2008 ANNUAL REPORT

IN FOCUS / ON TARGET

ONCOTHYREON

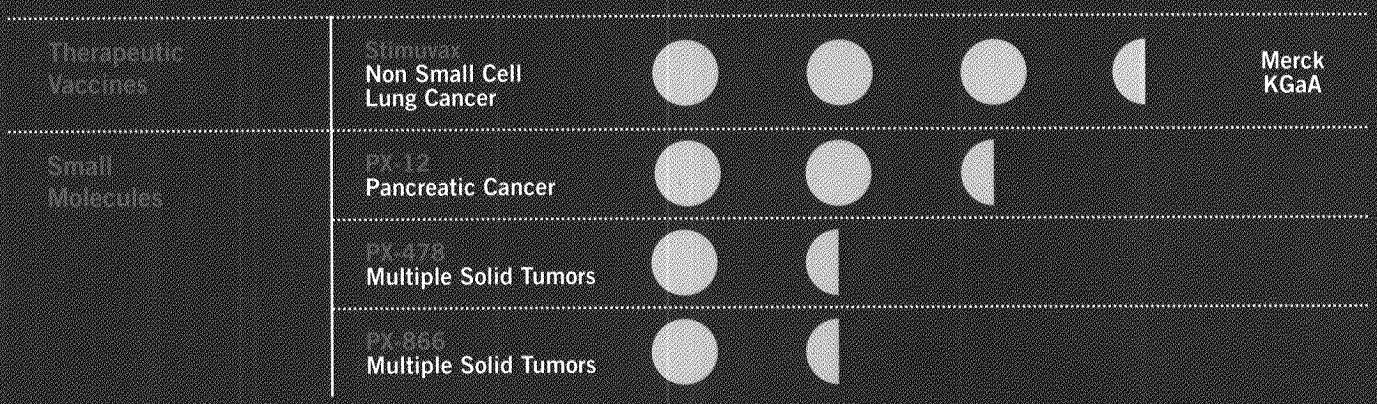
Robert L. Kirkman, M.D.
President and Chief Executive Officer

In the midst of a challenging economic environment, I am pleased to report that Oncothyreon has taken a number of steps in 2008 which we believe place your company in a position of relative strength to face the future. In particular, we have:

- Restructured our relationship with our partner for Stimuvax®, Merck KGaA of Darmstadt, Germany, in a manner which we believe reduces our financial risk and maintains a significant upside for our shareholders if Stimuvax is commercialized, while providing us with a needed, non-dilutive cash infusion,
- Focused our development efforts on our two most promising small molecule programs, PX-478 and PX-866, which we believe we can bring to their next value-inflection points with our existing resources, and
- Streamlined our organization to minimize our use of cash and to be as efficient as possible in developing our exciting product candidates.

I appreciate this opportunity to review these steps with you and to discuss our plans for continued advancement in 2009.

PRODUCT PIPELINE



to my fellow shareholders:

I am pleased to report that Oncothyreon has taken a number of steps in 2008 which we believe place your company in a position of relative strength to face the future.

STIMUVAX

As you are aware, Stimuvax, our most advanced product, is a therapeutic vaccine currently in Phase 3 development for the treatment of non-small cell lung cancer. We have a long-standing partnership with Merck KGaA to develop and commercialize Stimuvax. Until late last year, Merck KGaA was responsible for clinical development and marketing, while Oncothyreon was responsible for manufacturing. In December 2008, Merck purchased our Stimuvax manufacturing rights and know-how, together with our existing inventory and our Edmonton, Alberta facility, and assumed most of our Edmonton-based employees for a payment to us of approximately $13 million.

This transaction brought us needed cash at a time when accessing the capital markets would have been difficult, if even possible, and very dilutive. But it did much more than that. Going forward, it will substantially reduce our expenses. Under the prior agreement, we were responsible for commercial process development, which likely would have required us to spend many millions of dollars during the next two or three years. These are no longer our expenses, nor do we need to maintain the Edmonton facility where that work is being done. The transaction also removes the risk associated with uncertainty about the cost of goods at commercialization. Previously, these costs were to be subtracted from our royalty, which is no longer the case.

Moreover, we believe this transaction leaves the overall value of the collaboration substantially unchanged. All of the milestone payments based on future events remain as previously agreed. The royalty rates were reduced, but only by an amount that we believe is offset by the expenses we are avoiding, and the royalty rates remain substantial. In short, we believe the net present value of Stimuvax remains substantially unchanged and that we have reduced risk and preserved real upside for our shareholders should Stimuvax be commercialized successfully.

It is important to remember that commercialization of Stimuvax is the goal toward which both Oncothyreon and Merck KGaA have been working diligently. In that regard, I am pleased to report that the START trial being conducted by Merck KGaA made steady progress in 2008.

It is important to remember that commercialization of Stimuvax is the goal toward which both Oncothyreon and Merck KGaA have been working diligently. In that regard, I am pleased to report that the START trial being conducted by Merck KGaA made steady progress in 2008. The START trial is the Phase 3 trial of Stimuvax in patients with unresectable stage III NSCLC who have had a response or stable disease after at least two cycles of platinum based chemo-radiotherapy. This trial is expected to enroll more than 1,300 patients in approximately 30 countries around the world.

Also in 2008, data were reported at the American Society of Clinical Oncology meeting supporting the rationale for the START trial. In a Phase 1/2 trial of Stimuvax in twenty-two patients with unresectable Stage III non-small cell lung cancer, the overall survival at two years was 64 percent. The Phase 1/2 trial was designed to evaluate the safety of Stimuvax following a change in the manufacturer of the adjuvant component of the vaccine. No new safety concerns were identified in the study. The two-year overall survival rate in the Phase 1/2 study is similar to the overall survival rate seen in a similar cohort of patients in Oncothyreon's Phase 2b trial of Stimuvax. In that prior study, the two-year overall survival in patients with Stage IIIb loco-regional disease was 57 percent in those treated with Stimuvax plus best supportive care compared with 33 percent in those who received best supportive care alone. We are very encouraged that the new data, obtained in the same patient population and with the same formulation of Stimuvax being used in the ongoing Phase 3 trial, are supportive of our prior promising results.

Finally, in 2008 Merck KGaA made plans to conduct another Phase 3 trial of Stimuvax in a new indication, a trial which Merck KGaA has indicated they expect to begin in 2009. We believe this new trial, together with the purchase of the manufacturing rights, are a strong indication of the importance that Merck KGaA places on the development of Stimuvax.

PX-478 AND PX-866

With the sale of our Stimuvax manufacturing operations to Merck KGaA, Oncothyreon is now able to focus our internal development work on our small molecule programs. In 2008 we made the decision to make PX-478 and PX-866 our priority projects, for two important reasons. First, we believe these drugs are directed at very exciting targets of high interest to both the medical community and potential development partners. Second, we believe we can develop these drugs to their next value-inflection points with our available financial resources.

PX-478 targets hypoxia-inducible factor-1α (HIF-1α), a protein that plays a critical role in allowing cancer cells to respond to low oxygen concentrations. While HIF-1α is expressed at low levels in normal cells, it is overexpressed in a wide range of tumors and is a key factor in both the altered glucose metabolism

Our Phase 1 trial of PX-478 in patients with advanced metastatic cancers and lymphomas made steady progress in 2008, with cohorts of patients being treated with increasingly large dosage levels.

and the formation of new blood vessels (angiogenesis) that are essential for tumor survival and growth. Antiangiogenic agents are validated cancer therapies. PX-478 directly lowers HIF-1α levels and we believe that the compound could be a first-in-class therapy with both anti-metabolic and anti-angiogenic effects, with utility in diverse cancer indications, including ovarian, renal, prostate, colon, pancreatic, breast and lung cancers.

Our Phase 1 trial of PX-478 in patients with advanced metastatic cancers and lymphomas made steady progress in 2008, with cohorts of patients being treated with increasingly large dosage levels. This trial includes a number of important pharmacodynamic tests, which means that we are looking at biomarkers that will demonstrate whether or not the drug is having the expected activity. Like all Phase 1 trials, the most important outcome will be safety. However, we believe that demonstration of the expected effect on biomarkers such as angiogenic factors, in concert with an acceptable safety profile, will generate considerable excitement about this product candidate. We currently expect to have data from this trial in 2009.

PX-866 targets PI-3 kinase, a protein that mediates diverse cell growth, proliferation, metabolism and survival pathways and is a key contributing factor to a number of human cancers, particularly ovarian, head and neck, urinary tract, cervical, prostate, endometrial and small cell lung cancers and gliomas. Because of the central importance of the PI-3 kinase pathway in so many tumors, a number of product candidates directed against this target are currently in clinical trials conducted by both small and large pharmaceutical companies. We believe PX-866 is unique among these product candidates, because, to our knowledge, it is the only irreversible inhibitor of this target. We believe this will give PX-866 a significant pharmacokinetic advantage, because prolonged blockade of the target may result in improved target inhibition and enhanced efficacy. Moreover, an irreversible inhibitor may enable prolonged target blockade with a more convenient dosing schedule, which could provide both clinical and commercial benefits.

The year 2008 was pivotal for PX-866, as we both filed an Investigational New Drug Application with the Food and Drug Administration and initiated a Phase 1 clinical trial for the compound. This trial is also progressing well. Preliminary pharmacodynamic data from this trial have already shown that PX-866 is exhibiting the expected effect on PI-3 kinase signaling as assessed by activation of downstream components of the pathway. We currently expect to present preliminary data from this trial at the American Society of Clinical Oncology meeting in mid-2009. We believe that demonstrating the expected pharmacodynamic effects of PX-866 with an acceptable safety profile will give the compound a competitive advantage with respect to other investigational PI-3 kinase inhibitors.

The year 2008 was pivotal for PX-866, as we both filed an Investigational New Drug Application with the Food and Drug Administration and initiated a Phase 1 clinical trial for the compound. This trial is also progressing well.

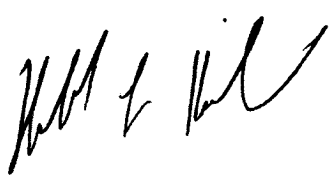
STREAMLINING ONCOTHYREON

With our decision to prioritize our internal development activities and the sale of our manufacturing operations to Merck KGaA, we have streamlined our costs while retaining multiple opportunities for success. We are pleased that we were able to achieve these efficiencies with minimal disruption to our former employees, with Merck KGaA offering employment to a large percentage of our Edmonton-based staff. We understand the importance of managing our cash resources carefully and being as efficient as possible in our drug development efforts. We plan to consolidate all of our efforts in Seattle this year, which we believe will yield further operating efficiencies.

We also understand the importance of business development activities to our future success. We will continue to seek opportunities to monetize our non-core assets, including our other small molecule and vaccine product candidates. We believe that the data anticipated for PX-478 and PX-866 in 2009 will also allow us to initiate potential partnership discussions for these molecules. Our goal in these efforts is to establish partnerships that bring in additional cash and development expertise while retaining key rights to these programs. We believe this approach will enhance our near-term financial position, enable more aggressive and expansive clinical development of the compounds and provide our shareholders with compelling long-term economics.

As we move forward in 2009, we will continue to invest prudently in PX-478 and PX-866, conserving cash without sacrificing our ability to generate the clinical data we need to advance these promising programs. This strategy is designed to optimize our near-term growth opportunities while maintaining sufficient cash resources to prepare for better economic times and position Oncothyreon for long-term success. With key data anticipated in 2009 from the ongoing clinical trials of PX-478 and PX-866 and the potential for initiation of an additional Phase 3 Stimuvax trial, we believe we will have several opportunities to demonstrate the promise of our programs and technology and to create value for you, our shareholders. I look forward to sharing our progress with you in the months ahead.

Sincerely,



Robert L. Kirkman, M.D.
President and Chief Executive Officer

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, 2008

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE TRANSITION PERIOD FROM TO

Commission file number: 001-33882

ONCOTHYREON INC.

(Exact name of registrant as specified in its charter)

Delaware	**26-0868560**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification Number)*

2601 Fourth Ave, Suite 500
Seattle, Washington 98121
(Address of principal executive office, including zip code)

(206) 801-2100
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Exchange on Which Registered
Common Stock, $0.0001 par value	The NASDAQ Stock Market LLC (The NASDAQ Global Market)

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 the 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)

Indicate 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 and non-voting stock held by non-affiliates of the Registrant, based on the closing sale price of the Registrant's common stock on the last day of its most recently completed second fiscal quarter, as reported on the NASDAQ Global Market, was approximately $43 million. Shares of common stock held by each executive officer and director and by each person who owns 5% or more of the outstanding common stock, based on filings with the Securities and Exchange Commission, have been excluded from this computation since such persons may be deemed affiliates of the Registrant. The determination of affiliate status for this purpose is not necessarily a conclusive determination for other purposes.

There were 19,492,432 shares of the Registrant's common stock, $0.0001 par value, outstanding on February 28, 2009.

DOCUMENTS INCORPORATED BY REFERENCE

The Registrant has incorporated by reference the information required by Part III of this Annual Report on Form 10-K from its proxy statement relating to the 2009 Annual Meeting of Stockholders of the Registrant, to be filed within 120 days after the end of its fiscal year ended December 31, 2008.

ONCOTHYREON INC.
ANNUAL REPORT ON FORM 10 K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2008

TABLE OF CONTENTS

PART I

ITEM 1. *Business*

This annual report on Form 10-K, including the "Management's Discussion and Analysis of Financial Condition and Results of Operation" section in Item 7 of this report, and other materials accompanying this annual report on Form 10-K contain forward-looking statements or incorporate by reference forward-looking statements. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other "forward-looking" information. These statements relate to our, or in some cases our partners' future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. These forward-looking statements include, but are not limited to, statements that we:

- *identify and capitalize on possible collaboration, strategic partnering, acquisition or divestiture opportunities;*
- *obtain suitable financing to support our operations, clinical trials and commercialization of our products;*
- *manage our growth and the commercialization of our products;*
- *achieve operating efficiencies as we progress from a mid-stage to a final-stage biotechnology company;*
- *successfully compete in our markets;*
- *realize the results we anticipate from the clinical trials of our products;*
- *succeed in finding and retaining joint venture and collaboration partners to assist us in the successful marketing, distribution and commercialization of our products;*
- *achieve regulatory approval for our products;*
- *obtain on commercially reasonable terms adequate product liability insurance for our commercialized products;*
- *adequately protect our proprietary information and technology from competitors and avoid infringement of proprietary information and technology of our competitors;*
- *assure that our products, if successfully developed and commercialized following regulatory approval, are not rendered obsolete by products or technologies of competitors; and*
- *not encounter problems with third parties, including key personnel, upon whom we are dependent.*

All forward-looking statements are based on information available to us on the date of this annual report and we will not update any of the forward-looking statements after the date of this annual report, except as required by law. Our actual results could differ materially from those discussed in this annual report. The forward-looking statements contained in this annual report, and other written and oral forward-looking statements made by us from time to time, are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in the following discussion and within Part I. Item 1A "Risk Factors" of this annual report.

Overview

We are a clinical-stage biopharmaceutical company focused primarily on the development of therapeutic products for the treatment of cancer. Our goal is to develop and commercialize novel synthetic vaccines and targeted small molecules that have the potential to improve the lives and outcomes of cancer patients. Our cancer vaccines are designed to stimulate the immune system to attack cancer cells, while our small molecule compounds are designed to inhibit the activity of specific cancer-related proteins. We are advancing our product candidates through in-house development efforts and strategic collaborations.

We believe the quality and breadth of our product candidate pipeline, strategic collaborations and scientific team will enable us to become an integrated biopharmaceutical company with a diversified portfolio of novel, commercialized therapeutics for major diseases.

Our lead product candidate is Stimuvax, which is a cancer vaccine currently in Phase 3 development for non-small cell lung cancer, or NSCLC. We have granted an exclusive,

worldwide license to Merck KGaA of Darmstadt, Germany, or Merck KGaA, for the development, manufacture and commercialization of Stimuvax. Our pipeline of clinical and pre-clinical stage proprietary small molecule product candidates was acquired by us in October 2006 from ProlX Pharmaceuticals Corporation, or ProlX. We are currently focusing our internal development efforts on PX-478, for which we initiated a Phase 1 trial in advanced metastatic cancer in August 2007, and PX-866, for which we initiated a Phase 1 trial in advanced metastatic cancer in June 2008. We are completing a Phase 2 trial for PX-12 in pancreatic cancer and have announced our intention to seek a partner for further development. As of the date of this report, we have not licensed any rights to our small molecules to any third party and retain all development, commercialization and manufacturing rights. In addition to our product candidates, we have developed novel vaccine technology we may further develop ourselves and/or license to others.

We were incorporated in 1985 in Canada under the name Biomira Inc., or Biomira. On December 10, 2007, Oncothyreon became the successor corporation to Biomira by way of a plan of arrangement effected pursuant to Canadian law. On December 11, 2007, Oncothyreon's common stock began trading on the NASDAQ Global Market under the symbol "ONTY" in U.S. dollars and on the Toronto Stock Exchange under the symbol "ONY" in Canadian dollars. In addition, pursuant to the plan of arrangement, shareholders of the former Biomira received one share of Oncothyreon common stock for each six common shares of Biomira that they held. All information contained in this annual report, including the information contained in Management's Discussion and Analysis, selected financial data, and our consolidated financial statements and related notes for the years ended December 31, 2007 and 2008 gives effect to the 6 for 1 share exchange implemented in connection with the plan of arrangement. The consolidated financial statements have been prepared giving effect to the 6 for 1 share exchange and basic and diluted earnings (loss) per share for all the periods presented.

The plan of arrangement represents a transaction among entities under common control. The assets and liabilities of the predecessor Biomira have been reflected at their historical cost in the accounts of Oncothyreon.

Our executive office is located at 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121 and our telephone number is (206) 801-2100. We maintain an Internet website at *www.oncothyreon.com*.

Available Information

We make available free of charge through our investor relations Web site, *www.oncothyreon.com*, our annual reports, quarterly reports, current reports, proxy statements and all amendments to those reports as soon as reasonably practicable after such material is electronically filed or furnished with the SEC. These reports may also be obtained without charge by contacting Investor Relations, Oncothyreon Inc., 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121, e-mail: *IR@oncothyreon.com*. Our Internet Web site and the information contained therein or incorporated therein are not intended to be incorporated into this Annual Report on Form 10-K. In addition, the public may read and copy any materials we file or furnish with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 or may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Moreover, the SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding reports that we file or furnish electronically with them at *www.sec.gov*.

Our Strategy

Our pipeline of product candidates is comprised of cancer vaccines and small molecule candidates. Our cancer vaccines attack cancer cells by stimulating the immune system,

while our small molecule product candidates inhibit critical cancer-related pathways. The resulting product pipeline provides us with opportunities to diversify risk, develop new therapies and establish strategic partnerships. This pipeline is the foundation on which we intend to build a valuable oncology franchise and become a leading developer of vaccine and small molecule therapies for cancer. Key elements of our strategy are to:

- *Advance Our Product Pipeline.* Our primary focus is advancing our pipeline of product candidates: Stimuvax, PX-478, PX-866 and PX-12, which are in clinical trials, and BGLP40 and PX-316, which are in pre-clinical development, on our own or with partners. To that end, we are building internal expertise in our development, regulatory and clinical groups. We also have relationships with key scientific advisors, research organizations and contract manufacturers to supplement our internal efforts.
- *Establish and Maintain Strategic Collaborations to Advance our Product Pipeline.* Our strategy is to enter into collaborations at appropriate stages in our research and development process to accelerate the commercialization of our product candidates. Collaborations can supplement our own internal expertise in areas such as clinical trials and manufacturing, as well as provide us with access to our collaborators' marketing, sales and distribution capabilities. For example, we have an agreement with Merck KGaA for the clinical development, manufacture and commercialization of Stimuvax. This collaboration was initiated in 2001, was revised in August 2007 and revised again in December 2008. We understand Merck KGaA plans to investigate the use of Stimuvax in multiple types of cancer, which we would not have been able to do alone. All development costs for Stimuvax have been borne exclusively by Merck KGaA as of March 1, 2006, with the exception of manufacturing process development costs, which Merck KGaA also assumed on December 18, 2008. We will receive cash payments upon the achievement of certain milestones and a royalty based on net sales.
- *Selectively License our Technologies.* As a result of our experience in cancer vaccine development, we have acquired and developed unique technologies that are available for license. For example, we have developed a fully synthetic toll-like receptor 4 agonist called PET-lipid A, which we believe to be useful as a vaccine adjuvant.
- *Acquire or In-license Attractive Product Candidates and Technologies.* In addition to our internal research and development initiatives, we have ongoing efforts to identify products and technologies to acquire or in-license from biotechnology and pharmaceutical companies and academic institutions. Our acquisition of ProlX in October 2006 is an example of such an acquisition. We plan to continue supplementing our internal development programs through strategic acquisition or in-licensing transactions.

Product Candidates Overview

Product Candidate	Technology	Most Advanced Indication	Development Stage
Stimuvax	Vaccine	Non-small cell lung cancer	Phase 3
PX-12	Small Molecule	Pancreatic cancer	Phase 2
PX-478	Small Molecule	Advanced solid tumors and lymphoma	Phase 1
PX-866	Small Molecule	Advanced solid tumors, glioma	Preclinical
PX-316	Small Molecule	To be determined	Preclinical
BGLP40	Vaccine	To be determined	Preclinical

In the table above, under the heading "Development Stage," "Phase 3" indicates evaluation of clinical efficacy and safety within an expanded patient population, at geographically dispersed clinical trial sites; "Phase 2" indicates clinical safety testing, dosage testing and initial efficacy testing in a limited patient population; "Phase 1" indicates initial clinical safety testing in healthy volunteers or a limited patient population, or trials directed

toward understanding the mechanisms or metabolism of the drug; and "Preclinical" indicates the program has not yet entered human clinical trials. For purposes of the table, "Development Stage" indicates the most advanced stage of development that has been completed or is ongoing.

Vaccine Products

General

The immunotherapeutic or cancer "vaccine" approach is based on the concept that tumors possess distinct antigens, like the Mucin 1, or MUC1, antigen incorporated in our Stimuvax vaccine, which should be recognized by the body's immune system. Immunotherapy is designed to stimulate an individual's immune system to recognize cancer cells and control the growth and spread of cancers in order to increase the survival of cancer patients.

Stimuvax

Our lead product candidate currently under clinical development is a vaccine we call Stimuvax. Stimuvax incorporates a 25 amino acid sequence of the cancer antigen MUC1, in a liposomal formulation. Stimuvax is designed to induce an immune response to destroy cancer cells that express MUC1, a protein antigen widely expressed on many common cancers, such as lung cancer, breast cancer and colorectal cancer. Stimuvax is thought to work by stimulating the body's immune system to identify and destroy cancer cells expressing MUC1.

Non-small cell lung cancer

Background. Lung cancer is the leading cause of cancer death for both men and women. More people die of lung cancer than of colon, breast, and prostate cancers combined. According to the World Health Organization, lung cancer (both non-small cell and small cell type) affects more than 1.2 million patients a year, with around 1.1 million deaths annually and around 500,000 in the U.S., Europe and Japan. About 85% of all lung cancers are of the non-small cell type. Further, only about 15% of people diagnosed with NSCLC survive this disease after five years. For most patients with NSCLC, current treatments provide limited success.

Potential Market. According to a May 2007 Espicom report, the NSCLC market was estimated to be worth $3.7 billion in 2006 with a growth rate of 14% year per year. There are currently no therapeutic vaccines approved for the treatment of NSCLC. We believe therapeutic vaccines have the potential to substantially enlarge the NSCLC market, both because of their novel mechanism of action and their expected safety profile. Stimuvax is currently being developed as maintenance therapy following treatment of inoperable locoregional Stage III NSCLC with induction chemotherapy; there are currently no approved therapies with this indication.

Clinical Results and Status. In the fourth quarter of 2002, we completed the enrollment of 171 patients in a Phase 2b multi-center trial of Stimuvax in patients with advanced (Stages IIIB and IV) NSCLC at 13 sites in Canada and four sites in the United Kingdom. All patients had received first line standard chemotherapy and had responded to chemotherapy treatment with either a complete response or stable disease. Patients were randomly chosen to receive either Stimuvax along with best supportive care, or best supportive care alone. Best supportive care can include local radiotherapy and second line chemotherapy, according to current standard clinical practice. The objectives of the trial were to measure safety and the possible survival benefit of Stimuvax in these patients. Secondary endpoints of the trial were quality of life and immune response.

We reported the preliminary results from our Phase 2b trial of Stimuvax in December 2004. The median survival of those patients receiving Stimuvax was 4.4 months longer than those on the control arm who did not receive the vaccine. The overall median survival

was 17.4 months for patients who received the vaccine versus 13 months for the patients on the control arm who did not receive the vaccine. The two-year survival rate was 43.2% for the vaccine arm versus 28.9% for the control arm. The two-year survival rate for patients who had locoregional Stage IIIB non-small cell lung cancer was 60% for the vaccine arm versus 36.7% for the control arm.

In mid-2005, we began scheduling for the manufacture of new vaccine supplies incorporating manufacturing changes intended to secure the future commercial supply of the vaccine. We began a small clinical safety study of the new formulation of Stimuvax in the second quarter of 2005. The results of this study indicated that the new formulation is equivalent to the formulation used in the Phase 2b trial. In mid-2008 Merck KGaA reported that the two-year survival rate for patients in this trial was 64%.

In April 2006, we announced that the final survival analysis of our Phase 2b trial of Stimuvax in patients with Stages IIIB and IV non-small cell lung cancer showed that the median survival in the pre-stratified subset of locoregional Stage IIIB patients on the vaccine arm was 30.6 months compared to 13.3 months observed for the same stage patients who did not receive the vaccine, a difference of 17.3 months. These data were obtained through ongoing, regular follow-up of patients enrolled in the trial.

In December 2006, we reached an agreement with the United States Food and Drug Administration, or FDA, on a Special Protocol Assessment, or SPA, for the Phase 3 trial of Stimuvax for the treatment of non-small cell lung cancer. The SPA relates to the design of the Phase 3 trial and outlines definitive clinical objectives and data analyses considered necessary to support regulatory approval of Stimuvax.

In January 2007, a global Phase 3 trial assessing the efficacy and safety of Stimuvax as a potential treatment for patients with unresectable, or inoperable, Stage III NSCLC was opened for enrollment. The trial is being conducted by Merck KGaA and is expected to include more than 1,300 patients in approximately 30 countries. Based on information provided by Merck KGaA we expect the trial to be complete in 2011.

The FDA has granted Fast Track status to the investigation of Stimuvax for its proposed use in the treatment of NSCLC. The FDA's Fast Track programs are designed to facilitate the development and expedite review of drugs that are intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs. With Fast Track designation, there may be more frequent interactions with the FDA during the development of a product and eventually a company may be eligible to file a U.S. Biologics License Application on a rolling basis as data become available.

FDA-Approved NSCLC Therapies. Stage I-IIIa NSCLC patients are generally treated with surgery and radiation, while Stage IIIb-IV patients are inoperable and generally treated with chemotherapy, radiation and palliative care. The market is currently driven by the use of several drug classes, namely chemotherapeutic agents (taxanes and cytotoxics) and targeted therapies (Iressa, Nexavar, Sutent, Tarceva and Avastin). However, there are currently no approved maintenance therapies for inoperable Stage III NSCLC following induction chemotherapy, the population for which we are currently testing Stimuvax, and no approved cancer vaccines for any indication.

BGLP40 Liposome Vaccine Product Candidate

We have developed a completely synthetic MUC1-based liposomal glycolipopeptide cancer vaccine, BGLP40 liposome vaccine, for potential use in several cancer indications, including breast, thyroid, colon, stomach, pancreas and prostate, as well as certain types of lung cancer. The BGLP40 glycolipopeptide combines carbohydrate and peptide determinates in a multi-epitopic vaccine that evokes both cellular and humoral immune responses against major cancer-associated epitopes expressed on adenocarcinomas. BGLP40 liposome vaccine is expected to be our first completely synthetic vaccine. BGLP40 liposome vaccine

formulations also include our proprietary liposomal delivery technology. This product candidate is currently in pre-clinical development and we are currently evaluating whether to move BGLP40 liposome vaccine into clinical development ourselves or with a potential collaborator.

As discussed in the section captioned, "Our Strategic Collaboration with Merck KGaA," if we intend to license the development or marketing rights to BGLP40, Merck KGaA will have a right of first negotiation with respect to such rights.

Small Molecule Drugs

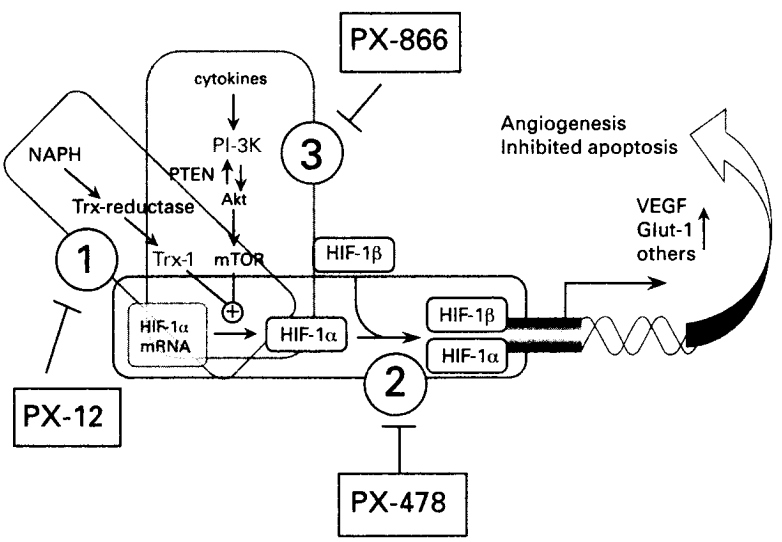
General

On October 30, 2006, we acquired ProlX Pharmaceuticals Corporation, or ProlX, of Tucson, Arizona, a privately held biopharmaceutical company focused on the development of novel therapeutics for the treatment of cancer. With the ProlX acquisition, we have added a pipeline of targeted small-molecule cancer drugs to our existing pipeline of cancer vaccines. Our small molecule compounds are designed to inhibit the activity of specific cancer-related proteins. We believe this enhanced pipeline gives us multiple opportunities for successful clinical development while diversifying risk.

The compounds discovered and developed by ProlX are novel agents for the treatment and prevention of cancer, focusing on redox regulation of survival signaling pathways. The chosen drug targets are linked to the early stages of the initiation of cancer, to the growth of a cancer cell, its differentiation or its response to apoptosis or cell death. The unregulated nature of redox proteins in many cancers disrupts the normal processes of cell growth and death.

The ProlX drug candidates target redox regulation and proteins in major signaling pathways: (1) thioredoxin/ thioredoxin reductase, (2) hypoxia inducible factor-1a (HIF-1a), and (3) proteins within the phosphoinositide-3-kinase (PI-3-kinase)/Akt (protein kinase B) survival signaling pathway. These pathways are interrelated and are part of the mechanism by which cells respond to conditions of hypoxia, or low levels of oxygen (Figure 1). Hypoxia is a characteristic of many cancers. By inhibiting these proteins, our small molecule compounds are designed to inhibit the mechanisms by which cancer cells survive and proliferate.

Figure 1:



We are currently focusing our internal development efforts on two small molecule drug candidates, PX-478 and PX-866.

PX-478

PX-478 is a small molecule inhibitor of hypoxia inducible factor-1a (HIF-1a), a component of a transcription factor which is an important regulator of the tumor response to hypoxia. Normally, under conditions of hypoxia, levels of HIF-1a increase, leading to an increase in the activity of the transcription factor HIF-1. The transcription of a wide variety of genes is increased by HIF-1, including genes that promote angiogenesis, or new blood vessel growth; genes for glycolytic metabolism, which allow cells to use glucose for energy in conditions of low oxygen; and genes which protect against apoptosis, or programmed cell death. Thus, the increased HIF-1 levels permit cancer cells to survive and grow. PX-478 blocks the increase in HIF-1a levels, thus inhibiting the transcription of these genes. For example, treatment with PX-478 in animals has been shown to decrease levels of vascular endothelial growth factor, VEGF, and the glucose transporter Glut-1.

PX-478 is effective when delivered orally in animal models, and has shown marked tumor regressions and growth inhibition in such model systems across a range of cancers, including lung, ovarian, renal, prostate, colon, pancreatic, and breast cancer. PX-478 may potentiate other current cancer treatments including radiation. We initiated a Phase 1 trial of PX-478 in patients with advanced metastatic cancer in August 2007. We continue to enroll patients in this trial and have not yet identified a maximum tolerated dose. We expect to report data from this trial in the second half of 2009, and to initiate a second trial of PX-478 by the end of 2009.

PX-866

PX-866 is an inhibitor of the phosphatidylinositol-3-kinase (PI-3-kinase)/PTEN/Akt pathway, an important survival signaling pathway that is activated in many types of human cancer. PI-3-kinase is over expressed in a number of human cancers, especially ovarian, colon, head and neck, urinary tract, and cervical cancers, where it leads to increased proliferation and inhibition of apoptosis, or programmed cell death. The PI-3-kinase inhibitor PX-866 induces prolonged inhibition of tumor PI-3-kinase signaling following both oral and intravenous administration and has been shown to have good in vivo anti-tumor activity in human ovarian and lung cancer, as well as intracranial glioblastoma, tumor models. PX-866 may potentiate the anti-tumor activity of other cancer therapeutics and radiation. We initiated a Phase 1 trial of PX-866 in patients with advanced metastatic cancer in June 2008 and currently expect to report data from this trial in mid-2009.

PX-12

PX-12 is a small molecule irreversible inhibitor of the redox protein thioredoxin. Thioredoxin is involved in the first unique step in DNA synthesis. Thioredoxin also provides control over a number of transcription factors affecting cell proliferation and death through the mechanism of redox regulation.

An initial Phase 1 trial involving 38 patients with advanced metastatic cancer showed that PX-12 was well tolerated and produced a decrease in plasma concentrations of thioredoxin that was significantly correlated with increased patient survival. Fifteen of the 38 patients achieved stable disease of up to 322 days. A randomized Phase 2 trial comparing two dose levels of PX-12 in up to 80 patients at three sites with advanced pancreatic cancer who have progressed on gemcitabine or a gemcitabine-containing regimen was initiated in January 2007. Enrollment in this trial was terminated in early 2009. We initiated a Phase 1b trial for PX-12 in patients with advanced metastatic cancer in June of 2008 to explore a more prolonged infusion regime. Enrollment in this trial was completed in late 2008.

We intend to seek a partner for further development of this drug candidate.

PX-316

ProlX developed a new class of chemical inhibitors of Akt mediated survival signaling, D-3-deoxy-phosphatidyl-myo-inositols (DPIs). The DPIs have shown antitumor activity in animal models of colon cancer and breast cancer. Work by ProlX has shown that these DPI analogues act to inhibit Akt in a novel way. These drugs act by preventing translocation, the movement of the target protein in the cell to its site of activation, rather than blocking of the catalytic site.

Market Opportunity for Targeted Small Molecules

The market for targeted cancer drugs, both small molecules and biologic agents, is expanding rapidly, with the approval of such agents as Gleevec, Herceptin, Tarceva, Nexavar, Sutent and Avastin. Our small molecule compounds are highly targeted agents directed at proteins found in many types of cancer cells. Therefore, we believe that these product candidates could potentially be useful for many different oncology indications that address large markets. For example, PX-478 has been demonstrated to lower levels of the angiogenesis factor VEGF in animal models. Should this also prove to be the case in clinical trials, PX-478 may be useful as an anti-angiogenic agent, which may result in patient benefit. Avastin, which also targets VEGF, had sales of approximately $2.7 billion in the U.S. in 2008, according to Genentech.

Research Programs/Vaccine Technology

In addition to our pipeline of product candidates, we have developed a proprietary synthetic lipid A analog, PET lipid-A, a toll like receptor 4 (TLR4) agonist. Pet lipid-A has been produced under cGMP conditions as an adjuvant for vaccine formulations for clinical trials. We also have a wide range of other effective lipid-A analogs available for our own use and for evaluation by our licensing partners. Our synthetic lipid analogs provide strong innate immune stimulation. These synthetic structures are easy to formulate and manufacture. We are also open to new collaborations to discover novel applications of these molecules as stand-alone therapeutics and as synergistic adjuvants for antibiotic and antiviral drugs.

Our Strategic Collaboration with Merck KGaA

In May 2001, we and Merck KGaA entered into a global product development, licensing and co-promotion collaboration for our then two most advanced therapies, Stimuvax vaccine and Theratope vaccine. The collaboration covered the entire field of oncology for these two products. We received an up-front cash payment and Merck KGaA made an equity investment in us upon entering into the collaboration. In 2004, Merck KGaA returned our development and commercialization rights to Theratope. Development of Theratope has been subsequently discontinued and we do not currently plan further clinical development. In August 2007 we entered into amended and restated collaboration and supply agreements with Merck KGaA, pursuant to which Merck KGaA assumed world-wide responsibility for the clinical development and marketing of Stimuvax, while we retained responsibility for manufacturing and process development.

On December 18, 2008, we entered into a new license agreement with Merck KGaA pursuant to which the amended and restated collaboration and supply agreements were replaced. Under the new license agreement, (1) we licensed to Merck KGaA the right to manufacture Stimuvax and transferred certain manufacturing know-how in return for an upfront payment of approximately $10.5 million, (2) the royalties rates on net sales to which we are entitled if Stimuvax is commercialized were reduced by a specified amount which we believe is consistent with our estimated costs of goods, manufacturing scale up costs and certain other expenses assumed by Merck KGaA, (3) the steering committee, consisting of our representatives and representatives of Merck KGaA, responsible for the

clinical testing, development and manufacture of Stimuvax was abolished (although we continue to be entitled to certain information rights with respect to clinical testing, development and manufacture of Stimuvax) and (4) if we intend to license the development or marketing rights to BGLP40, Merck KGaA will have a right of first negotiation with respect to such rights.

Under the December 2008 license agreement we will receive cash payments upon the achievement of a certain process transfer event, for BLA submission for first and second cancer indications, for regulatory approval for first and second cancer indications, and for sales milestones. We understand Merck KGaA plans to investigate the use of Stimuvax in multiple types of cancer. We will receive a royalty based on net sales. The royalty rate is higher in North America than in the rest of the world in return for our relinquishing our prior co-promotion interest in U.S. and Canadian sales.

In connection with the entry into the December 2008 license agreement, we entered into an asset purchase agreement pursuant to which we sold to Merck KGaA certain assets related to the manufacture of, and inventory of, Stimuvax, placebo and raw materials, and Merck KGaA agreed to assume certain liabilities related to the manufacture of Stimuvax and our obligations related to the lease of our Edmonton, Alberta, Canada facility. The aggregate purchase price paid by the buyers pursuant to the terms of the asset purchase agreement consisted of approximately $2.5 million, for aggregate consideration payable to us in connection with the new license agreement and the asset purchase agreement of approximately $13.0 million.

License Agreements

We have in-licensed targets and intellectual property from academic institutions for use in our pipeline programs, including the following:

Cancer Research Technology Limited. In 1991, we acquired from Cancer Research Technology Limited (CRTL) of London, England an exclusive world-wide license of CRTL's rights to the Mucin 1 peptide antigen, or MUC1, found on human breast, ovarian, colon and pancreatic cancer and other types of solid tumor cells for uses in the treatment and diagnosis of cancer and other diseases. MUC1 is incorporated in our Stimuvax vaccine. Under the terms of this agreement, we are required to make progress-dependent milestone payments and pay royalties on net sales of products covered by issued patents licensed from CRTL.

University of Alberta. In 2001, we entered into an exclusive license with the University of Alberta for certain patents relating to natural lipid-A, an adjuvant for vaccine formulations which we use in Stimuvax. Under the terms of this agreement, we are required to make progress-dependent milestone payments and pay royalties on net sales of products covered by issued patents licensed from University of Alberta.

University of Arizona. In connection with our acquisition of ProlX, we assumed ProlX's existing license agreements with the University of Arizona and Georgetown University. Pursuant to these agreements, certain intellectual property related to PX-12, PX-478, PX-866 and PX-316 were exclusively licensed to ProlX. We will owe certain progress-dependent milestone payments and royalties on net sales of products covered by the patents licensed from the universities.

Patents and Proprietary Information

We seek appropriate patent protection for our proprietary technologies by filing patent applications in the United States and other countries. As of December 31, 2008, we owned approximately 12 United States and corresponding foreign patents and patent applications and held exclusive or partially exclusive licenses to over 16 United States and corresponding foreign patents and patent applications.

Our patents and patent applications are directed to our product candidates as well as to our liposomal formulation technology. Although we believe our patents and patent applications provide us with a competitive advantage, the patent positions of biotechnology and pharmaceutical companies can be uncertain and involve complex legal and factual questions. We and our corporate collaborators may not be able to develop patentable products or processes or obtain patents from pending patent applications. Even if patent claims are allowed, the claims may not issue, or in the event of issuance, may not be sufficient to protect the technology owned by or licensed to us or our corporate collaborators. For example, PX-12 was described in a publication over a year before the earliest priority date of a ProlX patent application in the United States. Therefore, claims to the PX-12 composition cannot be obtained in the U.S. or in a foreign country. Similarly, claims covering the composition of PX-478 were only filed in the U.S. and Canada, which will prevent us from being able to obtain claims covering the composition of PX-478 in other foreign jurisdictions, including Europe.

With the exception of PX-12 (for which we only have use patents and patent applications), our clinical product candidates are protected by composition and use patents and patent applications. Patent protection afforded by the patents and patent applications covering our product candidates will expire over the following time frames:

Product Candidate	Expiration of Patent Protection
Stimuvax	2018 - 2026
PX - 478	2014 - 2028
PX - 866	2022 - 2026
PX - 12	2017 - 2028
PX - 316	2019
BGLP 40	2022 - 2023

We also rely on trade secrets and proprietary know-how, especially when we do not believe that patent protection is appropriate or can be obtained. Our policy is to require each of our employees, consultants and advisors to execute a confidentiality and inventions assignment agreement before beginning their employment, consulting or advisory relationship with us. These agreements provide that the individual must keep confidential and not disclose to other parties any confidential information developed or learned by the individual during the course of their relationship with us except in limited circumstances. These agreements also provide that we shall own all inventions conceived by the individual in the course of rendering services to us.

Manufacturing

We currently outsource the manufacturing of both drug substance and drug product for all of our products in clinical development. This arrangement allows us to use contract manufacturers that already have extensive GMP manufacturing experience. We have a staff with experience in the management of contract manufacturing and the development of efficient commercial manufacturing processes for our products. We currently intend to outsource the supply of all our commercial products.

As discussed above under the caption, "Our Strategic Relationship with Merck KGaA," on December 18, 2008, we entered into a new license agreement with Merck KGaA pursuant to which we licensed to Merck KGaA the right to manufacture Stimuvax. Prior to the entry into the new license agreement, we were responsible for the manufacture of Stimuvax. During 2008, Merck KGaA purchased Stimuvax and placebo from us for use in clinical trials in accordance with the amended and restated supply agreement, and in connection with the renegotiation of our relationship with Merck KGaA, we entered into asset purchase agreement pursuant to which we sold to Merck KGaA our remaining inventory of both Stimuvax and placebo. The manufacture of Stimuvax is outsourced pursuant to agreements

with Baxter (for the manufacture of Stimuvax) and Corixa, a subsidiary of GlaxoSmithKline (for the manufacture of the adjuvant used in Stimuvax). These agreements were assigned to Merck KGaA in accordance with the terms of the asset purchase agreement. The Corixa agreement includes royalty payments which Merck KGaA is responsible for paying. If Stimuvax is not approved by 2015, Corixa may terminate its obligation to supply the adjuvant. Although in such a case, we would retain the necessary licenses from Corixa required to have the adjuvant manufactured, the transfer of the process to a third party would delay the development and commercialization of Stimuvax. In addition prior to the entry into the new license agreement and asset purchase agreement, we performed process development, assay development, quality control and scale up activities for Stimuvax at our Edmonton facility, when this facility and these activities were transferred to Merck KGaA.

For our small molecule programs, we rely on third parties to manufacture both the active pharmaceutical ingredients, or API, and drug product. We believe there are several contract manufacturers capable of manufacturing both the API and drug product for these compounds; however, establishing a relationship with an alternative supplier would likely delay our ability to produce material.

We believe that our existing supplies of drug product and our contract manufacturing relationships with our existing and other potential contract manufacturers with whom we are in discussions, will be sufficient to accommodate our planned clinical trials. However, we may need to obtain additional manufacturing arrangements, if available on commercially reasonable terms, or increase our own manufacturing capability to meet our future needs, both of which would require significant capital investment. We may also enter into collaborations with pharmaceutical or larger biotechnology companies to enhance the manufacturing capabilities for our product candidates.

Competition

The pharmaceutical and biotechnology industries are intensely competitive, and any product candidate developed by us would compete with existing drugs and therapies. There are many pharmaceutical companies, biotechnology companies, public and private universities, government agencies and research organizations that compete with us in developing various approaches to cancer therapy. Many of these organizations have substantially greater financial, technical, manufacturing and marketing resources than we have. Several of them have developed or are developing therapies that could be used for treatment of the same diseases that we are targeting. In addition, many of these competitors have significantly greater commercial infrastructures than we have. Our ability to compete successfully will depend largely on our ability to:

- design and develop products that are superior to other products in the market and under development;
- attract and retain qualified scientific, product development and commercial personnel;
- obtain patent and/or other proprietary protection for our product candidates and technologies;
- obtain required regulatory approvals;
- successfully collaborate with pharmaceutical companies in the design, development and commercialization of new products;
- compete on, among other things, product efficacy and safety, time to market, price, extent of adverse side effects and the basis of and convenience of treatment procedures; and
- identify, secure the rights to and develop products and exploit these products commercially before others are able to develop competitive products.

In addition, our ability to compete may be affected if insurers and other third party payors seek to encourage the use of generic products, making branded products less attractive to buyers from a cost perspective.

Stimuvax. Currently, no product has been approved for maintenance therapy following induction chemotherapy for Stage III NSCLC. However, it is possible that existing or new agents will be approved for this indication. In addition, there are three vaccines in development for the treatment of NSCLC, including GSK's MAGE A3 vaccine in Phase 3, IDM Pharma's EP-2101 in Phase 2 and Transgene's TG-4010, also in Phase 2. To our knowledge, these vaccines are not currently being developed in the same indication as Stimuvax. However, subsequent development of these vaccines, including Stimuvax, may result in direct competition.

Small Molecule Products. PX-478 is a HIF-1 alpha inhibitor and we believe that at least one other company, Enzon, has a HIF-1 alpha anti-sense compound that is currently in Phase 1. PX- 866 is an inhibitor of PI-3-kinase and several other companies have product candidates directed at this target in clinical trials, including Novartis, Roche/Genentech, Semafore, Exelixis and Callistoga. PX-12 is an inhibitor of thioredexin and we are not aware of any other such inhibitors either in development, or that are marketed. There are also several approved targeted therapies for cancer and in development against which our small molecule products might compete. For example, Avastin is a direct inhibitor of VEGF, while PX-478 is expected to lower levels of VEGF.

Government Regulation

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, promotion, advertising, distribution, marketing and export and import of biopharmaceutical products such as those we are developing.

United States Government Regulation

In the United States, the information that must be submitted to the FDA in order to obtain approval to market a new drug varies depending on whether the drug is a new product whose safety and effectiveness has not previously been demonstrated in humans or a drug whose active ingredient(s) and certain other properties are the same as those of a previously approved drug. A new drug will follow the New Drug Application, or NDA, route for approval, a new biologic will follow the Biologics License Application, or BLA, route for approval, and a drug that claims to be the same as an already approved drug may be able to follow the Abbreviated New Drug application, or ANDA, route for approval.

NDA and BLA Approval Process

In the United States, the FDA regulates drugs and biologics under the Federal Food, Drug and Cosmetic Act, and, in the case of biologics, also under the Public Health Service Act, and implementing regulations. If we fail to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, we may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us.

The steps required before a drug or biologic may be marketed in the United States include:

- completion of pre-clinical laboratory tests, animal studies and formulation studies under the FDA's good laboratory practices regulations;

- submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each indication;
- submission to the FDA of an NDA or BLA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with cGMP; and
- FDA review and approval of the NDA or BLA.

Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the pre-clinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. The IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions about issues such as the conduct of the trials as outlined in the IND. In that case, the IND sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. Submission of an IND may not result in the FDA allowing clinical trials to commence.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each clinical protocol must be submitted to the FDA as part of the IND.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap or be combined. Each trial must be reviewed and approved by an independent institutional review board at each site where the trial will be conducted before it can begin at that site. Phase 1 clinical trials usually involve the initial introduction of the investigational drug into humans to evaluate the product's safety, dosage tolerance, pharmacokinetics and pharmacodynamics and, if possible, to gain an early indication of its effectiveness. Phase 2 clinical trials usually involve controlled trials in a limited patient population to evaluate dosage tolerance and appropriate dosage, identify possible adverse effects and safety risks, and evaluate preliminarily the efficacy of the drug for specific indications. Phase 3 clinical trials usually further evaluate clinical efficacy and further test for safety in an expanded patient population. Phase 1, Phase 2 and Phase 3 testing may not be completed successfully within any specified period, if at all. The FDA or we may suspend or terminate clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

Assuming successful completion of the required clinical testing, the results of the pre-clinical studies and of the clinical studies, together with other detailed information, including information on the chemistry, manufacture and control criteria of the product, are submitted to the FDA in the form of an NDA or BLA requesting approval to market the product for one or more indications. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use. The FDA reviews a BLA to determine, among other things, whether the product is safe, pure and potent and whether the facility in which it is manufactured, processed, packed or held meets standards designed to assure the product's continued safety, purity and potency. In connection with the submission of an NDA or BLA, an applicant may seek a special protocol assessment (SPA), which is an agreement between an applicant and the FDA on the design and size of clinical trials that is intended to form the basis of an NDA or BLA. In December 2006, we entered into an SPA agreement with the FDA for the Phase 3 trial of Stimuvax for the treatment of non-small cell lung cancer. The SPA agreement relates to the

design of the Phase 3 trial and outlines definitive clinical objectives and data analyses considered necessary to support regulatory approval of Stimuvax.

Before approving an application, the FDA will inspect the facility or the facilities at which the product is manufactured. The FDA will not approve the product unless cGMP compliance is satisfactory. If the FDA determines the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process requires substantial time, effort and financial resources, and each may take several years to complete. The FDA may not grant approval on a timely basis, or at all. We may encounter difficulties or unanticipated costs in our efforts to secure necessary governmental approvals, which could delay or preclude us from marketing our product candidates. The FDA may limit the indications for use or place other conditions on any approvals that could restrict the commercial application of our product candidates. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further FDA review and approval.

Fast Track Designation / Priority Review

We received Fast Track designation from the FDA for Stimuvax for the treatment of non-small cell lung cancer. A Fast Track product is defined as a new drug or biologic intended for the treatment of a serious or life-threatening condition that demonstrates the potential to address unmet medical needs for this condition. Under the Fast Track program, the sponsor of a new drug or biologic may request that the FDA designate the drug or biologic as a Fast Track product at any time during the development of the product, prior to marketing.

The FDA can base approval of a marketing application for a Fast Track product on an effect on a surrogate endpoint, or on another endpoint that is reasonably likely to predict clinical benefit. The FDA may condition approval of an application for a Fast Track product on a commitment to do post-approval studies to validate the surrogate endpoint or confirm the effect on the clinical endpoint and require prior review of all promotional materials. In addition, the FDA may withdraw approval of a Fast Track product in an expedited manner on a number of grounds, including the sponsor's failure to conduct any required post-approval study in a timely manner.

The FDA also has established priority and standard review classifications for original NDAs and efficacy supplements. Priority review applies to the time frame for FDA review of completed marketing applications and is separate from and independent of the Fast Track and accelerated approval mechanisms. The classification system, which does not preclude the FDA from doing work on other projects, provides a way of prioritizing NDAs upon receipt and throughout the application review process.

Priority designation applies to new drugs that have the potential for providing significant improvement compared to marketed products in the treatment or prevention of a disease. Hence, even if an NDA is initially classified as a priority application, this status can change during the FDA review process, such as in the situation where another product is approved for the same disease for which previously there was no available therapy. In addition, priority review does not guarantee that a product candidate will receive regulatory approval. To date, none of our product candidates have obtained priority designation from the FDA.

Post-Approval Requirements

After regulatory approval of a product is obtained, we are required to comply with a number of post-approval requirements. Holders of an approved NDA or BLA are required to report certain adverse reactions and production problems to the FDA, to provide updated safety and efficacy information and to comply with requirements concerning advertising and promotional labeling for their products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP, which imposes certain procedural, substantive and recordkeeping requirements. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

We use, and in at least the near-term will continue to use, third party manufacturers to produce our product candidates in clinical and commercial quantities. Future FDA inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA or BLA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Also, new government requirements may be established that could delay or prevent regulatory approval of our product candidates under development.

In addition, as a condition of approval of an NDA or BLA, the FDA may require post-marketing testing and surveillance to monitor the product's safety or efficacy.

Canadian and Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our product candidates. Whether or not we obtain FDA approval for a product candidate, we must obtain approval of a product candidate by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product candidate in those countries. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under the Canadian regulatory system, Health Canada is the regulatory body that governs the sale of drugs for the purposes of use in clinical trials. Accordingly, any company that wishes to conduct a clinical trial in Canada must submit a clinical trial application to Health Canada. Health Canada reviews the application and notifies the company within 30 days if the application is found to be deficient. If the application is deemed acceptable, Health Canada will issue a letter to the company within the 30-day review period which means the company may proceed with its clinical trial(s).

Under European Union regulatory systems, we may submit marketing authorizations either under a centralized or decentralized procedure. The centralized procedure provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization from one member state may submit an application to the remaining member states. Within 90 days of receiving the application and assessment report, each member state must decide whether to recognize approval.

Reimbursement

Sales of biopharmaceutical products depend in significant part on the availability of third party reimbursement, including Medicare. Each third party payor may have its own policy regarding what products it will cover, the conditions under which it will cover such products, and how much it will pay for such products. It is time consuming and expensive for us to seek reimbursement from third party payors. Reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market.

We expect that there will continue to be a number of federal and state proposals to implement governmental pricing controls. It is difficult to determine whether such legislative or regulatory proposals will be adopted, and whether the adoption of such proposals would have a material adverse effect on our business, financial condition and profitability.

Research and Development

We devote a substantial portion of our resources to developing new product candidates. During the years ended December 31, 2008, 2007 and 2006, we expended approximately $9.3 million, $10.0 million and $12.2 million, respectively, on research and development activities.

Employees

As of December 31, 2008, we (including our consolidated subsidiaries) had 18 employees excluding the three employees who retired or resigned on that day, 11 of whom are engaged in development activities, seven in finance and administration, and five of whom hold Ph.D. and/or M.D. degrees. A number of our management and professional employees have had prior experience with other pharmaceutical or medical products companies.

Our ability to develop marketable products and to establish and maintain our competitive position in light of technological developments will depend, in part, on our ability to attract and retain qualified personnel. Competition for such personnel is intense. We have also chosen to outsource activities where skills are in short supply or where it is economically prudent to do so.

None of our employees are covered by collective bargaining agreements and we believe that our relations with our employees are good.

Executive Officers

The names, ages as of December 31, 2008 and positions of each of our executive officers in 2008 are set forth below. The last day of employment by us for each of Mr. Taylor, Dr. Kirkpatrick and Dr. Koganty was December 31, 2008. Mr. Karan was appointed our principal financial officer and principal accounting officer, effective January 1, 2009.

Name and Address	Age	Office
ROBERT L. KIRKMAN, M.D. ..... Yarrow Point, Washington, United States of America	59	President, Chief Executive Officer and Director
EDWARD A. TAYLOR ..... White Rock, British Columbia, Canada	65	Vice President, Finance and Administration, Chief Financial Officer and Corporate Secretary
GARY CHRISTIANSON ..... Seattle, Washington, United States of America	53	Chief Operating Officer
LYNN KIRKPATRICK, Ph.D. ..... Houston, Texas, United States of America	51	Chief Scientific Officer
R. RAO KOGANTY, Ph.D. ..... Edmonton, Alberta, Canada	65	Vice President and General Manager, Synthetic Biologics Business Unit

ROBERT L. KIRKMAN, M.D. has served as our president and chief executive officer since September 2006. From 2005 to 2006, Dr. Kirkman was acting president and chief executive officer of Xcyte Therapies, Inc., which concluded a merger with Cyclacel Pharmaceuticals, Inc., both development-stage biopharmaceuticals companies, in March of 2006. From 2004 to 2005, Dr. Kirkman was chief business officer and vice president of Xcyte. From 1998 to 2003, Dr. Kirkman was vice president, business development and corporate communications of Protein Design Labs, Inc., a biopharmaceuticals company. Dr. Kirkman holds an M.D. degree from Harvard Medical School and a B.A. in economics from Yale University.

EDWARD A. TAYLOR served as our vice president, finance and administration, chief financial officer and corporate secretary from May 1995 to December 2008. From May 2006 through September 2006, Mr. Taylor served as our acting president and chief executive officer. Mr. Taylor is chairman of the board of directors for Ceapro Inc., a biotechnology company. Mr. Taylor attended Stanford University's Executive Development program and received his certified general account certification from the Certified General Accountants of British Columbia.

GARY CHRISTIANSON was appointed as our chief operating officer in July 2007. From 2005 to 2007, Mr. Christianson was site director for the Biologics Unit of GlaxoSmithKline plc, a global healthcare company. From 1999 to 2003, Mr. Christianson was vice president, technical operations at Corixa Corp., a biopharmaceutical and biotechnology company, and from 2003 to 2005, he was promoted to general manager of the Hamilton, Montana site in addition to his duties as vice president. From 1987 to 1999, Mr. Christianson held various positions at RIBI ImmunoChem Research, Inc., a biopharmaceuticals company. Mr. Christianson received a B.S. in mechanical engineering technology from Montana State University and is a licensed and board certified professional engineer.

SHASHI KARAN has been serving as our principal financial officer and principal accounting officer, since January 1, 2009. Mr. Karan has served as our controller since April 1, 2008. Prior to joining us, from 2006 to 2007, Mr. Karan acted as a consultant, providing financial and accounting advice to various clients, with a focus on publicly-traded companies. From 2001 to 2005, Mr. Karan was vice president of finance of MusicNet Inc., a private online media company. From 1992 to 2000, Mr. Karan was senior director and corporate controller of Pathogenesis Corporation, a publicly-traded biotechnology company. Mr. Karan has been certified as a CPA in the State of Washington and received a B.A. (with honors) in economics from Leeds University, United Kingdom, and an M.S. in accounting from Long Island University and an M.S. in tax from Golden Gate University.

R. RAO KOGANTY, Ph.D. has served as our vice president and general manager, synthetic biologics business unit since April 2005 to December 2008. From 1990 to 2005, Dr. Koganty was our director of chemistry. Dr. Koganty has held various positions with us since 1986. Dr. Koganty holds a Ph.D. and M.Sc. from Vikram University and a B.Sc. from Osmania University in India.

LYNN KIRKPATRICK, Ph.D. served as our chief scientific officer from November 2006 to December 2008. From 1999 to 2006, Dr. Kirkpatrick served as president and chief executive officer of ProlX Pharmaceuticals Corporation, a biopharmaceuticals company that we acquired in October 2006. From 1983 to 2001, Dr. Kirkpatrick was a professor of chemistry and biochemistry at the University of Regina. Dr. Kirkpatrick received her Ph.D. and B.Sc. from the University of Saskatchewan.

ITEM 1A. *Risk Factors*

Factors That Could Affect Future Results

Set forth below and elsewhere in this Annual Report on Form 10-K, and in other documents we file with the SEC are descriptions of risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements contained in this report. Because of the following factors, as well as other variables affecting our operating results, past financial performance should not be considered a reliable indicator of future performance and investors should not use historical trends to anticipate results or trends in future periods. The risks and uncertainties described below are not the only ones facing us. Other events that we do not currently anticipate or that we currently deem immaterial also affect our results of operations and financial condition.

Risks Relating to our Business

Our ability to continue as a going concern is dependent on our success at raising additional capital sufficient to meet our obligations on a timely basis. If we fail to obtain additional financing when needed, we may be unable to complete the development, regulatory approval and commercialization of our product candidates.

We have expended and continue to expend substantial funds in connection with our product development activities and clinical trials and regulatory approvals. Funds generated from our operations will be insufficient to enable us to bring all of our products currently under development to commercialization. Accordingly, we need to raise additional funds from the sale of our securities, partnering arrangements or other financing transactions in order to finance the commercialization of our product candidates. On September 2, 2008, we announced our intention to offer shares of our common stock in a fully-underwritten public offering; however, as of the date of this Annual Report on Form 10-K, we were not been able to consummate such offering due to adverse market conditions. Further, the current financing environment in the United States, particularly for biotechnology companies like us, is exceptionally challenging and we can provide no assurances as to when such environment will improve. For these reasons, among others, we cannot be certain that additional financing will be available when and as needed or, if available, that it will be available on acceptable terms. If financing is available, it may be on terms that adversely affect the interests of our existing stockholders. If adequate financing is not available, we may need to continue to reduce or eliminate our expenditures for research and development, testing, production and marketing for some of our product candidates. Our actual capital requirements will depend on numerous factors, including:

- our commercialization activities and arrangements;
- the progress of our research and development programs;
- the progress of our pre-clinical and clinical testing;
- the time and cost involved in obtaining regulatory approvals for our product candidates;

- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights with respect to our intellectual property;
- the effect of competing technological and market developments;
- the effect of changes and developments in our existing collaborative, licensing and other relationships; and
- the terms of any new collaborative, licensing and other arrangements that we may establish.

We may not be able to secure sufficient financing on acceptable terms. If we cannot, we may need to delay, reduce or eliminate some or all of our research and development programs, any of which would be expected to have a material adverse effect on our business, operating results, and financial condition.

Our near-term success is highly dependent on the success of our lead product candidate, Stimuvax, and we cannot be certain that it will be successfully developed or receive regulatory approval or be successfully commercialized.

Our lead product candidate, Stimuvax, is currently being evaluated in a Phase 3 clinical trial for the treatment of non-small cell lung cancer, or NSCLC, and will require the successful completion of this and possibly other clinical trials before submission of a biologic license application, or BLA, or its foreign equivalent for approval. This process can take many years and require the expenditure of substantial resources. Pursuant to our agreement with Merck KGaA of Darmstadt, Germany, or Merck KGaA, Merck KGaA is responsible for the development and the regulatory approval process and any subsequent commercialization of Stimuvax. We cannot assure you that Merck KGaA will continue to advance the development and commercialization of Stimuvax as quickly as would be optimal for our stockholders. Clinical trials involving the number of sites and patients required for Food and Drug Administration, or FDA, approval of Stimuvax may not be successfully completed. If these clinical trials fail to demonstrate that Stimuvax is safe and effective, it will not receive regulatory approval. Even if Stimuvax receives regulatory approval, it may never be successfully commercialized. If Stimuvax does not receive regulatory approval or is not successfully commercialized, we may not be able to generate revenue, become profitable or continue our operations. Any failure of Stimuvax to receive regulatory approval or be successfully commercialized would have a material adverse effect on our business, operating results, and financial condition and could result in a substantial decline in the price of our common stock.

Stimuvax and our other vaccine product candidates are based on novel technologies, which may raise new regulatory issues that could delay or make FDA approval more difficult.

The process of obtaining required FDA and other regulatory approvals, including foreign approvals, is expensive, often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. Stimuvax and our other vaccine therapies are novel; therefore, regulatory agencies may lack experience with them, which may lengthen the regulatory review process, increase our development costs and delay or prevent commercialization of Stimuvax and our other active vaccine products under development.

To date, the FDA has not approved for commercial sale in the United States any active vaccine designed to stimulate an immune response against cancer. Consequently, there is no precedent for the successful development or commercialization of products based on our technologies in this area.

We have a history of net losses, we anticipate additional losses and we may never become profitable.

Other than the year ended December 31, 2008, we have incurred net losses in each fiscal year since we commenced our research activities in 1985. The net income we realized in 2008 was due entirely to our December 2008 transactions with Merck KGaA and we do not anticipate realizing net income again for the foreseeable future. In addition, as of December 31, 2008, our accumulated deficit was approximately $314.4 million. Our losses have resulted primarily from expenses incurred in research and development of our product candidates. We do not know when or if we will complete our product development efforts, receive regulatory approval for any of our product candidates, or successfully commercialize any approved products. As a result, it is difficult to provide the extent of any future losses or the time required to achieve profitability, if at all. Any failure of our products to complete successful clinical trials and obtain regulatory approval and any failure to become and remain profitable would adversely affect the price of our common stock and our ability to raise capital and continue operations.

There is no assurance that we will be granted regulatory approval for any of our product candidates.

Merck KGaA is currently testing our lead product candidate, Stimuvax, in an ongoing Phase 3 clinical trial for the treatment of NSCLC. PX-12 is currently in a Phase 2 clinical trial for pancreatic cancer and a Phase 1b trial in patients with advanced metastatic cancer which we initiated in June of 2008 to explore a more prolonged infusion regime. In addition, we have recently initiated a Phase 1 clinical trial for PX-478 and PX-866. Our other product candidates remain in the pre-clinical testing stages. The results from pre-clinical testing and clinical trials that we have completed may not be predictive of results in future pre-clinical tests and clinical trials, and there can be no assurance that we will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals. A number of companies in the biotechnology and pharmaceutical industries, including our company, have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. Regulatory approval may not be obtained for any of our product candidates. If our product candidates are not shown to be safe and effective in clinical trials, the resulting delays in developing other product candidates and conducting related pre-clinical testing and clinical trials, as well as the potential need for additional financing, would have a material adverse effect on our business, financial condition and results of operations.

We are dependent upon our collaborative relationship with Merck KGaA to develop and commercialize our lead product candidate, Stimuvax.

Under our collaboration with Merck KGaA for our lead product candidate, Stimuvax, Merck KGaA is entirely responsible for the development, manufacture and worldwide commercialization of Stimuvax and the costs associated with such development, manufacture and commercialization. With one exception, any future payments, including royalties to us, will depend on the extent to which Merck KGaA advances Stimuvax through development and commercialization. Merck KGaA has the right to terminate the collaboration agreement, upon 30 days' written notice, if, in Merck KGaA's reasonable judgment, Merck KGaA determines that there are issues concerning the safety or efficacy of Stimuvax which materially adversely affect Stimuvax's medical, economic or competitive viability, provided that if we do not agree with such determination we have the right to cause the matter to be submitted to binding arbitration. Our ability to receive any significant revenue from Stimuvax is dependent on the efforts of Merck KGaA. If Merck KGaA fails to fulfill its obligations under this agreement, we would need to obtain the capital necessary to fund the development and commercialization of Stimuvax or enter into alternative arrangements with a third party. We could also become involved in disputes with Merck KGaA, which could lead to delays in or termination of our

development and commercialization of Stimuvax and time-consuming and expensive litigation or arbitration. If Merck KGaA terminates or breaches its agreement with us, or otherwise fails to complete its obligations in a timely manner, the chances of successfully developing or commercializing Stimuvax would be materially and adversely affected.

We currently rely on third party manufacturers to supply our product candidates, which could delay or prevent the clinical development and commercialization of our product candidates.

We currently depend on third party manufacturers for the manufacture of our small molecule product candidates. Any disruption in production, inability of these third party manufacturers to produce adequate quantities to meet our needs or other impediments with respect to development or manufacturing could adversely affect our ability to continue our research and development activities or successfully complete pre-clinical studies and clinical trials, delay submissions of our regulatory applications or adversely affect our ability to commercialize our product candidates in a timely manner, or at all.

Merck KGaA currently depends on a single manufacturer, Baxter International Inc., or Baxter, for the supply of our lead product candidate, Stimuvax, and on Corixa Corp. (now a part of GlaxoSmithKline plc, or GSK) for the manufacture of the adjuvant in Stimuvax. If Stimuvax is not approved by 2015, Corixa/GSK may terminate its obligation to supply the adjuvant. In this case, we would retain the necessary licenses from Corixa/GSK required to have the adjuvant manufactured, but the transfer of the process to a third party would delay the development and commercialization of Stimuvax, which would materially harm our business.

Our product candidates have not yet been manufactured on a commercial scale. In order to commercialize a product candidate, the third party manufacturer may need to increase its manufacturing capacity, which may require the manufacturer to fund capital improvements to support the scale up of manufacturing and related activities. With respect to our small molecule product candidates, we may be required to provide all or a portion of these funds. The third party manufacturer may not be able to successfully increase its manufacturing capacity for our product candidate for which we obtain marketing approval in a timely or economic manner, or at all. If any manufacturer is unable to provide commercial quantities of a product candidate, we (or Merck KGaA, in the case of Stimuvax) will need to successfully transfer manufacturing technology to a new manufacturer. Engaging a new manufacturer for a particular product candidate could require us (or Merck KGaA, in the case of Stimuvax) to conduct comparative studies or utilize other means to determine equivalence between product candidates manufactured by a new manufacturer and those previously manufactured by the existing manufacturer, which could delay or prevent commercialization of our product candidates. If any of these manufacturers is unable or unwilling to increase its manufacturing capacity or if alternative arrangements are not established on a timely basis or on acceptable terms, the development and commercialization of our product candidates may be delayed or there may be a shortage in supply.

Any manufacturer of our products must comply with current Good Manufacturing Practices, or cGMP, requirements enforced by the FDA through its facilities inspection program or by foreign regulatory agencies. These requirements include quality control, quality assurance and the maintenance of records and documentation. Manufacturers of our products may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. We have little control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any quantities supplied is compromised due to our manufacturers' failure to

adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products.

Any failure or delay in commencing or completing clinical trials for our product candidates could severely harm our business.

Each of our product candidates must undergo extensive pre-clinical studies and clinical trials as a condition to regulatory approval. Pre-clinical studies and clinical trials are expensive and take many years to complete. The commencement and completion of clinical trials for our product candidates may be delayed by many factors, including:

- our or our collaborators' ability to obtain regulatory approval to commence a clinical trial;
- our or our collaborators' ability to manufacture or obtain from third parties materials sufficient for use in pre-clinical studies and clinical trials;
- delays in patient enrollment and variability in the number and types of patients available for clinical trials;
- poor effectiveness of product candidates during clinical trials;
- safety issues or side effects;
- governmental or regulatory delays and changes in regulatory requirements, policy and guidelines; and
- varying interpretation of data by the FDA and similar foreign regulatory agencies.

It is possible that none of our product candidates will complete clinical trials in any of the markets in which we and/or our collaborators intend to sell those product candidates. Accordingly, we and/or our collaborators may not receive the regulatory approvals necessary to market our product candidates. Any failure or delay in commencing or completing clinical trials or obtaining regulatory approvals for product candidates would prevent or delay their commercialization and severely harm our business and financial condition.

The failure to enroll patients for clinical trials may cause delays in developing our product candidates.

We may encounter delays if we or our collaboration partners are unable to enroll enough patients to complete clinical trials. Patient enrollment depends on many factors, including, the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites and the eligibility criteria for the trial. Moreover, when one product candidate is evaluated in multiple clinical trials simultaneously, patient enrollment in ongoing trials can be adversely affected by negative results from completed trials. Our product candidates are focused in oncology, which can be a difficult patient population to recruit.

We rely on third parties to conduct our clinical trials. If these third parties do not perform as contractually required or otherwise expected, we may not be able to obtain regulatory approval for or be able to commercialize our product candidates.

We rely on third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories, to assist in conducting our clinical trials. We have, in the ordinary course of business, entered into agreements with these third parties. Nonetheless, we are responsible for confirming that each of our clinical trials is conducted in accordance with its general investigational plan and protocol. Moreover, the FDA and foreign regulatory agencies require us to comply with regulations and standards, commonly referred to as good clinical practices, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the trial participants are adequately protected. Our reliance on third parties does not relieve us of these responsibilities and requirements. If these third parties

do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our pre-clinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for our product candidates.

Even if regulatory approval is received for our product candidates, the later discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions, including withdrawal of the product from the market.

Approval of a product candidate may be conditioned upon certain limitations and restrictions as to the drug's use, or upon the conduct of further studies, and may be subject to continuous review. After approval of a product, if any, there will be significant ongoing regulatory compliance obligations, and if we or our collaborators fail to comply with these requirements, we and/or our collaborators could be subject to penalties, including:

- warning letters;
- fines;
- product recalls;
- withdrawal of regulatory approval;
- operating restrictions;
- disgorgement of profits;
- injunctions; and
- criminal prosecution.

Regulatory agencies may require us or our collaborators to delay, restrict or discontinue clinical trials on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk. In addition, we or our collaborators may be unable to submit applications to regulatory agencies within the time frame we currently expect. Once submitted, applications must be approved by various regulatory agencies before we or our collaborators can commercialize the product described in the application. All statutes and regulations governing the conduct of clinical trials are subject to change in the future, which could affect the cost of such clinical trials. Any unanticipated costs or delays in our clinical studies could delay our ability to generate revenues and harm our financial condition and results of operations.

Failure to obtain regulatory approval in foreign jurisdictions would prevent us from marketing our products internationally.

We intend to have our product candidates marketed outside the United States. In order to market our products in the European Union and many other non-U.S. jurisdictions, we must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. To date, we have not filed for marketing approval for any of our product candidates and may not receive the approvals necessary to commercialize our product candidates in any market. The approval procedure varies among countries and can involve additional testing and data review. The time required to obtain foreign regulatory approval may differ from that required to obtain FDA approval. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory agencies in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory agencies in other foreign countries or by the FDA. However, a failure or delay in obtaining regulatory approval in one

jurisdiction may have a negative effect on the regulatory approval process in other jurisdictions, including approval by the FDA. The failure to obtain regulatory approval in foreign jurisdictions could harm our business.

Our product candidates may never achieve market acceptance even if we obtain regulatory approvals.

Even if we receive regulatory approvals for the commercial sale of our product candidates, the commercial success of these product candidates will depend on, among other things, their acceptance by physicians, patients, third party payors such as health insurance companies and other members of the medical community as a therapeutic and cost-effective alternative to competing products and treatments. If our product candidates fail to gain market acceptance, we may be unable to earn sufficient revenue to continue our business. Market acceptance of, and demand for, any product that we may develop and commercialize will depend on many factors, including:

- our ability to provide acceptable evidence of safety and efficacy;
- the prevalence and severity of adverse side effects;
- availability, relative cost and relative efficacy of alternative and competing treatments;
- the effectiveness of our marketing and distribution strategy;
- publicity concerning our products or competing products and treatments; and
- our ability to obtain sufficient third party insurance coverage or reimbursement.

If our product candidates do not become widely accepted by physicians, patients, third party payors and other members of the medical community, our business, financial condition and results of operations would be materially and adversely affected.

If we are unable to obtain, maintain and enforce our proprietary rights, we may not be able to compete effectively or operate profitably.

Our success is dependent in part on obtaining, maintaining and enforcing our patents and other proprietary rights and will depend in large part on our ability to:

- obtain patent and other proprietary protection for our technology, processes and product candidates;
- defend patents once issued;
- preserve trade secrets; and
- operate without infringing the patents and proprietary rights of third parties.

As of December 31, 2008, we owned approximately 12 United States and corresponding foreign patents and patent applications and held exclusive or partially exclusive licenses to over 16 United States and corresponding foreign patents and patent applications. The degree of future protection for our proprietary rights is uncertain. For example:

- we might not have been the first to make the inventions covered by any of our patents, if issued, or our pending patent applications;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or products and/or duplicate any of our technologies and/or products;
- it is possible that none of our pending patent applications will result in issued patents or, if issued, these patents may not be sufficient to protect our technology or provide us with a basis for commercially-viable products and may not provide us with any competitive advantages;

- if our pending applications issue as patents, they may be challenged by third parties as infringed, invalid or unenforceable under U.S. or foreign laws;
- if issued, the patents under which we hold rights may not be valid or enforceable; or
- we may develop additional proprietary technologies that are not patentable and which may not be adequately protected through trade secrets, if for example a competitor were to independently develop duplicative, similar or alternative technologies.

The patent position of biotechnology and pharmaceutical firms is highly uncertain and involves many complex legal and technical issues. There is no clear policy involving the breadth of claims allowed in patents or the degree of protection afforded under patents. Although we believe our potential rights under patent applications provide a competitive advantage, it is possible that patent applications owned by or licensed to us will not result in patents being issued, or that, if issued, the patents will not give us an advantage over competitors with similar products or technology, nor can we assure you that we can obtain, maintain and enforce all ownership and other proprietary rights necessary to develop and commercialize our product candidates. For example, PX-12 was described in a publication over a year before the earliest priority date of a patent application covering PX-12 in the United States. Therefore, claims to the PX-12 composition cannot be obtained in the U.S. or in a foreign country. Similarly, claims covering the composition of PX-478 were only filed in the U.S. and Canada, which will prevent us from being able to obtain claims covering the composition of PX-478 in other foreign jurisdictions, including Europe.

Even if any or all of our patent applications issue as patents, others may challenge the validity, inventorship, ownership, enforceability or scope of our patents or other technology used in or otherwise necessary for the development and commercialization of our product candidates. We may not be successful in defending against any such challenges. Moreover, the cost of litigation to uphold the validity of patents to prevent infringement or to otherwise protect our proprietary rights can be substantial. If the outcome of litigation is adverse to us, third parties may be able to use the challenged technologies without payment to us. There is no assurance that our patents, if issued, will not be infringed or successfully avoided through design innovation. Intellectual property lawsuits are expensive and would consume time and other resources, even if the outcome were successful. In addition, there is a risk that a court would decide that our patents, if issued, are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of a patent were upheld, a court would refuse to stop the other party from using the inventions, including on the ground that its activities do not infringe that patent. If any of these events were to occur, our business, financial condition and results of operations would be materially and adversely effected.

In addition to the intellectual property and other rights described above, we also rely on unpatented technology, trade secrets, trademarks and confidential information, particularly when we do not believe that patent protection is appropriate or available. However, trade secrets are difficult to protect and it is possible that others will independently develop substantially equivalent information and techniques or otherwise gain access to or disclose our unpatented technology, trade secrets and confidential information. We require each of our employees, consultants and advisors to execute a confidentiality and invention assignment agreement at the commencement of an employment or consulting relationship with us. However, it is possible that these agreements will not provide effective protection of our confidential information or, in the event of unauthorized use of our intellectual property or the intellectual property of third parties, provide adequate or effective remedies or protection.

If our vaccine technology or our product candidates, including Stimuvax, conflict with the rights of others, we may not be able to manufacture or market our product candidates,

which could have a material and adverse effect on us and on our collaboration with Merck KGaA.

Issued patents held by others may limit our ability to develop commercial products. All issued patents are entitled to a presumption of validity under the laws of the United States. If we need licenses to such patents to permit us to develop or market our product candidates, we may be required to pay significant fees or royalties, and we cannot be certain that we would be able to obtain such licenses on commercially reasonable terms, if at all. Competitors or third parties may obtain patents that may cover subject matter we use in developing the technology required to bring our products to market, that we use in producing our products, or that we use in treating patients with our products. We know that others have filed patent applications in various jurisdictions that relate to several areas in which we are developing products. Some of these patent applications have already resulted in the issuance of patents and some are still pending. We may be required to alter our processes or product candidates, pay licensing fees or cease activities. Certain parts of our vaccine technology, including the MUC1 antigen, originated from third party sources. These third party sources include academic, government and other research laboratories, as well as the public domain. If use of technology incorporated into or used to produce our product candidates is challenged, or if our processes or product candidates conflict with patent rights of others, third parties could bring legal actions against us, in Europe, the United States and elsewhere, claiming damages and seeking to enjoin manufacturing and marketing of the affected products. Additionally, it is not possible to predict with certainty what patent claims may issue from pending applications. In the United States, for example, patent prosecution can proceed in secret prior to issuance of a patent. As a result, third parties may be able to obtain patents with claims relating to our product candidates which they could attempt to assert against us. Further, as we develop our products, third parties may assert that we infringe the patents currently held or licensed by them and it is difficult to provide the outcome of any such action

There has been significant litigation in the biotechnology industry over patents and other proprietary rights and if we become involved in any litigation, it could consume a substantial portion of our resources, regardless of the outcome of the litigation. If these legal actions are successful, in addition to any potential liability for damages, we could be required to obtain a license, grant cross-licenses and pay substantial royalties in order to continue to manufacture or market the affected products.

There is no assurance that we would prevail in any legal action or that any license required under a third party patent would be made available on acceptable terms or at all. Ultimately, we could be prevented from commercializing a product, or forced to cease some aspect of our business operations, as a result of claims of patent infringement or violation of other intellectual property rights, which could have a material and adverse effect on our business, financial condition and results of operations.

If any products we develop become subject to unfavorable pricing regulations, third party reimbursement practices or healthcare reform initiatives, our ability to successfully commercialize our products will be impaired.

Our future revenues, profitability and access to capital will be affected by the continuing efforts of governmental and private third party payors to contain or reduce the costs of health care through various means. We expect a number of federal, state and foreign proposals to control the cost of drugs through government regulation. We are unsure of the form that any health care reform legislation may take or what actions federal, state, foreign and private payors may take in response to the proposed reforms. Therefore, it is difficult to provide the effect of any implemented reform on our business. Our ability to commercialize our products successfully will depend, in part, on the extent to which reimbursement for the cost of such products and related treatments will be available from

government health administration authorities, such as Medicare and Medicaid in the United States, private health insurers and other organizations. Significant uncertainty exists as to the reimbursement status of newly approved health care products, particularly for indications for which there is no current effective treatment or for which medical care typically is not sought. Adequate third party coverage may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product research and development. If adequate coverage and reimbursement levels are not provided by government and third party payors for use of our products, our products may fail to achieve market acceptance and our results of operations will be harmed.

Foreign governments often impose strict price controls, which may adversely affect our future profitability.

We intend to seek approval to market our future products in both the United States and foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions, we will be subject to rules and regulations in those jurisdictions relating to our product. In some foreign countries, particularly in the European Union, prescription drug pricing is subject to government control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a drug candidate. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our future product to other available therapies. If reimbursement of our future products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability.

We face potential product liability exposure, and if successful claims are brought against us, we may incur substantial liability for a product candidate and may have to limit its commercialization.

The use of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval expose us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health care providers, pharmaceutical companies or others selling our products. If we cannot successfully defend ourselves against these claims, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for our product candidates;
- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs of related litigation;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and the inability to commercialize our product candidates.

Although we currently have product liability insurance coverage for our clinical trials for expenses or losses up to a $10 million aggregate annual limit, our insurance coverage may not reimburse us or may not be sufficient to reimburse us for any or all expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for our product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. On occasion, large judgments have been awarded in class action lawsuits based on products that had unanticipated side effects. A successful product liability claim or

series of claims brought against us could cause our stock price to fall and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

We face substantial competition, which may result in others discovering, developing or commercializing products before, or more successfully, than we do.

Our future success depends on our ability to demonstrate and maintain a competitive advantage with respect to the design, development and commercialization of our product candidates. We expect any product candidate that we commercialize with our collaborative partners or on our own will compete with existing, market-leading products and products in development.

Stimuvax. Currently, no product has been approved for maintenance therapy following induction chemotherapy for Stage III NSCLC, which is the indication for which Stimuvax is being developed. However, it is possible that existing or new agents will be approved for this indication. In addition, there are three vaccines in development for the treatment of NSCLC, including GSK's MAGE A3 vaccine in Phase 3, IDM Pharma Inc.'s IDM-2101 in Phase 2 and Transgene S.A.'s TG-4010, also in Phase 2. To our knowledge, these vaccines are not currently being developed in the same indication as Stimuvax. However, subsequent development of these vaccines, including Stimuvax, may result in direct competition.

Small Molecule Products. PX-478 is a HIF-1 alpha inhibitor and we believe that at least one other company, Enzon Pharmaceutical, Inc., has a HIF-1 alpha anti-sense compound that is currently in Phase 1. There are also several approved targeted therapies for cancer and in development against which our small molecule products might compete. For example, Avastin is a direct inhibitor of vascular endothelial growth factor, or VEGF, and PX-478 is expected to lower levels of VEGF.

Many of our potential competitors have substantially greater financial, technical and personnel resources than we have. In addition, many of these competitors have significantly greater commercial infrastructures than we have. Our ability to compete successfully will depend largely on our ability to:

- design and develop products that are superior to other products in the market;
- attract qualified scientific, medical, sales and marketing and commercial personnel;
- obtain patent and/or other proprietary protection for our processes and product candidates;
- obtain required regulatory approvals; and
- successfully collaborate with others in the design, development and commercialization of new products.

PX-866 is an inhibitor of phosphoinositide 3-kinase (PI3K). We are aware of several companies that have entered clinical trials with competing compounds targeting the same protein. Among those are Novartis (clinical phase I/II), Semafore (phase I), Exelixis (phase I), Genentech (phase I), and Calistoga (phase I).

Established competitors may invest heavily to quickly discover and develop novel compounds that could make our product candidates obsolete. In addition, any new product that competes with a generic market-leading product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome severe price competition and to be commercially successful. If we are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition and operations will suffer.

If we are unable to enter into collaborations with partners to perform sales and marketing functions, or build these functions ourselves, we will not be able to commercialize our product candidates.

We currently do not have any internal sales, marketing or distribution capabilities. In order to commercialize any of our product candidates, we must either acquire or internally develop a sales, marketing and distribution infrastructure or enter into collaborations with partners to perform these services for us. Under our agreements with Merck KGaA, Merck KGaA is responsible for developing and commercializing Stimuvax, and any problems with that relationship could delay the development and commercialization of Stimuvax. Additionally, we may not be able to enter into collaborations with respect to our product candidates not covered by the Merck KGaA agreements on commercially acceptable terms, if at all. Factors that may inhibit our efforts to commercialize our product candidates without collaboration partners include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating a sales and marketing organization.

If we are not able to partner with a third party and are not successful in recruiting sales and marketing personnel or in building a sales and marketing and distribution infrastructure, we will have difficulty commercializing our product candidates, which would adversely affect our business and financial condition.

If we lose key personnel, or we are unable to attract and retain highly-qualified personnel on a cost-effective basis, it would be more difficult for us to manage our existing business operations and to identify and pursue new growth opportunities.

Our success depends in large part upon our ability to attract and retain highly qualified scientific, clinical, manufacturing, and management personnel. In addition, any difficulties retaining key personnel or managing this growth could disrupt our operations. Future growth will require us to continue to implement and improve our managerial, operational and financial systems, and continue to retain, recruit and train additional qualified personnel, which may impose a strain on our administrative and operational infrastructure. In particular, we are in the process of recruiting a Chief Medical Officer to oversee our clinical development programs. The competition for qualified personnel in the biopharmaceutical field is intense. We are highly dependent on our continued ability to attract, retain and motivate highly-qualified management, clinical and scientific personnel. Due to our limited resources, we may not be able to effectively recruit, train and retain additional qualified personnel. If we are unable to retain key personnel or manage our growth effectively, we may not be able to implement our business plan.

Furthermore, we have not entered into non-competition agreements with all of our key employees. In addition, we do not maintain "key person" life insurance on any of our officers, employees or consultants. The loss of the services of existing personnel, the failure to recruit additional key scientific, technical and managerial personnel in a timely manner, and the loss of our employees to our competitors would harm our research and development programs and our business.

Our business is subject to increasingly complex environmental legislation that has increased both our costs and the risk of noncompliance.

Our business may involve the use of hazardous material, which will require us to comply with environmental regulations. We face increasing complexity in our product development as we adjust to new and upcoming requirements relating to the materials composition of many of our product candidates. If we use biological and hazardous materials in a manner that causes contamination or injury or violates laws, we may be liable for damages. Environmental regulations could have a material adverse effect on the results of our operations and our financial position. We maintain insurance under our general liability policy for any liability associated with our hazardous materials activities, and it is possible in the future that our coverage would be insufficient if we incurred a material environmental liability.

If we fail to establish and maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our consolidated operating results, our ability to operate our business, and our stock price.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. Failure on our part to have effective internal financial and accounting controls would cause our financial reporting to be unreliable, could have a material adverse effect on our business, operating results, and financial condition, and could cause the trading price of our common stock to fall dramatically. We and our independent registered public accounting firm have recently identified certain significant deficiencies in our internal controls.

Remedying these significant deficiencies and maintaining proper and effective internal controls will require substantial management time and attention and may result in our incurring substantial incremental expenses, including with respect to increasing the breadth and depth of our finance organization to ensure that we have personnel with the appropriate qualifications and training in certain key accounting roles and adherence to certain control disciplines within the accounting and reporting function.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Our management does not expect that our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the company will have been detected. As discussed in this Form 10-K, our management, together with our independent registered chartered accountants, identified a material weakness in our controls for the year ended December 31, 2007 and may identify additional deficiencies in the future.

We are expending significant resources in maintaining and improving the necessary documentation and testing procedures required by Section 404 of the Sarbanes-Oxley Act. We cannot be certain that the actions we are taking to improve our internal controls over financial reporting will be sufficient or that we will be able to implement our planned processes and procedures in a timely manner. In future periods, if the process required by Section 404 of the Sarbanes-Oxley Act reveals any material weaknesses or further significant deficiencies, the correction of any such material weaknesses or significant deficiencies could require additional remedial measures which could be costly and time-

consuming. In addition, we may be unable to produce accurate financial statements on a timely basis. Any of the foregoing could cause investors to lose confidence in the reliability of our consolidated financial statements, which could cause the market price of our common stock to decline and make it more difficult for us to finance our operations and growth.

If we are required to redeem the shares of our Class UA preferred stock, our financial condition may be adversely affected.

Our certificate of incorporation provides for the mandatory redemption of shares of our Class UA preferred stock if the Company realizes "net profits" in any year. See "Note 11 — Share Capital — Redemption" of the audited financial statements included elsewhere in this Annual Report on Form 10-K. For this purpose, "net profits ... means the after tax profits determined in accordance with generally accepted accounting principles, where relevant, consistently applied."

The certificate of incorporation does not specify the jurisdiction whose generally accepted accounting principles would apply for the redemption provision. At the time of the original issuance of the shares, we were a corporation organized under the federal laws of Canada, and our principal operations were located in Canada. In addition, the original purchaser and current holder of the Class UA preferred stock is a Canadian entity. In connection with our reincorporation in Delaware, we disclosed that the rights, preferences and privileges of the shares would remain unchanged except as required by Delaware law, and the mandatory redemption provisions were not changed. In addition, the formula for determining the price at which such shares would be redeemed is expressed in Canadian dollars. Therefore, if challenged, we believe that a Delaware court would determine that "net profits" be interpreted in accordance with Canadian GAAP.

As a result of the December 2008 Merck KGaA transaction, we recognized on a one-time basis all deferred revenue relating to Stimuvax, under both U.S. GAAP and Canadian GAAP. Under U.S. GAAP this resulted in net income. However, under Canadian GAAP we were required to recognize an impairment on intangible assets which resulted in a net loss for 2008 and therefore do not intend to redeem any shares of Class UA preferred stock in 2009. If in the future we recognize net income under Canadian GAAP, or any successor to such principles, or if the holder of Class UA preferred stock were to challenge, and prevail in a dispute involving, the interpretation of the mandatory redemption provision, we may be required to redeem such shares which would have an adverse effect on our cash position. The maximum aggregate amount that we would be required to pay to redeem such shares is CAN $1.25 million.

We may expand our business through the acquisition of companies or businesses or in-licensing product candidates that could disrupt our business and harm our financial condition.

We may in the future seek to expand our products and capabilities by acquiring one or more companies or businesses or in-licensing one or more product candidates. Acquisitions and in-licenses involve numerous risks, including:

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

- potential loss of our key employees or key employees of the acquired companies or businesses.

In our recent history, we have not expanded our business through in-licensing and we have completed only one acquisition; therefore, our experience in making acquisitions and in-licensing is limited. We cannot assure you that any acquisition or in-license 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 or in-licensed product candidate. In addition, our future success would depend in part on our ability to manage the rapid growth associated with some of these acquisitions and in-licenses. We cannot assure you that we would be able to make the combination of our business with that of acquired businesses or companies or in-licensed product candidates work or be successful. Furthermore, the development or expansion of our business or any acquired business or company or in-licensed product candidate may require a substantial capital investment by us. We may not have these necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise funds by selling shares of our capital stock, which could dilute our current stockholders' ownership interest, or securities convertible into our capital stock, which could dilute current stockholders' ownership interest upon conversion.

Risks Related to the Ownership of Our Common Stock

Our common stock may become ineligible for listing on The NASDAQ Stock Market, which would materially adversely affect the liquidity and price of our common stock.

Our common stock is currently listed for trading in the United States on The NASDAQ Global Market. We have in the past and could in the future be unable to meet The NASDAQ Global Market continued listing requirements, particularly if (i) the market value of our common stock is not at least $50 million or, in the alternative, our stockholders' equity is not at least $10 million or (ii) our common stock fails to trade at or above $1.00 per share for an extended period of time.

For example, on August 20, 2008 we disclosed that we had received a letter from The NASDAQ Stock Market indicating that we did not comply with the requirements for continued listing on The NASDAQ Global Market because we did not meet the maintenance standard in Marketplace Rule 4450(b)(1)(A) that specifies, among other things, that the market value of our common stock be at least $50 million or that or stockholders' equity was at least $10 million. We were notified on March 12, 2009 that the NASDAQ Listing Qualifications Panel determined that our common stock could continue to be listed on The NASDAQ Global Market since we demonstrated, among other things, that our stockholders' equity was at least $10 million as of December 31, 2008. In addition, on November 2, 2007, we received a letter from NASDAQ notifying Biomira, our predecessor corporation, that for the 30 consecutive trading days preceding the date of the letter, the bid price of Biomira's common stock had closed below the $1.00 per share minimum required for continued inclusion on The NASDAQ Global Market pursuant to NASDAQ Marketplace Rule 4450(a)(5). On January 2, 2008, we were notified by NASDAQ that our common stock had regained compliance with the minimum bid requirement for continued listing on The NASDAQ Global Market.

We have a history of losses and would expect that, absent the completion of a financing or other event that would have a positive impact on our stockholders' equity, our stockholders' equity would decline over time. Further, in the past year our stock price has traded near, and at times below, the $1.00 minimum bid price required for continued listing on NASDAQ. Although NASDAQ has provided relief from the $1.00 minimum bid price requirement as a result of the recent weakness in the stock market, it may not continue to do so. If we fail to maintain compliance with NASDAQ's listing standards, and our common stock becomes ineligible for listing on The NASDAQ Stock Market the liquidity and price of our common stock would be adversely affected.

The trading price of our common stock may be volatile.

The market prices for and trading volumes of securities of biotechnology companies, including our securities, have been historically volatile. The market has from time to time experienced significant price and volume fluctuations unrelated to the operating performance of particular companies. The market price of our common shares may fluctuate significantly due to a variety of factors, including:

- the results of pre-clinical testing and clinical trials by us, our collaborators and/or our competitors;
- technological innovations or new therapeutic products;
- governmental regulations;
- developments in patent or other proprietary rights;
- litigation;
- public concern as to the safety of products developed by us or others;
- comments by securities analysts;
- the issuance of additional shares of common stock, or securities convertible into, or exercisable or exchangeable for, shares of our common stock in connection with financings, acquisitions or otherwise;
- the perception that shares of our common stock may be delisted from The NASDAQ Stock Market;
- the incurrence of debt;
- general market conditions in our industry or in the economy as a whole; and
- political instability, natural disasters, war and/or events of terrorism.

In addition, the stock market has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of individual companies. Broad market and industry factors may seriously affect the market price of companies' stock, including ours, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

Because we do not expect to pay dividends on our common stock, stockholders will benefit from an investment in our common stock only if it appreciates in value.

We have never paid cash dividends on our common shares and have no present intention to pay any dividends in the future. We are not profitable and do not expect to earn any material revenues for at least several years, if at all. As a result, we intend to use all available cash and liquid assets in the development of our business. Any future determination about the payment of dividends will be made at the discretion of our board of directors and will depend upon our earnings, if any, capital requirements, operating and financial conditions and on such other factors as our board of directors deems relevant. As a result, the success of an investment in our common stock will depend upon any future appreciation in its value. There is no guarantee that our common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Future sales of shares by existing stockholders could cause our stock price to decline.

As of December 31, 2008, we had outstanding 19,492,432 common shares. Of these shares, 2,979,623 common shares, approximately 15.3%, were held by former ProlX stockholders, including 800,239 common shares held by D. Lynn Kirkpatrick and 813,633 common shares

held by Garth Powis. Dr. Kirkpatrick and Dr. Powis are married. The former ProlX stockholders were permitted to begin selling the shares they acquired in the acquisition in compliance with Rule 144 on the one year anniversary of the closing date, or October 30, 2007. Dr. Kirkpatrick and Dr. Powis will be permitted to sell the shares they acquired in compliance with Rule 144 on March 31, 2009, the date on which they cease to be our affiliates If any substantial amount of our common stock, including former ProlX stockholders, is sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline. Our average trading volume is not large, and sales of large blocks of shares can have an adverse impact on the trading price of our common stock.

We expect to raise additional capital in the future; however, such capital may not be available to us on reasonable terms, if at all, when or as we require additional funding. If we issue additional shares of our common stock or other securities that may be convertible into, or exercisable or exchangeable for, our common stock, our existing stockholders would experience further dilution.

We expect that we will seek to raise additional capital from time to time in the future. Such financings may involve the issuance of debt, equity and/or securities convertible into or exercisable or exchangeable for our equity securities. These financings may not be available to us on reasonable terms or at all when and as we require funding. If we are able to consummate such financings, the terms of such financings may adversely affect the interests of our existing stockholders. Any failure to obtain additional working capital when required would have a material adverse effect on our business and financial condition and would be expected to result in a decline in our stock price. Any issuances of our common stock, preferred stock, or securities such as warrants or notes that are convertible into, exercisable or exchangeable for, our capital stock, would have a dilutive effect on the voting and economic interest of our existing stockholders.

We can issue shares of preferred stock that may adversely affect the rights of a stockholder of our common stock.

Our certificate of incorporation authorizes us to issue up to 10,000,000 shares of preferred stock with designations, rights, and preferences determined from time-to-time by our board of directors. Accordingly, our board of directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights superior to those of holders of our common stock. For example, an issuance of shares of preferred stock could:

- adversely affect the voting power of the holders of our common stock;
- make it more difficult for a third party to gain control of us;
- discourage bids for our common stock at a premium;
- limit or eliminate any payments that the holders of our common stock could expect to receive upon our liquidation; or
- otherwise adversely affect the market price or our common stock.

We have in the past, and we may at any time in the future, issue additional shares of authorized preferred stock.

ITEM 1B. ***Unresolved Staff Comments***

None.

ITEM 2. *Properties*

Description of Property

In May 2008, we entered into a sublease for an office facility in Seattle, Washington totaling approximately 17,000 square feet where we intend to consolidate certain of our operations. The sublease expires in December 17, 2011. In May 2008 we also entered into a lease directly with the landlord of such facility which will have a six year term beginning at the expiration of the sublease. We believe that our office facility is in good condition, adequately maintained and suitable for the conduct of our business.

ITEM 3. *Legal Proceedings*

We are not a party to any material legal proceedings with respect to us, our subsidiaries, or any of our material properties.

ITEM 4. *Submission of Matters to a Vote of Security Holders*

No matters were submitted to a vote of our stockholders during the fourth quarter of our fiscal year ended December 31, 2008.

PART II

ITEM 5. *Market for Registrant's Common Equity, Related Stockholder Matters and Issuers Purchases of Equity Securities*

Market Information for Common Stock

Our common stock has been quoted on the NASDAQ Global Market under the symbol "ONTY" and on the Toronto Stock Exchange under the symbol "ONY" since December 11, 2007. Prior to that time, Biomira's common shares were quoted on NASDAQ Global Market under the symbol "BIOM" and on the Toronto Stock Exchange under the symbol "BRA."

The following table sets forth for the indicated periods the high and low sales prices of our common stock as reported by the NASDAQ Global Market.

	High	Low
Fiscal year ended December 31, 2008:		
First Quarter	$ 4.70	$ 1.47
Second Quarter	4.25	2.38
Third Quarter	3.00	1.10
Fourth Quarter	1.21	0.62
Fiscal year ended December 31, 2007:		
First Quarter	$10.20	$6.00
Second Quarter	9.06	6.18
Third Quarter	6.90	5.28
Fourth Quarter	5.70	2.04

Dividends

We have never declared nor paid cash dividends on our common stock. We currently expect to retain future earnings, if any, to finance the operation and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our Board of Directors.

Stockholders

As of March 25 , 2009, there were 19,492,432 shares of our common stock outstanding held by approximately 655 stockholders of record and 28,058 stockholders in nominee name.

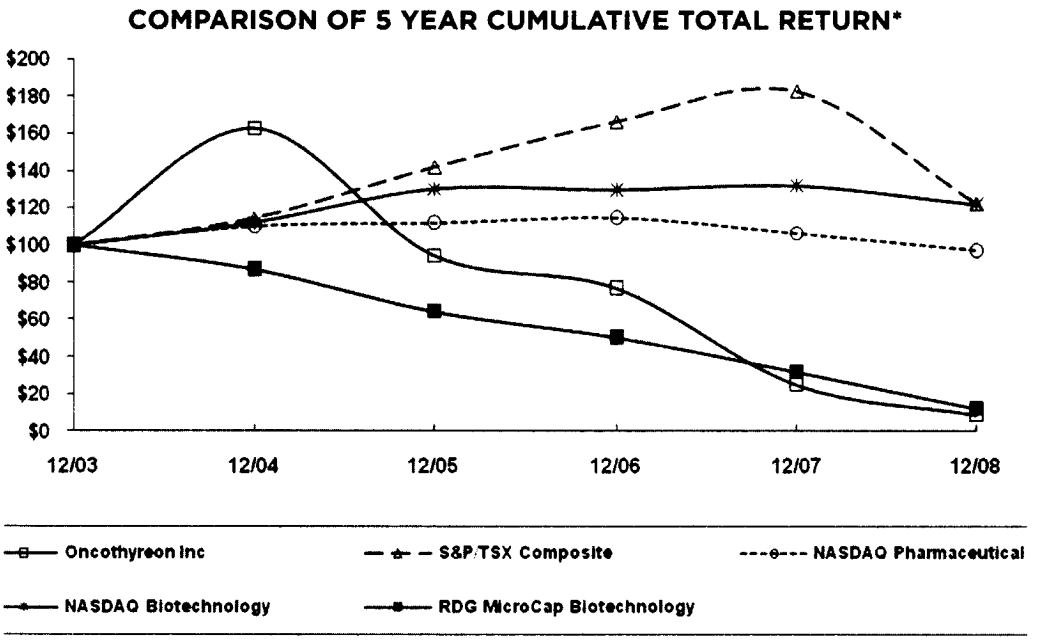
Securities Authorized for Issuance under Equity Compensation Plans

The information concerning our equity compensation plans is incorporated by reference herein to our Proxy Statement for the 2009 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2008.

Stock Performance Graph

Notwithstanding any statement to the contrary in any of our previous or future filings with the SEC, the following information relating to the price performance of our common stock shall not be deemed to be "filed" with the SEC or to be "soliciting material" under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and it shall not be deemed to be incorporated by reference into any of our filings under the Securities Act or the Exchange Act, except to the extent we specifically incorporate it by reference into such filing.

The graph below compares the cumulative total stockholder return of our common stock with that of the NASDAQ Pharmaceutical Index, NASDAQ Biotechnology Index, RDG MicroCap Biotechnology Index and a composite S&P/TSX index from December 31, 2003 through December 31, 2008. The comparisons in this graph below are based on historical data and are not intended to forecast or be indicative of future performance of our common stock. The graph assumes that $100 was invested and that all dividends were reinvested.



* $100 invested on 12/31/03 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

Unregistered Sale of Equity Securities

During the quarter ended December 31, 2008, we did not issue or sell any shares of our common stock or other equity securities pursuant to unregistered transactions in reliance upon exemption from the registration requirements of the Securities Act of 1933, as amended.

Issuer Purchases of Equity Securities

We did not make any purchases of our outstanding common stock during the three months ended December 31, 2008.

ITEM 6. *Selected Financial Data*

The data set forth below is not necessarily indicative of the results of future operations and should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this annual report on Form 10-K and also with "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Year Ended December 31,				
	2008	2007	2006(1)(2)	2005	2004(6)
	(Amounts in thousands, except share and per share data.)				
Consolidated Statements of Operations Data:					
Revenue					
Contract research and development	$ —	$ 631	$ 3,678	$ 3,171	$ 1,652
Contract manufacturing(4)	15,582	2,536	—	—	—
Licensing revenue from collaborative agreements	24,416	528	182	171	5,025
Licensing, royalties and other revenue	—	103	119	271	194
	39,998	3,798	3,979	3,613	6,871
Expenses					
Research and development	9,318	10,011	12,200	13,567	10,616
Manufacturing(4)(5)	13,675	2,564	—	—	—
General and administrative	9,749	11,797	7,636	4,690	4,513
Marketing and business development	—	565	587	756	988
Depreciation	422	246	247	224	295
In-process research and development	—	—	24,920	—	—
Investment and other expense (income)	(298)	371	(916)	(656)	(284)
Interest expense	7	5	10	2	4
Change in fair value of warrant liability	—	(1,421)	(3,849)	(3,843)	255
	(32,873)	(24,138)	(40,835)	(14,740)	(16,387)
Income (loss) before income taxes	7,125	(20,340)	(36,856)	(11,127)	(9,516)
Income tax recovery Current	—	—	462	287	312
Net income (loss)	$ 7,125	$ (20,340)	$ (36,394)	$ (10,840)	$ (9,204)
Earnings (loss) per share — basic(3)	$ 0.37	$ (1.04)	$ (2.38)	$ (0.83)	$ (0.76)
Earnings (loss) per share — diluted(3)	$ 0.36	$ (1.04)	$ (2.38)	$ (0.83)	$ (0.76)
Weighted average number of common shares outstanding(3)	19,490,621	19,485,889	15,316,697	13,109,917	12,156,851
Weighted average number of common shares outstanding(3)	19,570,170	19,485,889	15,316,697	13,109,917	12,156,851
Consolidated Balance Sheets Data:					
Cash and short term investments	$ 19,166	$ 24,186	$ 28,395	$ 18,368	$ 32,102
Total assets	$ 24,971	$ 36,218	$ 33,456	$ 20,438	$ 33,516
Total long-term liabilities	$ 393	$ 12,526	$ 2,328	$ 1,383	$ 5,457
Stockholders' equity	$ 20,717	$ 12,019	$ 27,435	$ 16,436	$ 25,910
Common shares outstanding(3)	19,492,432	19,485,889	19,485,889	13,136,094	13,056,663

(1) Effective January 1, 2006, we adopted the fair value recognition provisions of SFAS 123(R) using the modified prospective transition method, which requires us to apply the provisions of SFAS 123(R) only to awards granted, modified, repurchased, or cancelled after the adoption date. We recognize the value of the portion of the estimated fair value of the awards that is ultimately expected to vest as expense over the requisite vesting periods on a straight-line basis in our consolidated statements of operations. Prior to January 1, 2006, we accounted for stock-based employee compensation arrangements in accordance with Accounting Principles Board Opinion ("APB") 25. Under APB 25, we were required to record as compensation expense the excess, if any, of the fair market value of the stock on the date the stock option was granted over the applicable option exercise price. Prior to fiscal 2006, we recorded no compensation expense under APB 25 as all options granted had exercise prices equal to the fair market value of the common stock on the date of grant.

(2) On October 31, 2006, we announced the acquisition of ProlX and commencing with our quarter ended December 31, 2006 the results of ProlX have been included in our consolidated statements of operations.

(3) On December 11, 2007, Oncothyreon's common stock began trading on the NASDAQ Global Market under the symbol ONTY and on the Toronto Stock Exchange under the symbol ONY. Shareholders of the former Biomira received one share of Oncothyreon common stock for each six shares of Biomira that they held. For years presented prior to 2007, the summary consolidated financial and operating data has been prepared after giving effect to the 6 for 1 share exchange.

(4) In August 2007, we signed the amended and restated collaboration and supply agreements related to Stimuvax with Merck KGaA. Pursuant to the terms of the amended agreements, from August 2007 to December 2008, with the entry into the new license agreement, we retained the responsibility to manufacture Stimuvax and Merck KGaA agreed to purchase Stimuvax from us. During their term, the amended agreements transformed what were previously reimbursements of a portion of the Stimuvax manufacturing costs to a long-term contract manufacturing arrangement. Our financial reporting during the term of the collaboration and supply agreements reflects the revenue and associated clinical trial material costs related to the supply of Stimuvax separately in the consolidated statements of operations as contract manufacturing revenue and manufacturing expense, respectively. Previously, these amounts were reported under contract research and development revenue and research and development expense, respectively.

(5) The effect of the asset purchase agreement and new license agreement with Merck KGaA, is reflected in the December 31, 2008 data.

(6) The selected historical consolidated financial data as of December 31, 2004 is derived from our unaudited consolidated financial statements.

ITEM 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" included elsewhere in this report. All dollar amounts included in this discussion and analysis of our financial condition and results of operations represent U.S. dollars unless otherwise specified. Throughout this discussion, unless the context specifies or implies otherwise, the terms "Company", "Oncothyreon", "Biomira", "we", "us" and "our" refer to Oncothyreon Inc., its predecessor, Biomira Inc., and its subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company focused primarily on the development of therapeutic products for the treatment of cancer. Our goal is to develop and commercialize novel synthetic vaccines and targeted small molecules that have the potential to improve the lives and outcomes of cancer patients. Our cancer vaccines are designed to stimulate the immune system to attack cancer cells, while our small molecule compounds are designed to inhibit the activity of specific cancer-related proteins. We are advancing our product candidates through in-house development efforts and strategic collaborations.

We believe the quality and breadth of our product candidate pipeline, strategic collaborations and scientific team will enable us to become an integrated biopharmaceutical company with a diversified portfolio of novel, commercialized therapeutics for major diseases.

Our lead product candidate is Stimuvax, which is a cancer vaccine currently in Phase 3 development for non-small cell lung cancer, or NSCLC. We have granted an exclusive, worldwide license to Merck KGaA of Darmstadt, Germany, or Merck KGaA, for the development, manufacture and commercialization of Stimuvax. Our pipeline of clinical and pre-clinical stage proprietary small molecule product candidates was acquired by us in October 2006 from ProlX Pharmaceuticals Corporation, or ProlX. We are currently focusing our internal development efforts on PX-478, for which we initiated a Phase 1 trial in advanced metastatic cancer in August 2007, and PX-866, for which we initiated a Phase 1 trial in advanced metastatic cancer in June 2008. We are completing a Phase 2 trial for PX-12 in pancreatic cancer and have announced our intention to seek a partner for further development. As of the date of this report, we have not licensed any rights to our small molecules to any third party and retain all development, commercialization and manufacturing rights. In addition to our product candidates, we have developed novel vaccine technology we may develop ourselves and/or license to others.

In 2001, we entered into exclusive supply and collaboration agreements with Merck KGaA to develop and market Stimuvax, subject to certain development and co-promotion rights we retained. In connection with entering into these agreements, Merck KGaA made an equity investment in us in 2001, was obligated to make additional cash payments, generally contingent on satisfaction of specified milestones, and to pay us a royalty on Stimuvax sales, if any.

In August 2007, we restructured our agreements with Merck KGaA such that Merck KGaA would fully assume responsibility for the further clinical development and marketing of Stimuvax. Under the restated agreements, we converted the U.S. and Canadian co-promotion interest to a specified royalty rate, which is higher than the rate Merck KGaA had agreed to pay in markets outside of North America under the original agreements. The restated agreements also contained development and sales-based milestone payments as well as revised payments related to manufacturing scale-up and process transfer. Under the revised agreements, we retained the right to manufacture of Stimuvax, including process development and scale-up for commercial manufacturing. The signing of the amended agreements also triggered a milestone payment to us of $2.5 million, before associated payments to third parties of $0.1 million, which was received in September 2007. In December 2007, we announced that we had completed the transfer of certain assays and methodology related to Stimuvax to Merck KGaA triggering a payment to us of $5.0 million. In May 2008 we completed the transfer of certain additional assays and manufacturing technology related to Stimuvax which triggered a payment to us of $3.0 million.

Under the August 2007 agreement Merck KGaA would exclusively purchase Stimuvax from us; with respect to purchases for commercial sales, the purchase price would be subtracted from our royalty.

On December 18, 2008, we entered into a new license agreement with Merck KGaA pursuant to which the amended and restated collaboration and supply agreements were replaced. Under the new license agreement, among other things, we licensed to Merck KGaA the right to manufacture Stimuvax and transferred certain manufacturing know-how to Merck KGaA in return for an upfront payment of approximately $10.5 million and the royalty rates on net sales to which we are entitled if Stimuvax is commercialized were reduced by a specified amount which we believe is consistent with our estimate of costs of goods, manufacturing scale up costs and certain other expenses assumed by Merck KGaA. All other milestone payments remained the same and we expect to receive a milestone payment in 2009 related to process development.

In connection with this transaction, Oncothyreon also entered into an asset purchase agreement pursuant to which we sold to Merck KGaA certain assets related to the manufacture of, and inventory of, Stimuvax, placebo and raw materials, and Merck KGaA agreed to assume certain liabilities related to the manufacture of Stimuvax and our obligations related to the lease of our Edmonton, Alberta, Canada facility. The aggregate purchase price paid by the buyers pursuant to the terms asset purchase agreement consisted of approximately $2.5 million, for aggregate consideration payable to us in connection with the new license agreement and the asset purchase agreement of approximately $13.0 million. In addition, 43 employees at our former Edmonton facility were transferred to Merck, which will significantly reduce our operating expenses in future periods.

We have not developed a therapeutic product to the commercial stage. As a result, our revenue has been limited to date, and we do not expect to recognize any material revenue for the foreseeable future. In particular, our ability to generate revenue in future periods will depend substantially on the progress of ongoing clinical trials for Stimuvax and our small molecule compounds, our ability to obtain development and commercialization partners for our small molecule compounds, Merck KGaA's success in obtaining regulatory approval for Stimuvax, our success in obtaining regulatory approval for our small molecule compounds, and Merck KGaA's and our respective abilities to establish commercial markets for these drugs.

Any adverse clinical results relating to Stimuvax or any decision by Merck KGaA to discontinue its efforts to develop and commercialize the product would have a material and adverse effect on our future revenues and results of operations and would be expected to have a material adverse effect on the trading price of our common stock. Our small molecule compounds are much earlier in the development stage than Stimuvax, and we do not expect to realize any revenues associated with the commercialization of our products candidates for the foreseeable future.

The continued research and development of our product candidates will require significant additional expenditures, including preclinical studies, clinical trials, manufacturing costs and the expenses of seeking regulatory approval. We rely on third parties to conduct a portion of our preclinical studies, all of our clinical trials and all of the manufacturing of cGMP material. We expect expenditures associated with these activities to increase in future years as we continue the development of our small molecule product candidates.

We have incurred substantial losses since our inception. As of December 31, 2008, our accumulated deficit totaled $314.4 million. We recognized net income of $7.1 million for 2008 compared to a net loss of $20.3 million for 2007. The December 2008 transaction with Merck KGaA resulted in the recognition of $12.9 million which had previously been recorded as deferred revenue, $11.2 million related to the bulk sale of inventory and

$10.5 million from the sale of Stimuvax manufacturing rights and know-how. In future periods, we expect to continue to incur substantial net losses as we expand our research and development activities with respect to our small molecules product candidates. To date we have funded our operations principally through the sale of our equity securities, cash received through our strategic alliance with Merck KGaA, government grants, debt financings, and equipment financings. We completed our most recent financing in December 2006, raising approximately $13.0 million in gross proceeds from the sale of our common stock and the issuance of warrants. Because we have limited revenues and substantial research and development and operating expenses, we expect that we will in the future seek additional working capital funding from the sale of equity or debt securities or the licensing of rights to our product candidates.

On August 20, 2008, we disclosed we received a letter from The NASDAQ Stock Market indicating that we did not comply with the requirements for continued listing on The NASDAQ Global Market because the market value of our common stock was not at least $50 million. We appealed this decision and after demonstrating, among other things, that we met an alternative listing requirement since our stockholders' equity was greater than $10 million as of December 31, 2008, The NASDAQ Listing Qualifications Panel determined that we had regained compliance with The NASDAQ Global Market listing requirements and so notified on March 12, 2009.

Our predecessor corporation, Biomira Inc., a Canadian corporation, or Biomira, listed its common shares on the Toronto Stock Exchange in July 1987 in connection with its initial public offering. In December 1991, Biomira listed its securities for trading on the NASDAQ Global Market. Until December 10, 2007, Biomira's shares traded on the NASDAQ Global Market under the symbol "BIOM" in U.S. dollars and on the Toronto Stock Exchange under the symbol "BRA" in Canadian dollars.

On December 10, 2007, we became the successor corporation to Biomira by way of a plan of arrangement effected pursuant to Canadian law. On December 11, 2007, we announced that our common stock began trading on the NASDAQ Global Market under the symbol "ONTY" in U.S. dollars and on the Toronto Stock Exchange under the symbol "ONY" in Canadian dollars at the opening of trading on December 11, 2007. In addition, pursuant to the plan of arrangement, shareholders of the former Biomira received one share of our common stock for each six common shares of Biomira that they held. For years presented prior to 2007, this Management's Discussion and Analysis and our audited consolidated financial statements and related notes for the year ended December 31, 2008 have been prepared after giving effect to the 6 for 1 reverse share exchange implemented in connection with the plan of arrangement. The financial statements and Management's Discussion and Analysis have been prepared using U.S. dollars as the reporting currency.

Key Financial Metrics

Revenue

Historically, our revenue has been derived from our contract research and development activities, payments under our collaborative agreements, and miscellaneous licensing, royalty and other revenues from ancillary business and operating activities. Our collaboration with Merck KGaA on the development of Stimuvax has contributed the substantial majority of our revenue. Prior to August 2007, revenue from our lead product candidate, Stimuvax, was reported under contract research and development revenue. From August 2007, when we entered into the amended and restated supply agreement with Merck KGaA to December 18, 2008, when we entered into the new license agreement with Merck KGaA, we retained the right to manufacture Stimuvax and Merck KGaA was obligated to purchase Stimuvax exclusively from us. As a result, revenue generated during that period was reported as contract manufacturing revenue. As a result of the entry into

the December 2008 agreements with Merck KGaA, we will no longer generate revenues from the manufacture of Stimuvax in future periods.

Contract Research and Development. Contract research and development revenue represents Merck KGaA's contribution toward shared costs associated with Stimuvax clinical trials and clinical trial material provided to Merck KGaA related to Stimuvax. Effective March 1, 2006, we transitioned responsibility for all Stimuvax clinical development and regulatory activities to and the related costs thereon to Merck KGaA. In January 2007, Merck KGaA initiated a global Phase 3 clinical trial under our collaboration assessing the efficacy and safety of Stimuvax as a potential treatment for inoperable non-small cell lung cancer. We expect the clinical trial to include approximately 1,300 patients in approximately 30 countries. Because of the change in our responsibilities for Stimuvax clinical trials, our contract research and development revenue was reduced as we no longer receive reimbursements for shared clinical trial costs.

Contract Manufacturing. From August 2007, when we entered into the amended and restated supply agreement with Merck KGaA to December 18, 2008, when we entered into the new license agreement with Merck KGaA, we retained the right to manufacture Stimuvax and Merck KGaA was obligated to purchase Stimuvax exclusively from us. As a result, our financial reporting during that period reflects the revenue related to the supply of Stimuvax separately as contract manufacturing revenue. As a result of the entry into the new license agreement in December 2008, we will not realize revenue from the manufacture of Stimuvax in future periods

Licensing Revenue from Collaborative Agreements. For periods presented until December 18, 2008 (when we entered into the new license agreement with Merck KGaA) licensing revenue consisted of upfront payments received and other payments made upon achievement of certain development milestones relating to transfers of know-how, clinical trials, regulatory approvals, and commercial development of Stimuvax under our agreements with Merck KGaA. Such revenue is amortized over the life of the relevant patents that had been subject to the former collaboration agreement. As result of the entry into the new license agreement, the future performance obligations that required the payments to be amortized have been eliminated. Therefore, all existing deferred revenue relating to Stimuvax has been recognized in income as we have no more continuing involvement in the development efforts of Stimuvax. Future milestones payments will be recognized in income as they are received.

Licensing, Royalties, and Other Revenue. Licensing, royalties, and other revenue include revenue from sales of compounds and processes from patented technologies to third parties. We did not generate any revenue from the sale of such compounds or processes during the year ended December 31, 2008.

Expenses

Research and Development/Manufacturing. Research and development/manufacturing expense consists of costs associated with research activities as well as costs associated with our product development efforts, conducting preclinical studies, and clinical trial and manufacturing costs. These expenses include external research and development expenses incurred pursuant to agreements with third party manufacturing organizations; technology access and licensing fees related to the use of proprietary third party technologies; employee and consultant-related expenses, including salaries, stock-based compensation expense, benefits, and related costs; and third party supplier expenses.

For the periods covered by this report, we have recognized research and development expenses, including those paid to third parties, as they have been incurred. We credit funding received from government research and development grants against research and development expense. These credits totaled $1.3 million, $2.1 million and $0.2 million for the

years ended December 31, 2008, 2007 and 2006, respectively. These grants were Small Business Innovation Research, or SBIR, grants that we assumed in connection with our acquisition of ProlX on October 30, 2006. We have successfully applied for and received approval for an additional $1.0 million grant for the period August 1, 2008 to July 31, 2009.

The majority of our research and development programs are at an early stage and may not result in any approved products. Product candidates that appear promising at early stages of development may not reach the market for a variety of reasons. For example, Merck KGaA cancelled our collaboration relating to Theratope only after receiving Phase 3 clinical trial results. We had made substantial investments over several years in the development of Theratope and terminated all development activities following the cancellation of our collaboration. Similarly, any of our continuing product candidates may be found to be ineffective or cause harmful side effects during clinical trials, may take longer to complete clinical trials than we have anticipated, may fail to receive necessary regulatory approvals, and may prove impracticable to manufacture in commercial quantities at reasonable cost and with acceptable quality. As part of our business strategy, we may enter into collaboration agreements with larger third party pharmaceutical companies to complete the development and commercialization of our small molecule or other product candidates, and it is unknown whether or on what terms we will be able to secure collaboration arrangements for any candidate. For example, we intend to seek to a collaboration partner for Px-12. In addition, it is difficult to provide the impact of collaboration arrangements, if any, on the development of product candidates. Establishing collaborative product development relationships with large pharmaceutical companies may or may not accelerate the time to completion or reduce our costs with respect to the development and commercialization of any product candidate.

As a result of these uncertainties and the other risks inherent in the drug development process, we cannot determine the duration and completion costs of current or future clinical stages of any of our product candidates. Similarly, we cannot determine when, if, or to what extent we may generate revenue from the commercialization and sale of any product candidate. The timeframe for development of any product candidate, associated development costs, and the probability of regulatory and commercial success vary widely. As a result, other than with respect to Stimuvax, which is subject to our obligations under the agreements with Merck KGaA, we continually evaluate our product candidates and make determinations as to which programs to pursue and how much funding to direct to specific candidates. These determinations are typically made based on consideration of numerous factors, including our evaluation of scientific and clinical trial data and an ongoing assessment of the product candidate's commercial prospects. We anticipate that we will continue to develop our portfolio of product candidates, which will increase our research and development expense in future periods. We do not expect any of our current candidates to be commercially available before 2012, if at all.

Prior to August 2007, costs associated with manufacturing Stimuvax were aggregated with other research and development expenses and reported as one line item. From August 2007, when we entered into the amended and restated supply agreement with Merck KGaA to December 18, 2008, when we entered into the new license agreement with Merck KGaA, we reported costs associated with manufacturing Stimuvax as manufacturing expense. As a result of the entry into the new license agreement with Merck KGaA in December 2008, we will not incur manufacturing expenses associated with this activity,

General and Administrative. General and administrative expense consists principally of salaries, benefits, stock-based compensation expense, and related costs for personnel in our executive, finance, accounting, information technology, and human resource functions. Other general and administrative expenses include an allocation of our facility costs and professional fees for legal, consulting, and accounting services.

Marketing and Business Development. Marketing and business development expense consists principally of salaries, benefits, stock-based compensation expense, and related costs for marketing and business development personnel, including travel costs, research subscriptions, and other marketing administrative costs.

Depreciation. Depreciation expense consists of depreciation of the cost of plant and equipment such as scientific, office, manufacturing, and computer equipment as well as depreciation of leasehold improvements.

In-process Research and Development. In-process research and development expense relates to the portfolio of oncology products we acquired in connection with the acquisition of ProlX. These technologies require regulatory approval to be commercialized and, in the absence of such regulatory approval, have no proven alternative future use. Consequently, we expensed their fair value at the time of the acquisition. During the year ended December 31, 2006, we recognized in-process research and development expenses of $24.9 million in connection with the ProlX acquisition.

Investment and other income. Investment and other income consists of interest and other income on our cash and short-term investments and foreign exchange gains and losses. Our short term investments consist of Canadian or U.S. federal, state, or provincial debt securities, investment grade corporate debt securities and commercial paper, and term deposits or similar instruments of trust companies and banks, all with original maturities of between 90 days and one year at the time of purchase. Historically, our short term investments and cash balances were denominated in either U.S. dollars or Canadian dollars, and the relative weighting between U.S. dollars and Canadian dollars varied based on market conditions and our operating requirements in the two countries. However, with the reincorporation to, and concentration of our operating activities in, the United States, from October, 2008, our cash balances have been maintained predominantly in U.S. dollar deposits. We have historically not engaged in hedging transactions with respect to our U.S. and Canadian dollars investment assets or cash balances.

Interest expense. Interest expense consists of interest payments under capital lease agreements for computer equipment.

Change in fair value of warrants. Change in fair value of warrants relates to outstanding warrants to acquire shares of common stock. The exercise price of the warrants is denominated in U.S. dollars. Share purchase warrants with an exercise price denominated in a currency other than our functional currency, which, prior to January 1, 2008, was the Canadian dollar, are recorded as liabilities. Changes in the fair value of the warrants are then reflected in our statement of operations.

Income Tax Recovery. Income tax recovery relates to the proceeds realized from the sale of New Jersey state tax losses attributable to our U.S. subsidiary operating in the State of New Jersey. With the closing in December 2007 of our New Jersey operations, we will no longer be eligible to sell our tax losses.

Critical Accounting Policies and Significant Judgments and Estimates

We have prepared this management's discussion and analysis of financial condition and results of operations based on our audited consolidated financial statements, which have been included in this report beginning on page F-1 and which have been prepared in accordance with generally accepted accounting principles in the United States. These accounting principles require us to make estimates and judgments that can affect the reported amounts of assets and liabilities as of the dates of our consolidated financial statements as well as the reported amounts of revenue and expense during the periods presented. We believe that the estimates and judgments upon which we rely are reasonable based upon historical experience and information available to us at the time that we make these estimates and judgments. To the extent there are material differences

between these estimates and actual results, our consolidated financial statements will be affected.

The Securities and Exchange Commission considers an accounting policy to be critical if it is important to a company's financial condition and results of operations and if it requires the exercise of significant judgment and the use of estimates on the part of management in its application. We have discussed the selection and development of our critical accounting policies with the audit committee of our board of directors, and our audit committee has reviewed our related disclosures in this report. Although we believe that our judgments and estimates are appropriate, actual results may differ from these estimates.

We believe the following to be our critical accounting policies because they are important to the portrayal of our financial condition and results of operations and because they require critical management judgment and estimates about matters that are uncertain:

- revenue recognition;
- good will impairment;
- stock-based compensation; and
- foreign currency translation.

Revenue Recognition

We recognize revenue when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed and determinable, and collection is reasonably assured. Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there is objective and reliable evidence of the fair value of the undelivered items. The consideration received is allocated among the separate units of accounting based on their respective fair values when there is reliable evidence of fair value for all elements of the arrangement; otherwise, consideration is allocated based on the residual value method. The applicable revenue recognition criteria are then applied to each of the separate units. Payments received in advance of work performed are recorded as deferred revenue and recognized when earned.

Revenue from our collaboration with Merck KGaA on the development of Stimuvax is recognized as follows:

Up-Front Fees and License Fees. Prior to December 18, 2008 (when we entered into the new license agreement with Merck KGaA), up-front fees and license fees from Merck KGaA under the former collaboration agreement were deferred and recognized as revenue ratably over the term of the agreement or related patent life. Securities and Exchange Commission, or SEC, Staff Accounting Bulletin Topic 13.A.3(f), *Nonrefundable Up-Front Fees*, provides guidance on the accounting for nonrefundable up-front fees, including license fees that are payable at the initiation of a licensing agreement. Generally, nonrefundable fees are not recognized immediately as revenue unless the fee is consideration for a separate deliverable that represents the culmination of a separate earnings process. The bulletin requires future obligations or performance requirements on the part of the seller be analyzed to determine whether the undelivered or unperformed obligations are inconsequential or perfunctory. Under the terms of the new license agreement entered into with Merck KGaA in December 2008, we have no future performance obligations and therefore, we have recognized all previously deferred revenue.

Milestones. Milestone payments under our agreements with Merck KGaA are recognized as revenue upon performance of obligations or satisfaction of conditions defined as milestones in the agreements, assuming we have no further involvement or obligation to perform with respect to the milestone under our agreements with Merck KGaA. Milestone

payments for which we have ongoing involvement or obligations are deferred and recognized as revenue over the estimated period of our ongoing involvement or performance of our obligation.

Contract Research Funding and Contract Manufacturing. Prior to March 1, 2006, we were responsible for clinical research and development costs related to obtaining regulatory approval in North America, while Merck KGaA and we agreed to equal co-funding of eligible clinical research and development costs related to obtaining regulatory approval for rest of world. We recognized these reimbursed costs as revenue in the same period the costs were incurred. Effective March 1, 2006, we transitioned responsibility for the clinical research and development and regulatory activities for Stimuvax to Merck KGaA. Subsequent to March 1, 2006, we have continued to receive cost reimbursements from Merck KGaA related to transition activities and the supply of clinical trial material. The reimbursed transition costs were recognized as revenue in the same period the costs are incurred. Clinical trial material revenue was reported as contract manufacturing revenue after the earlier of the expiration of a 60 day return period or formal acceptance of the clinical trial material by Merck KGaA.

In August 2007, we signed amended and restated collaboration and supply agreements related to Stimuvax with Merck KGaA. Under the terms of the amended agreements, we retained the responsibility for the manufacture Stimuvax and Merck KGaA had agreed to purchase Stimuvax from us. The collaboration and supply agreements transformed what were previously reimbursements of a portion of the Stimuvax manufacturing costs to a long-term contract manufacturing arrangement. Our financial reporting from the date the collaboration and supply agreements were executed reflects the revenue and associated clinical trial material costs related to the supply of Stimuvax separately in the consolidated statements of operations as contract manufacturing revenue and manufacturing expense, respectively. Previously, these amounts were reported under contract research and development revenue and research and development expense, respectively. Contract manufacturing revenue was recognized after shipment of the clinical trial material to Merck KGaA and upon the earlier of the expiration of a 60 day return period or formal acceptance of the clinical trial material by Merck KGaA. The associated costs of the clinical trial material is removed from inventory and recorded as manufacturing expense at the same time the contract manufacturing revenue is recognized.

In connection with the execution of the new license agreement in December 2008, we sold our existing material, work in process and finished goods inventory to Merck KGaA. As a result of the entry into the license agreement, we will not realize revenue from the manufacture of Stimuvax in future periods.

Royalties. Royalties based on reported sales of licensed products, if any, will be recognized based on the terms of our license agreement with Merck KGaA when and if reported sales are reliably measurable and collectibility is reasonably assured. To date, we have not recognized any royalty revenues from product sales under the license agreement.

Goodwill Impairment

Goodwill is carried at cost and is not amortized, but is reviewed annually for impairment in the fourth quarter, or more frequently when events or changes in circumstances indicate that the asset may be impaired. In the event that the carrying value of goodwill exceeds its fair value, an impairment loss would be recognized. There were no impairment charges recorded for any of the periods presented.

Stock-Based Compensation

We maintain a share option plan under which an aggregate of 1,223,386 shares of common stock underlay outstanding options as of December 31, 2008 and an aggregate of 725,857 shares of common stock were available for future issuance. We have generally

granted options to our employees and directors under the share option plan, and we have granted restricted stock to non-employee directors under the restricted share unit plan. Prior to April 1, 2008 amendment to our share option plan, we granted options with an exercise price denominated in Canadian dollars equal to the closing price of our shares on the Toronto Stock Exchange on the trading day immediately prior to the date of grant. In cases where our board of directors approved grants during a closed trading window under our insider trading policy, however, our board of directors fixed the exercise price based on the closing price of our common shares on Toronto Stock Exchange trading on the first trading day after our trading window opened. On and after April 1, 2008, we granted options with an exercise price denominated in U.S. dollars equal to the close price of our shares on The NASDAQ Global Market on the date of grant.

Effective January 1, 2006, we adopted the fair value recognition provisions of Statement of Financial Accounting Standards, or SFAS, No. 123(R), *Share-Based Payment*, using the modified prospective transition method, which requires us to apply the provisions of SFAS 123(R) only to awards granted, modified, repurchased, or cancelled after the adoption date. Upon adoption of SFAS 123(R), we selected the Black-Scholes option pricing model as the most appropriate method for determining the estimated fair value for stock-based awards. The Black-Scholes model requires the use of highly subjective and complex assumptions to determine the fair value of stock-based awards, including the option's expected term and the price volatility of the underlying stock. We recognize the value of the portion of the awards that is ultimately expected to vest as expense over the requisite vesting periods on a straight-line basis in our consolidated statements of operations. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The following table summarizes the weighted average assumptions used in determining the fair value of stock options granted:

	Year Ended December 31, 2008	Year Ended December 31, 2007
Risk-free interest rate	3.09%	4.21%
Expected life of options in years	6.0	6.0
Expected dividend rate	0%	0%
Expected volatility	114.19%	102.52%
Weighted average grant-date fair value per share option $CDN	$ 3.84	$ 6.47
Weighted average grant-date fair value per share option $USD	$ 2.93	$ —

Historically we have based the risk-free interest rate for the expected term of the option on the yield available on Government of Canada benchmark bonds with an equivalent expected term. In future periods we will use the yield at the time of grant of a U.S. Treasury security. The expected life of options in years represents the period of time stock-based awards are expected to be outstanding, giving consideration to the contractual terms of the awards, vesting schedules and historical employee behavior. The expected volatility is based on the historical volatility of our common stock for a period equal to the stock option's expected life.

Foreign Currency Translation

For the fiscal year ended December 31, 2007, and comparative periods presented, our functional currency was the Canadian dollar. As such, revenue and expense transactions denominated in currencies other than our functional currency are translated into Canadian dollars at the average exchange rates in effect at the time of such transactions. Monetary assets and liabilities are translated at current rates at the balance sheet date. Gains or

losses resulting from these translation adjustments are included in other income or expense.

The operations of our wholly-owned U.S. subsidiaries are considered to be integrated foreign operations as they rely upon funding from us, and accordingly their functional currencies is also the Canadian dollar. Their respective books and records are converted to Canadian dollars by translating monetary assets and liabilities at the rate of exchange prevailing at the balance sheet date, non-monetary assets and liabilities at the rate in effect when the assets were acquired or liabilities were assumed, and items included in the statements of operations at the average exchange rates in effect at the date of such transactions with resulting exchange gains or losses included in the determination of income.

As our reporting currency is the U.S. dollar, our Canadian dollar consolidated financial statements are translated into U.S. dollars. Assets and liabilities are translated at the exchange rates as of the balance sheet date while operations and cash flows are translated at average rates for the period. Translation gains or losses related to our net assets are included as a component of accumulated other comprehensive loss in the statement of stockholders' equity.

Effective January 1, 2008, we changed our functional currency to the U.S. dollar from the Canadian dollar to reflect our incorporation as a Delaware corporation and increasing U.S. dollar denominated revenues and expenditures. Comparative financial statements are not restated and the changes have been accounted for prospectively in accordance with SFAS No. 52, *Foreign Currency Translation*.

Results of Operations for the years ended December 31, 2008, 2007 and 2006

The following table sets forth selected consolidated statements of operations data for each of the periods indicated.

Overview

	Years Ended December 31,			2007-2008 % Change	2006-2007 % Change
	2008	2007	2006		
	(In millions, except per share amounts)				
Revenue	$ 40.0	$ 3.8	$ 4.0	N/M+	(5.0)%
Expenses	(32.9)	(25.5)	(19.8)	(29.0)%	(28.8)%
In process research and development	—	—	(24.9)	N/M+	N/M+
Change in fair value of warrant liability	—	1.4	3.8	N/M+	(63.2)%
Income tax recovery	—	—	0.5	N/M+	N/M+
Net income (loss)	$ 7.1	$(20.3)	$(36.4)	N/M+	44.5%
Earnings (loss) per share — basic	$ 0.37	$ (1.04)	$(2.38)	N/M+	56.3%
Earnings (loss) per share — diluted	$ 0.36	$ (1.04)	$(2.38)	N/M+	56.3%

\+ Not meaningful

We had net income of $7.1 million in 2008 as a result of the entry into the license and asset purchase agreements with Merck. This also resulted in the recognition of $12.9 million in deferred revenue related to sales under the supply agreement superseded by the new license agreement and $10.5 million from the license of the manufacturing rights to

Stimuvax and know-how. Pursuant to the asset purchase agreement, we recognized $11.4 million in revenue along with the associated cost of sales of $9.7 million. While we experienced net income in 2008, we experienced net losses in each of 2006, and 2007 and we expect to continue experiencing net losses as we continue develop our product candidates.

The $16.1 million decrease in our net loss from 2007 to 2006, was attributable in part to the fact that in 2006, we incurred $24.9 million in in-process research and development expense related to the acquisition of ProlX in October 2006, and incurred no in-process research and development expense in 2007. In addition, a reduction in the change in the fair value of warrant liability of $2.4 million contributed to the smaller net loss in 2007. The balance of our expenses, consisting of research and development, manufacturing, general and administrative, marketing and business development, depreciation, investment and other income, and interest expense have increased by $5.7 million for, 2007 compared to 2006, primarily due to $4.5 million in legal, accounting and tax advisory fees associated with our reincorporation into the United States and certain costs associated with a reduction of administrative staff.

For 2007 and 2006, a substantial portion of our operating expenses are denominated in Canadian dollars, which was our functional currency in 2007 and 2006, and increases in the value of the Canadian dollar relative to the U.S. dollar had an adverse effect on our expenses when expressed in U.S. dollars on our consolidated statements of operations. Effective January 1, 2008, the U.S. dollar became both our functional and reporting currency, and we continued to incur expenses in Canadian dollars associated with our Canadian operations however, with the sale of our Canadian operations in December 2008 we will not continue to be subject to significant foreign currency exchange risks.

Revenue

	Years Ended December 31,			2007-2008 % Change	2006-2007 % Change
	2008	2007	2006		
		(In millions)			
Contract research and development	$ —	$0.7	$3.7	N/M+	(81.1)%
Contract manufacturing	15.6	2.5	—	N/M+	N/M+
Licensing revenues from collaborative agreements	24.4	0.5	0.2	N/M+	150.0%
Licensing, royalties and other revenue	—	0.1	0.1	—	—
	$40.0	$3.8	$4.0	N/M+	(5.0)%

\+ Not meaningful

Prior to August 2007, when we entered into an amended and restated supply agreement with Merck KGaA, revenue related to the supply of Stimuvax was reported as part of contract research and development revenue. As a result of our entry into such agreement, revenue related to the supply of Stimuvax was reported separately as contract manufacturing revenue and we ceased to generate revenue from contract research and development. The $3.0, or 81.1%, decrease in contract research and development revenue in 2007 relative to 2006 was primarily attributable to decreased funding associated with Stimuvax as a result of the restructuring of our agreement with Merck KGaA. During 2006, we transitioned responsibility for the clinical development and regulatory activities for Stimuvax to Merck KGaA, which resulted in reduced contract research and development revenue compared to 2006.

Of the $13.1 million increase in contract manufacturing revenue in 2008 compared to 2007, $11.4 was related to the bulk sale of our entire raw material, work in process and finished goods inventory to Merck KGaA in December 2008 and the remaining $1.7 million was related to increased sales to Merck KGaA during the rest of 2008 relative to 2007. As a result of such bulk sale and the related license of our Stimuvax manufacturing rights to Merck KGaA, we do not expect any contract manufacturing revenue for the foreseeable future.

During 2007, we recognized $2.5 million in contract manufacturing revenue under the amended and restated supply agreement with Merck KGaA, which partially offset the $3.0 million reduction in contract research and development revenue described above. Previously, these amounts would have been reflected under contract research and development revenue and research and development expense, respectively. In the first quarter of 2007 we resumed manufacturing to support the global phase 3 trial of Stimuvax and commenced shipments of clinical trial material to Merck KGaA in the second quarter of 2007.

The $23.9 million increase in our licensing revenue from collaborative agreements for 2008 relative to 2007 was directly attributable to the license of our Stimuvax manufacturing rights and know-how which generated an up-front payment of $10.5 million. Since the new license agreement restructured the existing agreements and relieved us of future performance obligations we recognized previously deferred revenue related to this relationship of $12.9 million.

In 2007 our licensing revenue from collaborative agreements increased from $0.2 million for the year ended December 31, 2006 to $0.5 million for the year ended December 31, 2007. In February 2007, we announced that the first patient had been enrolled in a global Phase 3 trial of Stimuvax which triggered a cash milestone payment to us from Merck KGaA of $2.5 million before associated payments to third parties of $0.4 million. In August 2007, we announced the signing of the amended and restated collaboration and supply agreements related to Stimuvax with Merck KGaA which triggered an additional cash milestone payment to us from Merck KGaA of $2.5 million before associated payments to third parties of $0.1 million. Finally, in December 2007, we announced the completion of the transfer of certain assays and methodology related to Stimuvax to Merck KGaA which triggered a further cash milestone payment to us of $5.0 million. We had recorded these milestone payments as deferred revenue and were recognizing the payments as revenue ratably over the remaining patent life of the Stimuvax product. As a result, our licensing revenue from collaborative agreements increased in 2007 compared to 2006.

Our licensing, royalties, and other revenue in fiscal 2007 remained unchanged from fiscal 2006 at $0.1 million.

Research and Development/Manufacturing Expense

	Years Ended December 31,			2007-2008	2006-2007
	2008	2007	2006	% Change	% Change
		(In millions)			
Research and development...	$ 9.3	$10.0	$12.2	(7.0)%	18.0%
Manufacturing	13.7	2.6	—	N/M+	N/M+
	$23.0	$12.6	$12.2	82.5%	3.3%

The $10.4 million, or 82.5%, increase in our combined research and development/ manufacturing expense for 2008 compared to 2007 primarily relates to the bulk sale of our inventory 2008 to Merck KGaA resulting in the significant increase in cost of sales. The $0.7 million decrease in of research and development in 2008 compared to 2007 is attributable primarily to higher allocation of research and development costs to product inventory as manufacturing activity increased during the year.

In connection with the license the of Stimuvax manufacturing rights to Merck KGaA and sale of related assets, we experienced a substantial reduction in our workforce. As a result, we expect that our research and development expense will be considerably lower in 2009 than it was in 2008.

Our combined research and development/manufacturing expense increased 3.3% from $12.2 million for the year ended December 31, 2006 to $12.6 million for the year ended December 31, 2007. The increase primarily relates to clinical and development activities related to our ProlX operation, which was acquired October 30, 2006, and increased Stimuvax manufacturing activities associated with the amended agreements with Merck KGaA relating to Stimuvax. Partially offsetting these increased expenses in 2007, relative to 2006, was the elimination of costs incurred in 2006 associated with restructuring our workforce and transitioning the responsibility for the clinical development and regulatory activities for Stimuvax to Merck KGaA.

As noted previously under the discussion of revenues, as a result of execution of the amended and restated collaboration and supply agreements, clinical trial material costs related to the supply of Stimuvax to Merck KGaA had been presented separately in the consolidated statements of operations as manufacturing expense. Previously, these costs were reported under research and development expenses. As a result, the 18.0% decrease in research and development expense from 2006 to 2007 was primarily attributable to the change in our business relationship with Merck KGaA reflected in the amended agreements.

General and Administrative

	Years Ended December 31,			2007-2008	2006-2007
	2008	2007	2006	% Change	% Change
		(In millions)			
General and administrative	$9.8	$11.8	$7.6	(16.9)%	55.3%

The $2.0 million, or 16.9%, decrease in our general and administrative expense for 2008 compared to 2007, was primarily attributable to higher legal, accounting and tax advisory professional fees incurred in 2007 associated with our reincorporation in United States. As with our research and development expenses, with the reduction of our workforce, our general and administrative expenses should decline substantially in 2009 from 2008.

The $4.2 million, or 55.3%, increase in our general and administrative expense in 2007 over 2006 was primarily attributable to legal, accounting and tax advisory professional fees and costs associated with our reincorporation in United States, which totaled $4.5 million.

Marketing and Business Development.

	Years Ended December 31,			2007-2008	2006-2007
	2008	2007	2006	% Change	% Change
		(In millions)			
Marketing and business development	$—	$0.6	$0.6	N/M+	—

We eliminated our marketing and business development organization as we increased our focus on the ongoing development of our newly acquired portfolio of small molecule compounds in connection with our acquisition of ProlX in late 2006. Our marketing and business development expense of $0.6 million for the year ended December 31, 2007 was similar to the same period in 2006.

Depreciation

	Years Ended December 31,			2007-2008 % Change	2006-2007 % Change
	2008	2007	2006		
		(In millions)			
Depreciation	$0.4	$0.2	$0.3	100.0%	(33.3)%

The $0.2 million, or 100%, increase in our depreciation expense for 2008 compared to 2007 reflects the increased investment in equipment and leasehold improvements made in 2007 and 2008. The $0.1 million, or 33%, decrease in our depreciation expense for 2007 compared to 2006 due to the absence of substantial capital expenditures or equipment purchases in 2006 and 2005.

In-Process Research and Development

	Years Ended December 31,			2007-2008 % Change	2006-2007 % Change
	2008	2007	2006		
		(In millions)			
In-process research and development	$—	$—	$24.9	N/M+	N/M+

\+ Not meaningful

In-process research and development expense of $24.9 million in fiscal 2006 relates to the acquisition of a portfolio of oncology products from ProlX. The portfolio consisted primarily of patents and technologies which require regulatory approval to be commercialized and which have no proven alternative future uses.

Investment and Other Loss (Income)

	Years Ended December 31,			2007-2008 % Change	2006-2007 % Change
	2008	2007	2006		
		(In millions)			
Investment and other loss (income)	$(0.3)	$0.4	$(0.9)	N/M+	N/M+

\+ Not meaningful

Our investment and other loss (income) increased from a loss of $0.4 million for the year ended December 31, 2007 to income of $0.3 million for the year ended December 31, 2008. The change was primarily attributable to $0.1 million gain from the sale of our manufacturing related plant and equipment to Merck KGaA and the decline in foreign exchange loss in 2008 of $0.1 million on our Canadian dollar holdings arising from increases in the value of the U.S. dollar relative to the Canadian dollar during the year compared to 2007 when we suffered foreign exchange losses of $1.4 million on U.S. dollar holdings arising from increases in the value of the Canadian dollar relative to the U.S. dollar in the previous year. Of the $0.7 million decrease, $1.5 million was attributable to increased foreign exchange losses, which was partially offset by a decrease in income from cash and investments of $0.8 million resulting from lower invested cash balances in 2008.

Our investment and other loss (income) decreased from income of $0.9 million for the year ended December 31, 2006 to a loss of $0.4 million for the year ended December 31, 2007. The change was primarily attributable to a foreign exchange loss on our U.S. dollar holdings arising from increases in the value of the Canadian dollar relative to the U.S. dollar during the periods. Of the $1.3 million decrease, $1.4 million was attributable to increased foreign exchange losses, which was partially offset by an increase in income from cash and investments of $0.1 million.

Change in Fair Value of Warrant Liability

	Years Ended December 31,			2006-2007 % Change	2005-2006 % Change
	2008	2007	2006		
		(In millions)			
Change in fair value of warrant liability	$—	$1.4	$3.8	N/M+	(63.2)%

\+ Not meaningful

Effective January 1, 2008, we changed our functional currency to the U.S. dollar from the Canadian dollar. Since the exercise price of the warrants is now denominated in our functional currency, there is no further requirement under SFAS 133, Accounting for Derivative Instruments and Hedging Activities, to adjust the warrants to fair value through earnings at each reporting date.

We recognized a $1.4 million recovery for 2007 and $3.8 million recovery for 2006 as a result of a reduction in the fair value of warrant liability. The exercise price of the warrants is denominated in U.S. dollars. Share purchase warrants with an exercise price denominated in a currency other than our functional currency, which, prior to January 1, 2008, was the Canadian dollar, are recorded as liabilities.

Income Tax Recovery

	Years Ended December 31,			2007-2008 % Change	2006-2007 % Change
	2008	2007	2006		
		(In millions)			
Current	$—	$—	$0.5	N/M+	N/M+

\+ Not meaningful

In December 2007, we closed our office in Cranbury, New Jersey and therefore no longer qualify to participate in the New Jersey tax loss selling program that was the source of our income tax recoveries in 2006.

Quarterly Results of Operations

The following table sets forth our quarterly consolidated statement of operations data for each of our eight fiscal quarters in the period ended December 31, 2008. The quarterly data have been prepared on the same basis as the audited consolidated financial statements included elsewhere in this report, and reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of this information. Our results for these quarterly periods are not necessarily indicative of the results of operations for a full year or any future period.

	Quarters Ended							
	March 31, 2007	June 30, 2007	September 30, 2007(1)	December 31, 2007	March 31, 2008	June 30, 2008	September 30, 2008	December 31, 2008(2)
	(Dollars in thousands, except share and per share data)							
Statement of Operations								
Total revenues	$ 171	$ 590	$ 1,099	$ 1,938	$ 2,020	$ 1,152	$ 802	$36,024
Research and development	$ 2,972	$ 3,355	$ 1,406	$ 2,278	$ 2,308	$ 2,726	$ 1,883	$ 2,401
Manufacturing	$ —	$ —	$ 1,168	$ 1,396	$ 2,080	$ 646	$ 422	$ 10,527
Change in fair value of warrant liability	$ (266)	$ (402)	$ (511)	$ (242)	$ —	$ —	$ —	$ —
Net income (loss)	$(4,676)	$(4,961)	$ (5,551)	$ (5,152)	$ (5,114)	$(4,916)	$(3,569)	$20,724
Basic earnings (loss) per share	$ (0.24)	$ (0.25)	$ (0.29)	$ (0.26)	$ (0.26)	$ (0.25)	$ (0.18)	$ 1.06
Diluted earnings (loss) per share	$ (0.24)	$ (0.25)	$ (0.29)	$ (0.26)	$ (0.26)	$ (0.25)	$ (0.18)	$ 1.06
Common shares outstanding (in 000's)	19,486	19,486	19,486	19,486	19,486	19,492	19,492	19,492
Balance Sheet								
Total assets	$31,243	$28,531	$35,558	$36,218	$30,039	$27,791	$27,966	$ 24,971
Total long-term liabilities	$ 4,315	$ 4,115	$ 7,939	$12,526	$ 12,823	$14,201	$14,055	$ 393
Common shares outstanding (in 000's)	19,486	19,486	19,486	19,486	19,486	19,492	19,492	19,492

(1) In August 2007, we signed amended and restated collaboration and supply agreements related to Stimuvax with Merck KGaA. Pursuant to the terms of the amended agreements, from August 2007 to December 2008,, with the entry into the new license agreement, we retained the responsibility to manufacture Stimuvax and Merck KGaA agreed to purchase Stimuvax from us. During their term, the amended agreements transformed what were previously reimbursements of a portion of the Stimuvax manufacturing costs to a long-term contract manufacturing arrangement. Our financial reporting during the term of the collaboration and supply agreements reflects the revenue and associated clinical trial material costs related to the supply of Stimuvax separately in the consolidated statements of operations as contract manufacturing revenue and manufacturing expense, respectively. Previously, these amounts were reported under contract research and development revenue and research and development expense, respectively.

(2) The effect of the asset purchase agreement and new license agreement with Merck KGaA, is reflected in the last quarter of 2008.

Liquidity and Capital Resources

Cash, cash equivalents, short term investments and working capital

As of December 31, 2008, our principal sources of liquidity consisted of cash and cash equivalents of $19.2 million and accounts receivable of $1.8 million. Our cash equivalents and short-term investments have historically been invested in money market funds, short-term obligations of the U.S. Treasury and Government of Canada, and commercial paper. Our accounts receivable primarily represents tax withholdings in Germany as a result of our sale of manufacturing rights to Merck KGaA in December 2008 which we expect to

recover. Our primary source of cash has historically been proceeds from the issuance of equity securities, debt and equipment financings, and payments to us under licensing and collaboration agreements. These proceeds have been used to fund our losses from operations.

Our cash and cash equivalents were $19.2 million as of December 31, 2008 compared to $24.2 million as of December 31, 2007, a decrease of $5.0 million, or 20.1%. The net decrease reflects operating expenditures of $11.9 million in 2008 offset by $7.1 million in cash received under our collaboration and supply agreements, $0.5 million received from the sale of plant and equipment, and $0.7 million used in the purchase of plant and equipment. Offsetting the decreases was the favorable effect of exchange rate fluctuations on our cash and cash equivalents of $0.3 million.

Our cash and cash equivalents and short-term investments were $24.2 million as December 31, 2007 compared to $28.4 million as of December 31, 2006, a decrease of $4.2 million, or 14.8%. The net decrease reflects operating expenditures of $22.8 million in 2007 offset by $15.8 million in cash received under our collaboration and supply agreements, $0.4 million used in payment of accrued business acquisition and share issuance costs, and $0.7 million used in the purchase of plant and equipment. Offsetting these decreases was the favorable effect of exchange rate fluctuations on our cash and cash equivalents of $1.7 million and our short-term investments of $1.9 million.

As of December 31, 2008, our working capital was $17.6 million compared to $21.1 million as of December 31, 2007, a decrease of $3.5 million, or 15.5%. The decrease in working capital was primarily attributable to a $5.0 million decrease in cash and cash equivalents, $0.5 million decrease in government grant receivable, offset by a decline in accounts payable of $1.9 million and net decline from the elimination of inventory and deferred revenue of $0.7 million. The decrease in deferred revenue and the decrease in inventory is related to the license of Stimuvax manufacturing rights to Merck KGaA in December 2008.

We believe that our currently available cash and cash equivalents, together with milestone payments we currently anticipate receiving from Merck KGaA under our license agreement, will be sufficient to finance our operations for at least the next 12 months. Nevertheless, we expect that we will require additional capital from time to time in the future in order to continue the development of products in our pipeline and to expand our product portfolio. We would expect to seek additional financing from the sale and issuance of equity or debt securities, and we cannot predict that financing will be available when and as we need financing or that, if available, that the financing terms will be commercially reasonable. If we are unable to raise additional financing when and if we require, it would have a material adverse effect on our business and results of operations. To the extent we issue additional equity securities, our existing shareholders could experience substantial dilution.

Our certificate of incorporation provides for the mandatory redemption of shares of our Class UA preferred stock if the Company realizes "net profits' in any year. See "Note 11 — Share Capital — Redemption" of the audited financial statements included elsewhere in this Annual Report on Form 10-K. For this purpose, "net profits ... means the after tax profits determined in accordance with generally accepted accounting principles, where relevant, consistently applied."

The certificate of incorporation does not specify the jurisdiction whose generally accepted accounting principles would apply for the redemption provision. At the time of the original issuance of the shares, we were a corporation organized under the federal laws of Canada, and our principal operations were located in Canada. In addition, the original purchaser and current holder of the Class UA preferred stock is a Canadian entity. In connection with our reincorporation in Delaware, we disclosed that the rights, preferences and privileges of the shares would remain unchanged except as required by Delaware law, and the mandatory redemption provisions were not changed. In addition, the formula for

determining the price at which such shares would be redeemed is expressed in Canadian dollars. Therefore, if challenged, we believe that a Delaware court would determine that "net profits" be interpreted in accordance with Canadian GAAP.

As a result of the December 2008 Merck KGaA transaction, we recognized on a one-time basis all deferred revenue relating to Stimuvax, under both U.S. GAAP and Canadian GAAP. Under U.S. GAAP this resulted in net income. However, under Canadian GAAP we were required to recognize an impairment on intangible assets which resulted in a net loss for 2008 and therefore do not intend to redeem any shares of Class UA preferred stock in 2009. If in the future we recognize net income under Canadian GAAP, or any successor to such principles, or if the holder of Class UA preferred stock were to challenge, and prevail in a dispute involving, the interpretation of the mandatory redemption provision, we may be required to redeem such shares which would have an adverse effect on our cash position. The maximum aggregate amount that we would be required to pay to redeem such shares is CAN $1.25 million.

Cash flows from operating activities

Cash provided by operating activities is primarily driven by our net income. However, operating cash flows differ from net income as a result of non-cash charges or differences in the timing of cash flows and earnings recognition. Significant components of cash provided by operating activities are as follows:

Changes in accounts payable and accrued liabilities used $1.5 million in 2008 mainly due to pay downs in accrued professional fees relating to the reincorporation in Delaware. Accrued compensation and related costs used $0.2 million during the year as a result of the decrease in our workforce.

Inventories decreased $5.1 million in 2008, as a result our bulk sale of raw materials and clinical product following the asset purchase agreement with Merck KGaA.

Receivables and other assets decreased by $0.5 million. Accounts receivable decreased by $0.2 million in 2008. Government grants receivable declined $0.5 million as the activity related to PX — 12 was reduced during the year.

During the year we received $3.0 million and $4.1 million in milestone payments and advances on product sales. These payments were deferred and not recognized in income at the time of receipt. As a result of the transaction with Merck KGaA in December, 2008 (See Results of Operations), we included in revenue previously deferred revenue of $24.8 million ($12.9 million for milestone payments and $11.9 million of advances on product sales).

In 2007 we received $10.0 million and $5.8 million in milestone payments and advances on product sales. These payments were deferred and not recognized in income at the time of receipt. Our inventory increased by $3.5 million in 2007 as a result of our agreement to manufacture and supply Merck KGaA with clinical product and our accounts payable and accrued expenses increased as result of increased higher activity with our reincorporation in Delaware.

Cash flows from investing activities

We had cash inflows of $11.8 million from investing activities during the year ended December 31, 2008, an increase of $7.6 million from the $4.2 million cash from investing activities in the year ended December 31, 2007. The increase in cash from investing activities 2008 compared to 2007 was attributable principally to lower net redemptions of short-term investments required to fund operations of $6.8 million and proceeds from the sale of plant and equipment of $0.5 million.

We had cash inflows of $4.2 million from investing activities during the year ended December 31, 2007, an increase of $13.0 million from the $8.8 million cash used in the year

ended December 31, 2006. This change was attributable principally to lower net redemptions of short-term investments required to fund operations of $9.6 million and lower business acquisition costs of $3.6 million.

Cash flows from financing activities

We used $0.1 million of cash in financing activities during the year ended December 31, 2008, a decrease of $0.1 million over the $0.2 million cash used in the year ended December 31, 2007. The decrease in cash used in financing activities between fiscal 2007 and fiscal 2008 was attributable principally to the reduction of cost related to shares and warrant issuance.

We used $0.2 million of cash in financing activities during the year ended December 31, 2007, a decrease of $27.9 million over the $27.7 million cash from financing activities in the year ended December 31, 2006. This change was attributable principally to the January and December 2006 common stock and warrant financings which generated proceeds of $27.7 million.

Contractual Obligations and Contingencies

In our continuing operations, we have entered into long-term contractual arrangements from time to time for our facilities, debt financing, the provision of goods and services, and acquisition of technology access rights, among others. The following table presents contractual obligations arising from these arrangements as of December 31, 2008:

		Payments Due by Period			
	Total	Less than 1 Year	1 — 3 Years	4 — 5 Years	After 5 Years
		(In thousands)			
Operating leases — premises	$5,766	$478	$998	$1,267	$3,022

In May 2008, we entered into a sublease for an office facility in Seattle, Washington totaling approximately 17,000 square feet where we intend to consolidate certain of our operations. The sublease expires in December 17, 2011. In May 2008 we also entered into a lease directly with the landlord of such facility which will have a six year term beginning at the expiration of the sublease. The sublease provides for a base rent of $33,324 increasing to $36,354. The lease provides for a base rent of $47,715 increasing to $52,259 in 2018.

In connection with the acquisition of ProlX, we assumed two loan agreements under which approximately $199,000 was outstanding at December 31, 2008. One loan, in the aggregate principal amount of $99,000, requires repayment only in the event that we commercialize the product or service developed with the funds provided under the loan agreement. For purposes of the loan, a product or service is considered to be commercialized as of the date we receive FDA approval for the product or service or upon receipt of consideration for the sale or license of the product or service. In addition, if we commercialize a product or service developed with funding under the agreement, we are required to conduct manufacturing in the Commonwealth of Pennsylvania or pay a transfer fee equal to three times the amount of the funding. A second loan, in the aggregate principal amount of $100,000, is repayable on similar terms as the first loan in the event we commercialize a product or service developed with funding received under the second loan. In addition, under the second loan, if we commercialize a product or service funded under the second loan, we are obligated to maintain a "significant presence," defined as 80% of our personnel, in the Commonwealth of Pennsylvania for a period of ten years or to pay a transfer fee equal to three times the amount of the funding. Finally, if we become obligated to repay the loans as a result of having commercialized a product or service, the aggregate amount repayable will equal the original funded amount multiplied by a factor ranging from one to two, subject to certain conditions. As the timing of any future

payments under these loans cannot be determined with any certainty, the related repayments have not been reflected in the above schedule of contractual obligations.

In connection with the acquisition of ProlX, we may become obligated to issue additional shares of our common stock to the former stockholders of ProlX upon satisfaction of certain milestones. We may become obligated to issue shares of our common stock with a fair market value of $5.0 million (determined based on a weighted average trading price at the time of issuance) upon the initiation of the first Phase 3 clinical trial for a ProlX product. We may become obligated to issue shares of our common stock with a fair market value of $10.0 million (determined based on a weighted average trading price at the time of issuance) upon regulatory approval of a ProlX product in a major market.

Under certain licensing arrangements for technologies incorporated into our product candidates, we are contractually committed to payment of ongoing licensing fees and royalties, as well as contingent payments when certain milestones as defined in the agreements have been achieved.

Guarantees and Indemnification

In the ordinary course of our business, we have entered into agreements with our collaboration partners, vendors, and other persons and entities that include guarantees or indemnity provisions. For example, our agreements with Merck KGaA and the former stockholders of ProlX contain certain tax indemnification provisions, and we have entered into indemnification agreements with our officers and directors. Based on information known to us as of December 31, 2008, we believe that our exposure related to these guarantees and indemnification obligations is not material.

Off-Balance Sheet Arrangements

During the period presented, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for another contractually narrow or limited purpose.

Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board, or FASB, issued SFAS No. 157 *Fair Value Measurements*, or SFAS 157. SFAS 157 introduces a framework for measuring fair value and expands required disclosure about fair value measurements of assets and liabilities.

SFAS 157 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability, an exit price, in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. SFAS 157 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. SFAS 157 describes three levels of inputs that may be used to measure fair value:

- Level 1 — quoted prices in active markets for identical assets or liabilities,
- Level 2 — observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities, and
- Level 3 — unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The adoption of SFAS 157 did not have any effect on our financial condition or results of operations, however, SFAS 157 introduced new disclosures about how we value certain

assets and liabilities. Much of the disclosure is focused on the inputs used to measure fair value, particularly in instances where the measurement uses significant unobservable, i.e., Level 3, inputs. All of our financial instruments as of December 31, 2008 are Level 1. For financial assets and liabilities, SFAS 157 was effective for fiscal years beginning after November 15, 2007, and we have adopted the standard for those assets and liabilities as of January 1, 2008. The impact of adoption was not significant.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS 159. SFAS 159 allows entities the option to measure eligible financial instruments at fair value as of specified dates. Such election, which may be applied on an instrument by instrument basis, is typically irrevocable once elected. We have not elected to apply SFAS 159 to any assets or liabilities, therefore the adoption of SFAS 159 did not result in a material impact on our financial position or results of operations.

In June 2007, the Emerging Issues Task Force, or EITF, issued EITF Issue No. 07-3, *Accounting for Non Refundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities*, or EITF 07-3. EITF 07-3 requires that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed. The adoption of EITF 07-3 did not result in a material impact on our financial position or results of operations.

In May 2008 the FASB released SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles*, or SFAS 162. SFAS 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements of companies that are presented in conformity with generally accepted accounting principles in the United States, or GAAP. FASB believes that the GAAP hierarchy should be determined by management because it is the company, not its auditor that is responsible for selecting accounting principles for financial statements that are presented in conformity with GAAP. Accordingly, FASB concluded that the GAAP hierarchy should reside in the accounting literature established by the FASB and issued SFAS 162 to achieve that result. SFAS 162 becomes effective 60 days following the SEC's approval of the Public Accounting Oversight Board amendment to AU Section 411..We are currently evaluating the potential impact, if any, of the adoption of SFAS 162 on its consolidated financial statements.

In April 2008, the FASB issued FASB Staff Position, or FSP, No. SFAS 142-3, *Determination of the Useful Life of Intangible Assets*, or FSP SFAS 142-3. FSP SFAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets*, or SFAS 142. The intent of FSP SFAS 142-3 is to improve the consistency between the useful life of a recognized intangible asset under SFAS 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141R (revised 2007), *Business Combinations*, or SFAS 141R and other applicable accounting literature. FSP SFAS 142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and must be applied prospectively to intangible assets acquired after the effective date. We are currently evaluating the potential impact, if any, of FSP SFAS 142-3 on its consolidated financial statements.

In September 2007, the EITF reached a consensus on EITF Issue No. 07-1, *Collaborative Arrangements*, or EITF 07-1. EITF 07-1 addresses the accounting for arrangements in which two companies work together to achieve a commercial objective, without forming a separate legal entity. The nature and purpose of a company's collaborative arrangements are required to be disclosed, along with the accounting policies applied and the

classification and amounts for significant financial activities related to the arrangements. The consensus is effective for fiscal years beginning after December 15, 2008. We are currently evaluating the impact of EITF 07-1 on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (Revised), *Business Combinations*, or SFAS 141R. SFAS 141R requires most identifiable assets, liabilities, noncontrolling interests, and goodwill acquired in a business combination to be recorded at fair value. The Statement applies to all business combinations, including combinations among mutual entities and combinations by contract alone. Under SFAS 141R, all business combinations will be accounted for by applying the acquisition method. Statement 141R is effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Earlier application of SFAS 141R is prohibited.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements — an Amendment of ARB No. 51*, or SFAS 160. SFAS 160 establishes accounting and reporting standards for the noncontrolling interest in a subsidiary and for the retained interest and gain or loss when a subsidiary is deconsolidated. This statement is effective for financial statements issued for fiscal years beginning on or after December 15, 2008 with earlier adoption prohibited. We are currently evaluating the impact of SFAS 160 on our consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, which amends SFAS 133, *Accounting for Derivative Instruments and Hedging Activities*, or SFAS 161. SFAS 161 requires each company with derivative instruments to disclose information about how and why it uses derivative instruments, how derivative instruments and related hedged items are accounted for under SFAS 133, and how derivative instruments and hedged items affect its financial position, financial performance, and cash flows. The required disclosures include the fair value of derivative instruments and their gains or losses in tabular format, information about credit risk-related contingent features in derivative agreements, counterparty credit risk, and the company's strategies and objectives for using derivative instruments. SFAS 161 expands the current disclosure framework in SFAS No. 133. SFAS 161 is effective prospectively for periods beginning on or after November 15, 2008. We do not utilize derivative instruments and, therefore, do not expect that there will be any impact on our consolidated financial statements.

ITEM 7A. *Quantitative and Qualitative Disclosure About Market Risk*

Foreign Currency Exchange Risk

As of December 31, 2008 and 2007, approximately $15,300 and $11.0 million respectively, of our cash, cash equivalents, and short-term investments were denominated in Canadian dollars. As a result, the carrying value of our cash, cash equivalents, and short-term investments may be impacted by exchange rate fluctuations. At December 31, 2008, a 10% strengthening of the Canadian dollar against the U.S. dollar would have no material effect for the year ended December 31, 2008.

In addition, we purchase goods and services denominated primarily in U.S. and Canadian currencies and, to a lesser extent, in certain European currencies. To manage our Canadian dollar exposure to foreign exchange risk, we have considered, but generally do not utilize, derivative instruments. The effect of exchange rate fluctuations may adversely affect our results in the future. During 2008 and the comparative periods presented, we did not enter into any foreign exchange forward or other derivative contracts in order to reduce our exposure to fluctuating foreign currency exchange rates.

Interest Rate Sensitivity

We had cash, cash equivalents, and short-term investments totaling $19.2 million and $24.2 million as of December 31, 2008 and 2007. We do not enter into investments for trading or speculative purposes. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short term nature of our cash, cash equivalents, and short-term investments. Declines in interest rates, however, would reduce future investment income. A 100 basis point decline in interest rates, occurring January 1, 2008 and sustained throughout the period ended December 31, 2008, would result in a decline in investment income of approximately $161,000 for that same period.

ITEM 8. *Financial Statements and Supplementary Data*

See Financial Statements beginning on page F-1.

ITEM 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

ITEM 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and principal financial and accounting officer, we conducted an evaluation of the effectiveness, as of December 31, 2008, 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. The purpose of this evaluation was to determine whether as of the evaluation date our disclosure controls and procedures were effective to provide reasonable assurance that the information we are required to disclose in our filings with the Securities and Exchange Commission, or SEC, under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our chief executive officer and principal financial and accounting officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. We have designed our internal controls to provide reasonable, but not absolute, assurance that our financial statements are prepared in accordance with U.S. GAAP. Our management conducted an evaluation of the effectiveness of our internal controls based on the criteria set forth in the *Internal Control — Integrated Framework* developed by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on our management's evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, which included remediation of the material weakness described below, our management concluded that as of December 31, 2008, our disclosure controls and procedures were effective. Deloitte & Touche LLP, Independent Registered Public Accountants, has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2008, which report is included within Item 8.

Changes in Internal Control Over Financial Reporting

In performing the assessment, our management identified a material weakness in internal control over financial reporting as of December 31, 2007. Specifically, a control over the

period-end financial reporting process relating to the preparation of our consolidated financial statements was not effective to ensure that a schedule supporting a foreign currency translation was reviewed by appropriate accounting personnel on a timely basis. This lack of appropriate review resulted in an error in the schedule which related to the incorrect use of the period-end exchange rate rather than the historical exchange rate. This error resulted in a material audit adjustment to a footnote summarizing the significant differences between generally accepted accounting principles in the United States and Canada and related disclosures of certain components within stockholders' equity. Due to this error, it was concluded that a material weakness in internal control over financial reporting existed because there is a reasonable possibility that a material misstatement of the interim and annual financial statements would not have been prevented or detected on a timely basis.

In response to the material weakness in our internal controls noted above, we have a defined process relating to the preparation of the schedules supporting foreign currency translation and enhanced the review process for such schedules. Specifically, the schedules supporting foreign currency translation are prepared by the senior accounting manager and reviewed by the controller. Further, a file is created for each SEC filing that provides detailed supporting documentation for all amounts and disclosures in the filing. All comments and questions received when preparing the financial statements are version controlled to ensure they are addressed.

After consideration of the remediation efforts described above, we have concluded that as of December 31, 2008, the material weakness disclosed with the audit of our consolidated financial statements for the year ended December 31, 2007, has been remediated. In addition, except as noted above, there have been no changes in our internal control over financial reporting since December 31, 2007 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitation on the Effectiveness of Internal Controls

The effectiveness of any system of internal control over financial reporting, including ours, is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, any system of internal control over financial reporting, including ours, no matter how well designed and operated, can only provide reasonable, not absolute assurances. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business, but cannot assure you that such improvements will be sufficient to provide us with effective internal control over financial reporting.

ITEM 9B. ***Other Information.***

None.

PART III

ITEM 10. ***Directors, Executive Officers and Corporate Governance***

The information required by Item 10 of Form 10-K is incorporated by reference to our Proxy Statement for the 2009 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2008. Certain information required by this item concerning executive officers is set forth in Part I of this Annual Report on Form 10-K in "Business — Executive Officers."

ITEM 11. ***Executive Compensation***

The information required by Item 11 of Form 10-K is incorporated by reference to our Proxy Statement for the 2009 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2008.

ITEM 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information required by Item 12 of Form 10-K is incorporated by reference to our Proxy Statement for the 2009 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2008.

ITEM 13. ***Certain Relationships and Related Transactions and Director Independence***

The information required by Item 13 of Form 10-K is incorporated by reference to our Proxy Statement for the 2009 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2008.

ITEM 14. ***Principal Accountant Fees and Services***

The information required by Item 14 of Form 10-K is incorporated by reference to our Proxy Statement for the 2009 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2008.

PART IV

ITEM 15. ***Exhibits and Financial Statement Schedules***

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

1. *Financial Statements*:

The consolidated financial statements of the Company are contained in Item 8 of this annual report on Form 10-K.

2. *Financial Statement Schedules*:

All financial statement schedules have been omitted because the required information is either included in the financial statements or notes thereto, or is not applicable.

3. *Exhibits*:

The exhibits required by Item 601 of Regulation S-K are listed in paragraph (b) below.

(b) Exhibits:

The following exhibits are filed herewith or are incorporated by reference to exhibits previously filed with the SEC:

Exhibit Number	Description
2.1	Agreement and Plan of Reorganization among ProlX Pharmaceuticals Corporation, D. Lynn Kirkpatrick, Garth Powis and Biomira Inc., dated October 30, 2006 (incorporated by reference from Exhibit 2.1 to Registration Statement on Form S-4/A filed on October 29, 2007).
3.1	Amended and Restated Certificate of Incorporation of Oncothyreon Inc. (incorporated by reference from Exhibit 3.1 to Registration Statement on Form S-4/A filed on September 27, 2007).
3.2	Bylaws of Oncothyreon Inc. (incorporated by reference from Exhibit 3.2 to Registration Statement on Form S-4/A filed on September 27, 2007).

Exhibit Number	Description
10.1	Form of Indemnification Agreement (incorporated by reference from Exhibit 10.1 to Registration Statement on Form S-4/A filed on September 27, 2007).
10.2†	License Agreement between Biomira Inc. and the Dana-Farber Cancer Institute, Inc., dated November 22, 1996 (incorporated by reference from Exhibit 10.6 to Registration Statement on Form S-4 filed on September 12, 2007).
10.3	Severance Agreement between Biomira Inc. and Edward Taylor, dated July 6, 1998 (incorporated by reference from Exhibit 10.7 to Registration Statement on Form S-4 filed on September 12, 2007).
10.4†	Exclusive License Agreement between the University of Arizona and ProlX Pharmaceuticals, Inc., dated June 3, 1999 (incorporated by reference from Exhibit 10.9 to Registration Statement on Form S-4/A filed on September 27, 2007).
10.5†	Product Development and Clinical Supply Agreement between Biomira USA and Cook Imaging Corporation d.b.a. Cook Pharmaceutical Solutions, dated September 10, 1999 (incorporated by reference from Exhibit 10.10 to Registration Statement on Form S-4/A filed on September 27, 2007).
10.6†	Amended and Restated License Agreement between Imperial Cancer Research Technology Limited and Biomira Inc., dated November 14, 2000 (incorporated by reference from Exhibit 10.11 to Registration Statement on Form S-4/A filed on September 27, 2007).
10.7†	Exclusive License Agreement among Georgetown University, the University of Arizona and ProlX Pharmaceuticals Corporation, dated July 5, 2001 (incorporated by reference from Exhibit 10.12 to Registration Statement on Form S-4 filed on September 12, 2007).
10.8	Consent and Acknowledgement among Biomira Inc., Biomira International Inc., Biomira Europe B.V., Imperial Cancer Research Technology Limited and Merck KGaA, dated February 5, 2002 (incorporated by reference from Exhibit 10.13 to Registration Statement on Form S-4 filed on September 12, 2007).
10.9†	License Agreement between the Governors of the University of Alberta and Biomira Inc., dated December 1, 2001 (incorporated by reference from Exhibit 10.14 to Registration Statement on Form S-4/A filed on September 27, 2007).
10.10	Severance Agreement between Biomira Inc. and Marilyn Olson, dated May 12, 2003 (incorporated by reference from Exhibit 10.15 to Registration Statement on Form S-4 filed on September 12, 2007).
10.11†	Letter Agreement between Biomira Inc. and Cancer Research Technology Limited (formerly Imperial Cancer Research Technology Limited), dated March 9, 2004 (incorporated by reference from Exhibit 10.16 to Registration Statement on Form S-4/A filed on September 27, 2007).
10.12	Commercial Lease Agreement between 221 E. 6th St. LLC and ProlX Pharmaceuticals Corporation, dated March 26, 2004 (incorporated by reference from Exhibit 10.17 to Registration Statement on Form S-4 filed on September 12, 2007).
10.13†	Exclusive License Agreement between the University of Arizona and ProlX Pharmaceuticals Corporation, dated July 29, 2004 (incorporated by reference from Exhibit 10.18 to Registration Statement on Form S-4 filed on September 12, 2007).
10.14†	Adjuvant License Agreement between Biomira International Inc. and Corixa Corporation, dated October 20, 2004 (incorporated by reference from Exhibit 10.19 to Registration Statement on Form S-4/A filed on September 27, 2007).

Exhibit Number	Description
10.15†	Adjuvant Supply Agreement between Biomira International Inc. and Corixa Corporation, dated October 20, 2004 (incorporated by reference from Exhibit 10.20 to Registration Statement on Form S-4/A filed on September 27, 2007).
10.16†	Exclusive Patent License Agreement between the University of Arizona and ProlX Pharmaceuticals Corporation, dated September 15, 2005 (incorporated by reference from Exhibit 10.21 to Registration Statement on Form S-4 filed on September 12, 2007).
10.17	Severance Agreement between Biomira Inc. and Rao Koganty, dated March 21, 2006 (incorporated by reference from Exhibit 10.25 to Registration Statement on Form S-4 filed on September 12, 2007).
10.18	Offer letter with Robert Kirkman, dated August 29, 2006 (incorporated by reference from Exhibit 10.27 to Registration Statement on Form S-4 filed on September 12, 2007).
10.18(a)	Amendment to Robert Kirkman Offer Letter dated December 31, 2008.
10.19†	Letter Agreement between the University of Arizona and Biomira Inc., dated October 6, 2006 (incorporated by reference from Exhibit 10.28 to Registration Statement on Form S-4 filed on September 12, 2007).
10.20	Offer Letter with Lynn Kirkpatrick dated October 30, 2006 (incorporated by reference from Exhibit 10.29 to Registration Statement on Form S-4 filed on September 12, 2007).
10.21	Assignment of Lease Agreement between 221 E. 6th St. LLC, ProlX Pharmaceuticals Corporation and Biomira Inc. (incorporated by reference from Exhibit 10.30 to Registration Statement on Form S-4 filed on September 12, 2007).
10.22	Escrow Agreement between D. Lynn Kirkpatrick, Garth Powis, John S. Lazo, ComputerShare Trust Company and Biomira Inc., dated October 30, 2006 (incorporated by reference from Exhibit 10.31 to Registration Statement on Form S-4 filed on September 12, 2007).
10.23	Lease Agreement between W2007 Seattle Office 110 Atrium Place Realty, LLC and Biomira Marketing, Inc., dated July 19, 2007 (incorporated by reference from Exhibit 10.33 to Registration Statement on Form S-4 filed on September 12, 2007).
10.24	Amended and Restated Share Option Plan and form of stock option agreement thereunder (incorporated by reference from Exhibit 10.34 to Registration Statement on Form S-4/A filed on October 29, 2007).
10.25	Amended and Restated Restricted Share Unit Plan (incorporated by reference from Exhibit 10.35 to Registration Statement on Form S-4/A filed on October 29, 2007).
10.26	2006 Variable Pay Plan (incorporated by reference from Exhibit 10.36 to Registration Statement on Form S-4 filed on September 12, 2007).
10.27	Form of Purchase Warrant issued by Biomira Inc. to each of the individuals and entities listed on Schedule 1 to this Exhibit 10.28, dated January 30, 2006 (incorporated by reference from Exhibit 10.38 to Registration Statement on Form S-4 filed on September 12, 2007).
10.28	Form of Purchase Warrant issued by Biomira Inc. to each of the individuals and entities listed on Schedule 1 to this Exhibit 10.29, dated December 18, 2006 (incorporated by reference from Exhibit 10.41 to Registration Statement on Form S-4 filed on September 12, 2007).

Exhibit Number	Description
10.29	Purchase Warrant issued by Biomira Inc. to Rodman & Renshaw, LLC, dated December 18, 2006 (incorporated by reference from Exhibit 10.42 to Registration Statement on Form S-4 filed on September 12, 2007).
10.30	Security Agreement between Jeffrey Millard and Biomira Inc., dated November 8, 2006 (incorporated by reference from Exhibit 10.43 to Registration Statement on Form S-4 filed on September 12, 2007).
10.31	General Security Agreement between Jeffrey Millard and Biomira Inc., dated November 8, 2006 (incorporated by reference from Exhibit 10.44 to Registration Statement on Form S-4 filed on September 12, 2007).
10.32	Security Agreement between Linda Pestano and Biomira Inc., dated November 8, 2006 (incorporated by reference from Exhibit 10.45 to Registration Statement on Form S-4 filed on September 12, 2007).
10.33	General Security Agreement between Linda Pestano and Biomira Inc., dated November 8, 2006 (incorporated by reference from Exhibit 10.46 to Registration Statement on Form S-4 filed on September 12, 2007).
10.34	Security Agreement between Patrick Trown and Biomira Inc., dated November 3, 2006 (incorporated by reference from Exhibit 10.47 to Registration Statement on Form S-4 filed on September 12, 2007).
10.35	General Security Agreement between Patrick Trown and Biomira Inc., dated November 3, 2006 (incorporated by reference from Exhibit 10.48 to Registration Statement on Form S-4 filed on September 12, 2007).
10.36	Promissory Note between Jeffrey Millard and Biomira Inc., dated November 8, 2006 (incorporated by reference from Exhibit 10.49 to Registration Statement on Form S-4 filed on September 12, 2007).
10.36(a)	Note Amendment Agreement by and between Oncothyreon Inc. and Jeffrey Millard, dated April 20, 2008.
10.37	Promissory Note between Linda Pestano and Biomira Inc., dated November 8, 2006 (incorporated by reference from Exhibit 10.50 to Registration Statement on Form S-4 filed on September 12, 2007).
10.37(a)	Note Amendment Agreement by and between Oncothyreon Inc. and Linda Pestano, dated April 20, 2008.
10.38	Promissory Note between Patrick Trown and Biomira Inc., dated November 8, 2006 (incorporated by reference from Exhibit 10.51 to Registration Statement on Form S-4 filed on September 12, 2007).
10.39	Letter Agreement between Patrick Trown and Biomira Inc., dated May 31, 2007 (incorporated by reference from Exhibit 10.52 to Registration Statement on Form S-4 filed on September 12, 2007).
10.40	Offer Letter with Gary Christianson, dated June 29, 2007 (incorporated by reference from Exhibit 10.1 to Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2008 filed on November 10, 2008).
10.40(a)	Amendment to Gary Christianson Offer Letter dated December 31, 2008.
10.41	Sublease Agreement between Muze Inc. and Oncothyreon Inc., dated May 9, 2008 (incorporated by reference from Exhibit 10.2 to Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2008 filed on November 10, 2008).
10.42	Lease Agreement between Selig Holdings Company and Oncothyreon Inc., dated May 9, 2008 (incorporated by reference from Exhibit 10.3 to Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2008 filed on November 10, 2008).

Exhibit Number	Description
10.43	Amendment Number 1 to Adjuvant License Agreement and Adjuvant Supply Agreement between Corixa Corporation, d/b/a GlaxoSmithKline Biologicals N.A. and Biomira Management Inc., dated August 8, 2008 (incorporated by reference from Exhibit 10.4 to Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2008 filed on November 10, 2008).
10.44††	Amended and Restated License Agreement between Biomira Management, Inc. and Merck KGaA, dated December 18, 2008.
10.45††	Asset Purchase Agreement by and among Oncothyreon Canada Inc., Biomira Management, Inc., Oncothyreon Inc., Merck KGaA and EMD Serono Canada Inc., dated December 18, 2008.
10.46	Offer Letter dated March 24, 2008 between Oncothyreon Inc. and Shashi Karan (incorporated by reference from Exhibit 99.1 to Current Report on Form 8-K filed on March 11, 2009).
12.1	Ratio of Earnings to Fixed Charges.
21.1	Subsidiaries of Oncothyreon Inc.
23.1	Consent of Deloitte & Touche LLP, independent registered chartered accountants.
23.2	Consent of Deloitte & Touche LLP, independent registered public accounting firm.
24.1	Power of Attorney (included on signature page).
31.1	Certification of Robert L. Kirkman, M.D., President and Chief Executive Officer, pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Shashi K. Karan, Corporate Controller, pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Robert L. Kirkman, M.D., President and Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Shashi K. Karan, Corporate Controller, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

† Confidential treatment has been granted for portions of this exhibit.

†† Portions of this exhibit are omitted and were filed separately with the Securities and Exchange Commission pursuant to an application requesting confidential treatment.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Seattle, County of King, State of Washington on March 27, 2009.

ONCOTHYREON INC

By: /s/ Robert L. Kirkman
Robert L. Kirkman
President, CEO and Director

POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Robert L. Kirkman and Shashi K. Karan, and each of them severally, his true and lawful attorneys-in-fact and agents, with full power to act without the other and with full power of substitution and resubstitution, to execute in his name and on his behalf, individually and in each capacity stated below, any and all amendments and supplements to this Report, and any and all other instruments necessary or incidental in connection herewith, and to file the same with the Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Robert L. Kirkman Robert L. Kirkman	President, Chief Executive Officer and Director (Principal Executive Officer)	March 27, 2009
/s/ Shashi K. Karan Shashi K. Karan	Principal Financial and Accounting Officer and Corporate Controller	March 27, 2009
/s/ Christopher S. Henney Christopher S. Henney	Chairman and Director	March 27, 2009
/s/ Richard L. Jackson Richard L. Jackson	Director	March 27, 2009
/s/ Daniel K. Spiegelman Daniel K. Spiegelman	Director	March 27, 2009
/s/ W. Vickery Stoughton W. Vickery Stoughton	Director	March 27, 2009

(This page intentionally left blank)

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Oncothyreon Inc.
Seattle, Washington

We have audited the accompanying consolidated balance sheet of Oncothyreon Inc. and subsidiaries (the "Company") as of December 31, 2008, and the related consolidated statements of operations and comprehensive income (loss), stockholders' equity, and cash flows for the year then ended. We also have audited the Company's internal control over financial reporting as of December 31, 2008, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes

in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Oncothyreon Inc. and subsidiaries as of December 31, 2008, and the results of their operations and their cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

/s/ Deloitte & Touche LLP

Seattle, Washington
March 25, 2009

REPORT OF INDEPENDENT REGISTERED CHARTERED ACCOUNTANTS

To the Board of Directors and Stockholders of Oncothyreon Inc.

We have audited the accompanying consolidated balance sheet of Oncothyreon Inc. and subsidiaries (the "Company") as of December 31, 2007 and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the two years in the period ended 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 in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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 audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Oncothyreon Inc. and subsidiaries as of December 31, 2007 and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2007, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Independent Registered Chartered Accountants
Edmonton, Alberta, Canada
March 13, 2008

ONCOTHYREON INC.

Consolidated Balance Sheets

	As of December 31, 2008	2007
	(In thousands, except share amounts)	
ASSETS		
Current		
Cash and cash equivalents	**$ 19,166**	$ 12,035
Short-term investments	**—**	12,151
Accounts receivable	**1,828**	2,024
Government grant receivable	**40**	552
Notes receivable, employees	**—**	364
Prepaid expenses	**384**	528
Inventory	**—**	5,069
	21,418	32,723
Plant and equipment	**867**	1,378
Lease deposits	**354**	—
Notes receivable, employees	**215**	—
Goodwill	**2,117**	2,117
	$ 24,971	$ 36,218
LIABILITIES		
Current		
Accounts payable	**$ 401**	$ 235
Accrued liabilities	**1,835**	3,710
Accrued compensation and related liabilities	**1,607**	1,823
Current portion of capital lease obligations	**—**	104
Current portion of deferred revenue	**18**	5,801
	3,861	11,673
Capital lease obligations	**—**	66
Notes payable	**199**	199
Warrant liability	**—**	64
Deferred revenue	**164**	12,167
Class UA preferred stock, 12,500 shares authorized, 12,500 and 12,500 shares issued and outstanding	**30**	30
	4,254	24,199
Contingencies, commitments, and guarantees (See Note 18)		
STOCKHOLDERS' EQUITY		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized, no shares issued and outstanding	**—**	—
Common stock, $0.0001 par value; 100,000,000 shares authorized, 19,492,432 and 19,485,889 shares issued and outstanding	**325,043**	324,992
Warrants	**64**	
Additional paid-in capital	**15,094**	13,636
Accumulated deficit	**(314,418)**	(321,543)
Accumulated other comprehensive loss	**(5,066)**	(5,066)
	20,717	12,019
	$ 24,971	$ 36,218

See accompanying notes to the consolidated financial statements.

ONCOTHYREON INC.

Consolidated Statements of Operations and Comprehensive Income (Loss)
Years ended December 31

	2008	2007	2006
	(In thousands, except per share amounts)		
Revenue			
Contract research and development	**$ —**	$ 631	$ 3,678
Contract manufacturing	**15,582**	2,536	—
Licensing revenue from collaborative agreements	**24,416**	528	182
Licensing, royalties, and other revenue	**—**	103	119
	39,998	3,798	3,979
Expenses			
Research and development	**9,318**	10,011	12,200
Manufacturing	**13,675**	2,564	—
General and administrative	**9,749**	11,797	7,636
Marketing and business development	**—**	565	587
Depreciation	**422**	246	247
In-process research and development	**—**	—	24,920
Investment and other (income) loss, net	**(298)**	371	(916)
Interest expense	**7**	5	10
Change in fair value of warrant liability	**—**	(1,421)	(3,849)
	(32,873)	(24,138)	(40,835)
Income (Loss) before income taxes	**7,125**	(20,340)	(36,856)
Income tax recovery:			
Current	**—**	—	462
Net Income (loss)	**7,125**	(20,340)	(36,394)
Other comprehensive income	**—**	3,243	164
Comprehensive net income (loss)	**$ 7,125**	$ (17,097)	$ (36,230)
Earnings (loss) per share — basic	**$ 0.37**	$ (1.04)	$ (2.38)
Earnings (loss) per share — diluted	**$ 0.36**	$ (1.04)	$ (2.38)
Shares used to compute basic earnings (loss) per share	**19,490,621**	19,485,889	15,316,697
Shares used to compute diluted earnings (loss) per share	**19,570,170**	19,485,889	15,316,697

See accompanying notes to the consolidated financial statements.

ONCOTHYREON INC.

Consolidated Statements of Stockholders' Equity

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss
	Number	Amount			
	(In thousands, except share amounts)				
Balance at December 31, 2005	**13,136,094**	**$280,235**	**$ 9,483**	**$(264,809)**	**$(8,473)**
Conversion of restricted share units	3,166	26	(26)		
Equity placements	3,367,000	22,792			
Issued for business acquisition	2,979,629	21,939			
Stock-based compensation			2,498		
Net loss				(36,394)	
Unrealized holding gains on available-for-sale securities, net of tax of ($0)					99
Foreign currency translation adjustments, net of tax of ($0)					65
Other comprehensive income					164
Balance at December 31, 2006	**19,485,889**	**$324,992**	**$ 11,955**	**$ (301,203)**	**$(8,309)**
Stock-based compensation			1,681		
Net loss				(20,340)	
Unrealized holding loss on available-for-sale securities, net of tax of ($0)					(48)
Foreign currency translation adjustments, net of tax of ($0)					3,291
Other comprehensive income					3,243
Balance at December 31, 2007	**19,485,889**	**$324,992**	**$13,636**	**$ (321,543)**	**$(5,066)**
Stock-based compensation			1,509		
Net income				7,125	
Conversion of restricted share units	6,543	51	(51)		
Balance at December 31, 2008	**19,492,432**	**$325,043**	**$15,094**	**$ (314,418)**	**$(5,066)**

See accompanying notes to the consolidated financial statements.

ONCOTHYREON INC.

Consolidated Statements of Cash Flows
Years ended December 31

	2008	2007	2006
		(In thousands)	
Operating			
Net income (loss)	**$ 7,125**	$(20,340)	$(36,394)
Depreciation	**422**	246	247
Stock-based compensation expense	**1,509**	1,681	2,498
In-process research and development	**—**	—	24,920
Change in fair value of warrant liability	**—**	(1,421)	(3,849)
Gain on disposal of short term investments	**—**	(48)	—
(Gain) loss on disposal of plant and equipment	**(48)**	7	—
Impairment allowance	**—**	—	88
Proceeds from collaborative agreements	**3,000**	10,000	—
Proceeds from contract manufacturing	**4,060**	5,798	—
Deferred revenue	**(24,846)**	(1,034)	(182)
Net change in non-cash working capital balances from operations			
Accounts receivable	**194**	10	(17)
Government grants receivable	**512**	—	—
Prepaid expenses	**144**	(171)	(164)
Inventory	**5,069**	(3,466)	(973)
Long term deposits	**(354)**	—	—
Accounts payable	**166**	(181)	12
Accrued liabilities	**(1,623)**	1,205	106
Accrued compensation and related liabilities	**(216)**	683	24
	(4,886)	(7,031)	(13,684)
Investing			
Purchase of short-term investments	**(22,376)**	(37,574)	(47,777)
Redemption of short-term investments	**34,246**	42,655	43,285
Purchase of plant and equipment	**(744)**	(684)	(71)
Proceeds from sale of plant and equipment	**548**	—	—
Business acquisition	**—**	(238)	(3,874)
(Increase) decrease in notes receivable	**151**	—	(356)
	11,825	4,159	(8,793)
Financing			
Proceeds on issue of common shares and warrants, net of issue costs	**—**	(165)	27,735
Repayment of notes payable	**—**	—	(13)
Repayment of capital lease obligations	**(93)**	(71)	(41)
	(93)	(236)	27,681
Net cash inflow (outflow)	**6,846**	(3,108)	5,204
Effect of exchange rate fluctuations on cash and cash equivalents	**285**	1,734	259
Increase (decrease) in cash and cash equivalents	**7,131**	(1,374)	5,463
Cash and cash equivalents, beginning of year	**12,035**	13,409	7,946
Cash and cash equivalents, end of year	**$ 19,166**	$ 12,035	$ 13,409
Supplemental disclosure of cash flow information			
Amount of interest paid in the year	**$ 7**	$ 5	$ 10
Amount of income taxes paid in the year	**$ —**	$ —	$ —

See accompanying notes to the consolidated financial statements.

1. DESCRIPTION OF BUSINESS

Oncothyreon Inc. (the "Company" or "Oncothyreon") is a clinical-stage biopharmaceutical company incorporated in the State of Delaware on September 7, 2007. Oncothyreon is focused primarily on the development of therapeutic products for the treatment of cancer. Oncothyreon's goal is to develop and commercialize novel synthetic vaccines and targeted small molecules that have the potential to improve the lives and outcomes of cancer patients. Oncothyreon's operations are not subject to any seasonality or cyclicality factors.

Change in reporting entity

On December 10, 2007, Oncothyreon became the successor corporation to Biomira Inc. (the "Company" or "Biomira") by way of a plan of arrangement approved at special meeting of the stockholders of Biomira and the Alberta Court of Queen's Bench under Canadian law in December 2007. Biomira was incorporated under the Canada Business Corporations Act in 1985.

On December 11, 2007, Oncothyreon's common stock began trading on The NASDAQ Global Market under the symbol "ONTY" and on the Toronto Stock Exchange under the symbol "ONY." Holders of common shares of the former Biomira received one-sixth of a share of common stock of Oncothyreon in exchange for each common share of Biomira, which had the effect of a 6 for 1 reverse stock split of the outstanding common shares. The holder of the 12,500 outstanding Biomira Class A preference shares received one share of Class UA Preferred Stock of Oncothyreon for each Biomira Class A preference share. The consolidated financial statements have been prepared giving effect to the 6 for 1 share exchange and basic and diluted loss per share for all periods presented.

All Biomira common stock options, restricted share units and warrants that were in existence prior to the plan of arrangement were exchanged for stock options, restricted share units and warrants in Oncothyreon on a 6 for 1 basis with no change in any of the terms and conditions.

Oncothyreon's Board of Directors and management immediately following the plan of arrangement were the same as Biomira's immediately before the plan of arrangement became effective.

In accordance with Statement of Financial Accounting Standard ("SFAS") No. 141, *Accounting for Business Combinations*, the plan of arrangement was a transaction among entities under common control. Assets and liabilities transferred between entities under common control are accounted for at historical cost. Accordingly, the assets and liabilities of the predecessor Biomira have been reflected at their historical cost in the accounts of Oncothyreon. In addition, these financial statements reflect the historical accounts of Biomira up to December 10, 2007 with the exception of basic and diluted loss per share amounts, descriptions and amounts of all common stock, stock options, restricted share units and warrants and their corresponding exercise prices where applicable; which have been recast to reflect the 6 for 1 common share exchange effected by the plan of arrangement.

In these financial statements, the reference to "Company" means Biomira for periods prior to December 10, 2007 and Oncothyreon for periods thereafter.

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

These consolidated financial statements have been prepared using accounting principles generally accepted in the United States of America ("U.S. GAAP"), which except as described in Note 21, conform, in all material respects, with Canadian generally accepted accounting standards ("Canadian GAAP"), and reflect the following significant accounting policies.

Basis of consolidation

The Company's consolidated financial statements include the accounts of its wholly-owned subsidiaries, including Oncothyreon Canada Inc., Biomira Management Inc., ProlX Pharmaceuticals Corporation, Biomira International Inc., Biomira BV, Oncothyreon Luxembourg and its 90% owned subsidiary Oncodigm Biopharma Inc., on a fully consolidated basis. All intercompany balances and transactions have been eliminated upon consolidation.

Accounting estimates

The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates. Significant estimates include the allocation of the purchase price for acquisitions, the cost and valuation of inventory, the valuation of goodwill, the fair value of stock options and restricted share units granted and warrants issued, the useful lives of plant and equipment, the amortization period of deferred revenues, and the valuation allowance offsetting deferred tax assets.

Cash and cash equivalents

Cash equivalents include short-term, highly liquid investments that are readily convertible to known amounts of cash, with original maturities of 90 days or less at the time of purchase. At December 31, 2008, cash and cash equivalents was comprised of $14,137 cash, $5,029 in money market investments and nil in short-term investments with original maturities of 90 days or less. As at December 31, 2007 the amounts were $6,625, $893 and $4,517 respectively. The carrying value of these cash equivalents approximates their fair value.

Short-term investments

Short-term investments are classified as available-for-sale securities. In accordance with SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, available-for-sale securities are carried at market value, with unrealized temporary holding gains and losses excluded from income and reported in other comprehensive income and also as a net amount in accumulated other comprehensive income until realized. Available-for-sale securities are written down to fair value through income whenever it is necessary to reflect an other-than-temporary impairment. As at December 31, 2008, the Company had no short term investments.

Derivative financial instruments

The Company does not utilize derivative financial instruments Under SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, and related amendments, share purchase warrants with an exercise price denominated in a currency other than the Company's functional currency are recorded as liabilities. Changes in the fair value of the warrants are recognized in the consolidated statements of operations.

Inventory

Inventories of raw material supplies are valued at the lower of cost, computed in a first-in, first-out basis, and replacement cost. Inventories of work-in-process and finished goods are valued at the lower of standard cost (which is calculated to approximate actual costs) and net realizable value. Cost for work-in-process and finished goods inventories includes materials, third party contract manufacturing costs, direct labour and an allocation of overhead.

Plant and equipment and depreciation

Plant and equipment are recorded at cost and depreciated over their estimated useful lives on a straight-line basis, as follows:

Scientific and office equipment	5 years
Manufacturing equipment	4 years
Computer software and equipment	3 years
Leased equipment	Shorter of useful life or the term of the lease
Leasehold improvements	Shorter of useful life or the term of the lease

Long-lived assets

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, long-lived assets, such as plant and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by an asset to the carrying value of the asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying value exceeds its fair value. Fair value is determined by management through various valuation techniques including discounted cash flow models, quoted market values and third-party independent appraisals, as considered necessary. There were no impairment charges recorded for any of the periods presented.

Goodwill

Goodwill is carried at cost and is not amortized, but is reviewed annually for impairment in the fourth quarter, or more frequently when events or changes in circumstances indicate that the asset may be impaired. In the event that the carrying value of goodwill exceeds its fair value, an impairment loss would be recognized. There were no impairment charges recorded for any of the periods presented.

Revenue recognition

Following the recommendations of Emerging Issues Task Force ("EITF") Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*, the Company evaluates revenue from

arrangements with multiple deliverables to determine whether the deliverables represent one or more units of accounting. A delivered item is considered a separate unit of accounting if the following separation criteria are met: (1) the delivered item has standalone value to the customer; (2) there is objective and reliable evidence of the fair value of any significant undelivered items; and (3) if the arrangement includes a general right of return relative to the delivered item, the delivery of undelivered items is probable and substantially in the Company's control. The relevant revenue recognition accounting policy is applied to each separate unit of accounting.

Revenue from contract research and development consists of non-refundable research and development payments received under the terms of collaborative agreements. Such funding compensates the Company for clinical trial expenses related to the collaborative development programs for certain product candidates of the Company, and is recognized as revenue at the time that clinical activities are performed under the terms of collaborative agreements.

Revenue from contract manufacturing consists of payments received under the terms of supply agreements for the sale of clinical trial material. Such payments compensates the Company for the cost of manufacturing clinical trial material and is recognized after shipment of the clinical trial material and upon the earlier of the expiration of a specified return period or formal acceptance of the clinical trial material by the customer.

Revenue from collaborative agreements consists of initial technology access or licensing fees and milestone payments triggered by specified events. Initial lump-sum payments for such technology access or licensing fees are recorded as deferred revenue when received and recognized as revenue ratably over the term of the license agreement or the related product lifecycle, whichever is shorter. Milestone payments are recognized as revenue upon performance of obligations defined as milestones in the agreements, when the Company has no further involvement or obligation to perform under the agreements. Milestone payments for which the Company has ongoing involvement are deferred and amortized into income over the estimated period of the ongoing involvement.

Royalty revenues from third party contracts are recognized as earned on an accrual basis in accordance with the terms of the contractual agreements.

Government grants

Government assistance is recognized when the expenditures that qualify for assistance are made and the Company has complied with the conditions for the receipt of government assistance. Government assistance is applied to reduce eligible expenses incurred. A liability to repay government assistance, if any, is recorded in the period in which conditions arise that cause the assistance to become repayable.

Research and development costs

R&D expenses include personnel and facility related expenses, outside contract services including clinical trial costs, manufacturing and process development costs, research costs and other consulting services. R&D costs are expensed as incurred. In instances where the Company enters into agreements with third parties for clinical trials, manufacturing and process development, research and other consulting activities, costs are expensed as services are performed. Amounts due under such arrangements may be either fixed fee or fee for service, and may include upfront payments, monthly payments, and payments upon the completion of milestones or receipt of deliverables.

The Company's accruals for clinical trials are based on estimates of the services received and pursuant to contracts with numerous clinical trial centers and clinical research organizations. In the normal course of business the Company contracts with third parties to perform various clinical trial activities in the ongoing development of potential products. The financial terms of these agreements are subject to negotiation and variation from contract to contract and may result in uneven payment flows. Payments under the contracts depend on factors such as the achievement of certain events, the successful accrual of patients, and the completion of portions of the clinical trial or similar conditions. The objective of the Company's accrual policy is to match the recording of expenses in our consolidated financial statements to the actual services received. As such, expense accruals related to clinical trials are recognized based on its estimate of the degree of completion of the event or events specified in the specific clinical study or trial contract.

Foreign exchange

The Company's consolidated financial statements are reported in U.S. dollars. In accordance with SFAS No. 52, *Foreign Currency Translation*, assets and liabilities of foreign subsidiaries with a non-U.S. dollar functional currency are translated to U.S. dollars at the exchange rates in effect on the balance sheet date. Revenues and expenses for these subsidiaries are translated to U.S. dollars using an average rate for the relevant reporting period. Translation adjustments resulting from this process are included, net of tax, in accumulated other comprehensive income in stockholders' equity. Gains and losses that arise from exchange rate fluctuations for balances that are not denominated in an entity's functional currency are included in the consolidated statements of operations and comprehensive income (loss). Currency gains and losses of intercompany balances deemed to be long-term in nature are included, net of tax, in accumulated other comprehensive income (loss) in stockholders' equity.

Our foreign subsidiaries are considered to be integrated foreign operations and, accordingly, have the same functional currency as the parent.

Prior to January, 1 2008, the Company's functional currency was the Canadian dollar.

Effective January 1, 2008, the Company changed its functional currency to the U.S. dollar from the Canadian dollar in order to more accurately represent the currency of the economic environment in which it operates as a result of the Company's redomicile into the United States effective December 10, 2007 (See Note 1) and increasing U.S. dollar denominated revenues and expenditures. Our financial statements for periods prior to this change have not been restated for the change in functional currency.

Earnings per share

Basic earnings per common share were calculated using the weighted average number of common shares outstanding during the year.

Diluted earnings per common share were calculated on the basis of the weighted average number of shares outstanding during the period, plus the additional common shares that would have been outstanding if potentially dilutive common shares underlying stock options, restricted share units and warrants had been issued using the treasury stock method.

Income taxes

The Company follows the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the future income tax

consequences attributable to differences between the carrying amounts and tax bases of assets and liabilities and losses carried forward and tax credits. Deferred tax assets and liabilities are measured using enacted tax rates and laws applicable to the years in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided to the extent that it is more likely than not that deferred tax assets will not be realized.

The Company has completed an analysis of uncertain tax positions based on the guidance of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* — an interpretation of SFAS No. 109, *Accounting for Income Taxes* which became effective for the Company as of January 1, 2007, and concluded that it has no material uncertain tax positions for either 2008 or 2007.

Accumulated other comprehensive income (loss)

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss).

Other comprehensive income (loss) primarily consists of foreign currency translation adjustments which arose from the conversion of the Canadian dollar functional currency consolidated financial statements to the U.S. dollar reporting currency consolidated financial statements in 2007.

Stock-based compensation

The Company applies SFAS No. 123(R), *Share-Based Payment, as interpreted by Staff Accounting Bulletin* ("SAB") 107, a revision to SFAS No. 123, *Accounting for Stock-Based Compensation* ("SFAS 123(R)"). SFAS 123(R) requires the Company to recognize in the income statement the grant date fair value of share-based compensation awards granted to employees over the requisite service period. Stock-based compensation expense in the consolidated statements of operations is recorded on a straight-line basis over the requisite service period, which is generally the vesting period, with the offset to additional paid-in capital. The Company uses the Black-Scholes option pricing model to calculate the fair value of stock options granted to employees. Assumptions used by management in calculating the value of stock awards are discussed in Note 12.

3. ACCOUNTING POLICY CHANGES

Accounting standards adopted in the current year

Fair value measurements

In September 2006, the Financial Accounting Standards Board ("FASB") issued SFAS No. 157 *Fair Value Measurements* ("SFAS 157"). SFAS 157 introduces a framework for measuring fair value and expands required disclosure about fair value measurements of assets and liabilities. SFAS 157 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability, an exit price, in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. SFAS 157 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. SFAS 157 describes three levels of inputs that may be used to measure fair value:

- Level 1 — quoted prices in active markets for identical assets or liabilities;

- Level 2 — observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 — unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The adoption of SFAS 157 did not have any effect on the Company's financial condition or results of operations, however, SFAS 157 introduced new disclosures about how the Company values certain assets and liabilities. Much of the disclosure is focused on the inputs used to measure fair value, particularly in instances where the measurement uses significant unobservable, i.e., Level 3, inputs. All of the Company's financial instruments as of December 31, 2008, which amounted to $5 million, are held in money market funds, are classified as Level 1 investments and are valued at fair value based on quoted market prices in active markets. For financial assets and liabilities, SFAS 157 was effective for fiscal years beginning after November 15, 2007, and the Company has adopted the standard for those assets and liabilities as of January 1, 2008. The impact of adoption was not significant.

The fair value option for financial assets and financial liabilities

Effective January 1, 2008, the Company adopted SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* ("SFAS 159"). SFAS 159 allows entities the option to measure eligible financial instruments at fair value as of specified dates. Such election, which may be applied on an instrument by instrument basis, is typically irrevocable once elected. The Company has elected not to apply SFAS 159 to any assets or liabilities, therefore the adoption of SFAS 159 had no impact on the Company's financial position or results of operations for the current or comparative periods presented.

Accounting for non-refundable advance payments for goods or services received for use in future research and development activities

Effective January 1, 2008, the Company adopted EITF Issue No. 07-3, *Accounting for Non Refundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities* ("EITF 07-3"). EITF 07-3 requires that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed and is to be applied prospectively for new contracts entered into on or after January 1, 2008. The adoption of EITF 07-3 did not have a material impact on the Company's financial position or results of operations.

Accounting standards effective in future years

GAAP hierarchy

In May 2008 the FASB released SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* ("SFAS 162"). SFAS 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements of nongovernmental entities that are presented in conformity with U.S. GAAP (the "GAAP hierarchy"). FASB believes that the GAAP hierarchy should be directed to entities because it is the entity, not its auditor, that is responsible for selecting accounting principles for financial statements that are presented in conformity with GAAP.

Accordingly, FASB concluded that the GAAP hierarchy should reside in the accounting literature established by the FASB and issued SFAS 162 to achieve that result. SFAS 162 becomes effective 60 days following the Securities and Exchange Commission's approval of the Public Accounting Oversight Board amendment to Interim Auditing Standard, AU Section 411. The Company is currently evaluating the potential impact, if any, of the adoption of SFAS 162 on its consolidated financial statements.

Determination of the useful life of intangible assets

In April 2008, the FASB issued FASB Staff Position ("FSP") No. SFAS 142-3, *Determination of the Useful Life of Intangible Assets* ("FSP SFAS 142-3"). FSP SFAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets* ("SFAS 142"). The intent of FSP SFAS 142-3 is to improve the consistency between the useful life of a recognized intangible asset under SFAS 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141R (revised 2007), *Business Combinations* ("SFAS 141R") and other applicable accounting literature. FSP SFAS 142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and must be applied prospectively to intangible assets acquired after the effective date. Therefore, the Company believes it will have no effect on its financial position or results of operations.

Collaborative arrangements

In September 2007, the EITF reached a consensus on EITF Issue No. 07-1, *Collaborative Arrangements* ("EITF 07-1"). EITF 07-1 addresses the accounting for arrangements in which two companies work together to achieve a commercial objective, without forming a separate legal entity. The nature and purpose of a company's collaborative arrangements are required to be disclosed, along with the accounting policies applied and the classification and amounts for significant financial activities related to the arrangements. The consensus is effective for fiscal years beginning after December 15, 2008. The Company does not believe that it has collaborative agreements subject to the consensus reached by the EITF.

Business combinations

In December 2007, the FASB issued SFAS No. 141 (Revised), *Business Combinations* ("SFAS 141R"). SFAS 141R requires most identifiable assets, liabilities, non-controlling interests, and goodwill acquired in a business combination to be recorded at "full fair value." SFAS 141R applies to all business combinations, including combinations among mutual entities and combinations by contract alone. Under SFAS 141R, all business combinations will be accounted for by applying the acquisition method. SFAS 141R is effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Earlier application of SFAS 141R is prohibited.

Non-controlling interests in consolidated financial statements

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements — an Amendment of ARB No. 51* ("SFAS 160"). SFAS 160 establishes accounting and reporting standards for the non-controlling interest in a subsidiary and for the retained interest and gain or loss when a subsidiary is deconsolidated. This statement is effective for financial statements issued for fiscal years beginning on or after December 15,

2008 with earlier adoption prohibited. The Company is currently evaluating the impact of SFAS 160 on its consolidated financial statements.

Disclosures about derivative instruments and hedging activities

In March 2008, the FASB issued SFAS No. 161, *Disclosure about Derivative Investments and Hedging Activities an amendment to SFAS No. 133* ("SFAS 161"), which requires companies with derivative instruments to disclose information about how and why a company uses derivative instruments, how derivative instruments and related hedged items are accounted for under SFAS 133, and how derivative instruments and related hedged items affect a company's financial position, financial performance, and cash flows. The required disclosures include the fair value of derivative instruments and their gains or losses in tabular format, information about credit-risk-related contingent features in derivative agreements, counterparty credit risk, and the company's strategies and objectives for using derivative instruments. The Statement expands the current disclosure framework in SFAS 133. SFAS 161 is effective prospectively for periods beginning on or after November 15, 2008. The Company currently does not utilize derivative instruments and, therefore, does not expect that there will be any impact of SFAS 161 on its consolidated financial statements.

4. BUSINESS ACQUISITION

On October 30, 2006, the Company acquired a 100% interest in ProlX Pharmaceuticals Corporation ("ProlX"). The purchase price for ProlX consisted of $3.0 million in cash from the Company's existing financial resources and 2,979,629 shares of the Company's common stock (subject to certain resale restrictions) in return for all of the outstanding stock of ProlX. The Company also incurred acquisition costs of $1,201. Of the total purchase price paid, 446,944 shares of the Company's common stock were held in escrow and 166,666 shares of the Company's common stock were held in special escrow. The escrow was to satisfy any claims arising out of representations and warranties made by ProlX in connection with the merger and was to continue for a period not to exceed 12 months from the closing date, except to the extent there remained pending claims at the end of such period, then the escrow could be continued until such claims are resolved. The special escrow was to continue until such time as an aggregate of $3.0 million in funding had been received under ProlX's existing federal government grants. If the grant funding was not received, the shares in the special escrow would be returned to the Company. During 2007, the conditions of both the escrow and the special escrow were met and the common stock was released.

In addition, and subject to applicable regulatory requirements, there may be up to three future payments based on the achievement of specified milestones. A payment in Oncothyreon common stock (with registration rights) of $5.0 million is due upon the initiation of the first phase 3 trial of a ProlX product. Another payment in Oncothyreon common stock (with registration rights) of $10.0 million is due upon regulatory approval of a ProlX product in a major market. Each share of Oncothyreon common stock issued in connection with these two future payments shall have a value equal to the average closing sale price of one share of Oncothyreon common stock as reported on The NASDAQ Global Market for the ten consecutive trading days ending three trading days immediately preceding the date of payment for such future payment ("contingently issuable shares").

The net assets and operations of ProlX acquired by the Company has continued as ProlX Pharmaceuticals Corporation, a wholly-owned subsidiary of the Company.

The total cost of the acquisition was as follows:

Purchase consideration and costs:

2,979,629 common shares of the Company	$21,974
Cash	3,000
Acquisition costs	1,201
	$26,175

The fair value of the Company's shares issued was based on the weighted average purchase price of the Company's shares traded on the Toronto Stock Exchange for a reasonable period before and after the date that the terms of the acquisition were agreed to and announced. In this case, the Company determined that two days before and after was a reasonable period of time. Share capital was credited with an amount of $21,939 representing the fair value of the shares issued net of stock issuance costs.

The total cost of the acquisition was allocated to ProlX's assets and liabilities, based on the estimated fair value of such items at the time of acquisition, as follows:

Assets acquired:	
Cash and cash equivalents	$ 89
Accounts receivable	24
Prepaid expenses	45
Plant and equipment	5
In-process research and development	24,920
Deposit asset	1,229
Goodwill	634
	26,946
Liabilities assumed:	
Accounts payable and accrued liabilities	551
Notes payable	220
	771
Net assets acquired	$ 26,175

The value of contingently issuable shares has not been included in the total cost of the acquisition, as the payment of these amounts is not reasonably assured at this time. Should any of the contingently issuable shares be issued, their value would be added to the purchase price. The in-process research and development of $24,920 is primarily comprised of patents and technologies which require regulatory approval to be commercialized and which have no proven alternative future uses. The in-process research and development amounts were immediately expensed upon acquisition. The fair value of the acquired technologies was determined using a probability adjusted discounted cash flow method on a product by product basis. Under the valuation model, material net cash inflows from significant products are expected to commence in years ranging from 2013 to 2018 and the risk adjusted discount rate applied to the product cash flows range from 16.25% to 20.00%. The valuation model does not incorporate anticipated material changes from historical pricing, margins and expense levels as all of the acquired technologies represent potential new products.

The deposit asset represents the 166,666 shares of the Company that were placed in a special escrow account. The release of these shares from escrow was contingent upon ProlX receiving an aggregate of $3.0 million in funding from existing government grants. As this future amount was not reasonably assured, the value of these shares of $1,229 was recorded as a refundable deposit. In the third quarter of 2007 the funding conditions were met and the common stock was released from special escrow. As a result of this event in 2007, the Company has recorded additional costs of the acquired assets resulting in an increase in goodwill.

Goodwill is primarily represented by the assembled workforce acquired and is not deductible for tax purposes.

The acquisition cost of $26,175 is shown net of the share consideration of $21,974, the cash acquired of $89 and the acquisition costs accrued at December 31, 2006 of $238 in the consolidated statements of cash flows.

This acquisition was accounted for under the purchase method of accounting, and the results of operations since the closing date are included in the consolidated statements of operations.

The following unaudited pro forma consolidated financial information, which reflects the Company's consolidated results of operations for the year ended December 31, 2006, have been prepared for information purposes only and is not indicative of the results of operations that would have been achieved had the acquisition taken place on January 1, 2006 or results that may occur in the future.

	Year Ended December 31, 2006 (Unaudited)
Revenue	$ 4,238
Net loss	$36,390
Basic and diluted loss per share	$ (2.05)

5. ACCOUNTS RECEIVABLE AND GOVERNMENT GRANT RECEIVABLE

	2008	2007
Customer, net of allowance for doubtful accounts — nil (2007 — nil)	**$1,777**	$ 2,010
Other	**51**	14
Accounts receivable	**$1,828**	$2,024
Government grant receivable	**$ 40**	$ 552

One customer accounted for 100% and 92% of customer accounts receivable at December 31, 2008 and 2007, respectively. The Company does not require a provision for doubtful accounts.

6. NOTES RECEIVABLE, EMPLOYEES

	2008	2007
Notes receivable	**$215**	$364

Pursuant to the acquisition of ProlX (See Note 4), the Company advanced notes of $344 to certain employees of ProlX and a former director of ProlX. The principal amount of the loans, together with interest accrued at the rate of 5.0% per annum to the date of payment, was due and payable on April 28, 2008. The former director repaid his loan while one employee was granted an extension on the repayment date to April 28, 2010 and another to April 28, 2011. Interest income of $12 ($17 in 2007) related to these loans has been recorded in the consolidated statements of operations.

7. INVENTORY

	2008	2007
Raw material supplies	$—	$ 1,693
Work-in-process	—	2,454
Finished goods	—	922
	$—	$5,069

Under the terms of the amended collaboration and supply agreements between the Company and Merck KGaA of Darmstadt, Germany ("Merck KGaA") (See Note 13), the Company was responsible for the manufacture of Stimuvax®, including process development and scale-up for commercial manufacturing. Merck KGaA will purchase Stimuvax from the Company. Raw material supplies represent Stimuvax raw material costs that have not been consumed in the manufacturing process, work-in-process represents Stimuvax clinical trial material that has completed the manufacturing process and is currently awaiting internal lot release and approval, and finished goods represents Stimuvax clinical trial material that has been shipped to Merck KGaA and is awaiting the expiration of the earlier of a 60 day return period or formal acceptance of the clinical trial material by Merck KGaA. As discussed in Note 13, the Company sold its manufacturing rights to Merck KGaA including all of its remaining inventory.

8. PLANT AND EQUIPMENT

	2008		
	Cost	Accumulated Depreciation	Carrying Value
Scientific equipment	$ 856	$399	$457
Office equipment	95	80	15
Computer software and equipment	313	84	229
Leasehold improvements	179	13	166
	$1,443	$576	$867

	2007		
	Cost	Accumulated Depreciation	Carrying Value
Scientific equipment	$3,624	$3,028	$ 596
Office equipment	192	152	40
Manufacturing equipment	304	201	103
Computer software and equipment	755	615	140
Computer equipment under capital lease	307	136	171
Leasehold improvements	1,043	715	328
	$6,225	$4,847	$1,378

During 2008, net additions of computer equipment under capital lease amounted to nil (2007 — $165; 2006 — nil). Computer software and equipment and leasehold improvements include $34 and $253, respectively, of assets not being depreciated because the assets were under development at December 31, 2007. Included in accrued liabilities at December 31, 2008 is $35 of computer software and leasehold improvements.

9. LEASE OBLIGATIONS

Capital leases

The Company had no capital leases at December 31, 2008 as the balance of the existing capital leases were assumed by Merck KGaA in December 2008. (See Note 13) Interest expense on capital leases in the amount of $7 (2007 — $6; 2006 — $4) has been recorded in the consolidated statements of operations.

Operating leases

The Company is committed to annual minimum payments under lease agreements for premises over the next five years, as follows:

2009	$ 479
2010	496
2011	501
2012	633
2013	635
Thereafter	3,022
	$5,766

Minimum rental expense for premises and equipment in the amount of $679 (2007 — $505; 2006 — $637) has been recorded in the consolidated statements of operations. In May 2008, the Company entered into a sublease agreement for an office facility in Seattle, Washington totaling approximately 17,000 square feet where the Company intends to consolidate certain of its operations. The sublease expires in December 17, 2011. In May 2008 the Company also entered into a lease agreement directly with the landlord beginning on December 18, 2011 for a period of 84 months to December 18, 2017. The sublease provides for a monthly base rent of $33 increasing to $36. The lease provides for a monthly base rent of $48, increasing to $52 in 2017.

The lease for the Company's corporate facilities in Edmonton, Alberta was assumed by Merck KGaA in December 2008. (See Note 13)

10. NOTES PAYABLE

Pursuant to the acquisition of ProlX (See Note 4), the Company has assumed an agreement with Innovation Works, Inc. (the "First Agreement"), under which funding of $99 was received and remains outstanding at December 31, 2008. Under the First Agreement, the Company is not charged interest expense. The First Agreement requires payment only in the event that the Company commercializes the product or service it is developing with funds provided by this agreement. Under the First Agreement, as clarified by the Letter Agreement (defined below), a product or service is considered to be commercialized as of the earlier of (1) the date the Company receives Food and Drug Administration ("FDA") approval for and (2) the date it receives consideration for the sale or license of, the product or service it is developing with funds provided by this agreement. In the event that the product or service being developed by the Company is not commercialized, the funding under the First Agreement is not repayable. Additionally, the First Agreement requires that if the Company commercializes a product or service developed in full or in part with the loan funds, it must be manufactured in the Commonwealth of Pennsylvania for a period of ten years. If manufacturing is not maintained in the Commonwealth of Pennsylvania for the ten-year period, the Company is required to pay a transfer fee equal to three times the amount of the funding.

Also pursuant to the acquisition of ProlX (See Note 4), the Company has assumed another agreement with Innovation Works, Inc. (the "Second Agreement") under which funding of $100 was received and remains outstanding at December 31, 2008. Under the Second Agreement, the Company is not charged interest expense. The Second Agreement requires payment only in the event that the Company commercializes the product or service it is developing with funds provided by this Second Agreement. As in the First Agreement, under the Second Agreement, a product or service is considered to be commercialized as of the earlier of (1) the date the Company receives FDA approval for and (2) the date it receives consideration for the sale or license of, the product or service it is developing with funds provided by this agreement. In the event that the product or service being developed by the Company is not commercialized, the funding under the Second Agreement is not repayable. Additionally, the Second Agreement requires that if the Company commercializes a product or service developed in full or in part with the loan funds, it must maintain a significant presence (as defined as 80% of its personnel) in the Commonwealth of Pennsylvania for ten years. If a significant presence is not maintained in the Commonwealth of Pennsylvania for the ten-year period, the Company is required to pay a transfer fee equal to three times the amount of the funding. If the Company is required to repay Innovation Works, Inc. the amount of repayment would represent the original funding amount multiplied by a factor ranging from one to two.

No interest is imputed for these notes payable as amounts that will be paid and the timing thereof can not be determined with any certainty.

In connection with the acquisition of ProlX, the Company entered into a written letter agreement with Innovation Works, Inc. (the "Letter Agreement"). The Letter Agreement clarifies the repayment and certain other terms of the First Agreement and the Second Agreement and specifies that the Company may, prior to the time it commercializes the product or service it is developing with funds provided by the First and/or Second Agreement, terminate each agreement and satisfy all obligations due thereunder by repaying the original funding amounts under each agreement.

11. SHARE CAPITAL

Authorized shares

Class UA preferred stock

As of December 31, 2008, the Company had 12,500 shares of Class UA preferred stock authorized. The Class UA preferred stock has the following rights, privileges, and limitations:

Voting. Each share of Class UA preferred stock will not be entitled to receive notice of, or to attend and vote at, any Stockholder meeting unless the meeting is called to consider any matter in respect of which the holders of the shares of Class UA preferred stock would be entitled to vote separately as a class, in which case the holders of the shares of Class UA preferred stock shall be entitled to receive notice of and to attend and vote at such meeting. Amendments to the certificate of incorporation of Oncothyreon that would increase or decrease the par value of the Class UA preferred stock or alter or change the powers, preferences or special rights of the Class UA preferred stock so as to affect them adversely would require the approval of the holders of the Class UA preferred stock.

Conversion. The Class UA preferred stock is not convertible into shares of any other class of Oncothyreon capital stock.

Dividends. The holders of the shares of Class UA preferred stock will not be entitled to receive dividends.

Liquidation preference. In the event of any liquidation, dissolution or winding up of the Company, the holders of the Class UA preferred stock will be entitled to receive, in preference to the holders of the Company's common stock, an amount equal to the lesser of (1) 20% of the after tax profits ("net profits"), determined in accordance with Canadian generally accepted accounting principles, where relevant, consistently applied, for the period commencing at the end of the last completed financial year of the Company and ending on the date of the distribution of assets of the Company to its stockholders together with 20% of the net profits of the Company for the last completed financial year and (2) CDN $100 per share.

Redemption. The Company may, at its option and subject to the requirements of applicable law, redeem at any time the whole or from time to time any part of the then-outstanding shares of Class UA preferred stock for CDN $100 per share. The Company is required each year to redeem at CDN $100 per share that number of shares of Class UA preferred stock as is determined by dividing 20% of the net profits by CDN $100.

The difference between the redemption value and the book value of the Class UA preferred stock will be recorded at the time that the fair value of the shares increases to redemption value based on the Company becoming profitable.

Preferred stock

As of December 31, 2008, the Company had 10,000,000 shares of undesignated preferred stock, $0.0001 par value per share, authorized. Shares of preferred stock may be issued in one or more series from time to time by the Board of Directors of the Company, and the Board of Directors is expressly authorized to fix by resolution or resolutions the designations and the powers, preferences and rights, and the qualifications, limitations and restrictions thereof, of the shares of each series of preferred stock. Subject to the determination of the Board of Directors of the Company, the preferred stock would

generally have preferences over common stock with respect to the payment of dividends and the distribution of assets in the event of the liquidation, dissolution or winding up of the Company.

Common stock

As of December 31, 2008, the Company had 100,000,000 shares of common stock, $0.0001 par value per share, authorized. The holders of common stock are entitled to receive such dividends or distributions as are lawfully declared on the Company's common stock, to have notice of any authorized meeting of stockholders, and to exercise one vote for each share of common stock on all matters which are properly submitted to a vote of the Company's stockholders. As a Delaware corporation, the Company is subject to statutory limitations on the declaration and payment of dividends. In the event of a liquidation, dissolution or winding up of the Company, holders of common stock have the right to a ratable portion of assets remaining after satisfaction in full of the prior rights of creditors, including holders of the Company's indebtedness, all liabilities and the aggregate liquidation preferences of any outstanding shares of preferred stock. The holders of common stock have no conversion, redemption, preemptive or cumulative voting rights.

Warrants issued and outstanding

Under SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, Share purchase warrants with an exercise price denominated in a currency other than the Company's functional currency are recorded as liabilities. Changes in the fair value of these warrants are recognized in the consolidated statements of operations.

As disclosed in Note 2, effective January 1, 2008 the Company's functional currency changed to the U.S. dollar from the Canadian dollar and therefore the exercise price of the warrants is now denominated in the Company's functional currency. Accordingly, the previously recognized liability represented by the fair value of the warrants as at December 31, 2007 of $64 was credited to stockholders' equity in the accompanying condensed consolidated balance sheet effective January 1, 2008 and there is no further requirement under SFAS 133 to adjust the warrants to fair value through earnings at each reporting date.

	2008		2007		2006	
	Warrants	Amount	Warrants	Amount	Warrants	Amount
Warrant liability						
Balance, beginning of year	**795,150**	**$64**	974,667	$1,364	179,517	$ 399
Equity placements	—	—	—	—	795,150	4,778
Exercise of warrants	—	—	—	—	—	—
Expiration of warrants	—	—	(179,517)	—	—	—
Fair value adjustments	—	—	—	(1,421)	—	(3,849)
Effect of changes in foreign exchange rates	—	—	—	121	—	36
Balance, end of year	**795,150**	**$64**	795,150	$ 64	974,667	$ 1,364

The following table summarizes information on warrants outstanding at December 31, 2008:

Exercise Prices	Number Outstanding	Expiry Date
$15.00	458,126	July 30, 2009
$11.16	337,024	December 18, 2010
	795,150	

At the warrant holder's option and upon payment of the exercise price by the holder, the warrants may be exchanged for an equal number of common shares of the Company.

Stock transactions

Exercise of stock options

There were no stock options exercised during 2008, 2007 or 2006.

Conversion of restricted share units

During 2008, 6,543 (2007— nil; 2006 — 3,166) restricted share units with a weighted average fair value of $7.81 (2007— nil; 2006 — $8.24) per unit were converted. Share capital was credited with an amount of $51 (2007 — nil; 2006 — $26) and additional paid-in capital was reduced by an equal amount $51 (2007 — nil; 2006 — $26) representing the fair value attributed to the restricted share units (See Note 12).

Equity placements

On January 30, 2006, the Company issued 1,762,062 common shares and 458,126 detachable warrants for proceeds of $15,270, net of issue costs of $800. Of the net proceeds, $12,190 and $3,080 have been allocated to common shares and warrants, respectively. The warrants have an exercise price of $15.00 and were not exercisable until after July 30, 2006, with the exception of 17,620 warrants that were not exercisable until after January 30, 2007. The 458,126 warrants expire on July 30, 2009.

On December 18, 2006, the Company issued 1,604,938 common shares and 337,024 detachable warrants for proceeds of $12,300, net of issue costs of $700, of which $165 was in accounts payable at December 31, 2006. Of the net proceeds, $10,602 and $1,698 have been allocated to common shares and warrants, respectively. The warrants have an exercise price of $11.16 and were not exercisable until after June 18, 2007. The 337,024 warrants expire on December 18, 2010.

The Company used the Black-Scholes option pricing model to calculate the fair value of the warrants issued.

Exercise of warrants

There were no warrants exercised during 2008, 2007 or 2006.

Earnings (loss) per share

For 2008 and the comparative years presented, shares potentially issuable upon the exercise of director and employee stock options (See Note 12), shares contingently issuable in connection with the May 2, 2001 Merck KGaA agreement (See Note 13), contingently issuable shares in connection with the October 30, 2006 ProlX acquisition (See Note 4), and purchase warrants issued in connection with the 2004 and 2006 equity placements, have been excluded from the calculation of diluted loss per share because the

effect would have been anti-dilutive. At December 31, 2008, 1,223,386 outstanding options have been excluded from the earnings (loss) per share calculations because they are anti-dilutive.

The following is a reconciliation of the numerators and denominators of the basic and diluted earnings per share computations:

	2008	2007	2006
Numerator:			
Net income (loss)	**$ 7,125**	$ (20,340)	$ (36,856)
Denominator:			
Weighted average shares outstanding used to compute earnings per share — basic	**19,490,621**	19,485,889	15,316,697
Effective of dilutive RSU's	**79,549**	—	—
Weighted average shares outstanding and dilutive securities used to compute earnings per share — diluted	**19,570,170**	19,485,889	15,316,697

12. STOCK-BASED COMPENSATION

Stock option plan

The Company sponsors a stock option plan (the "Option Plan") under which a maximum fixed reloading percentage of 10% of the issued and outstanding common shares of the Company may be granted to employees, directors, and service providers. Prior to April 1, 2008, options were granted with a per share exercise price, in Canadian dollars, equal to the closing market price of the Company's shares of common stock on the Toronto Stock Exchange on the date immediately preceding the date of the grant. After April 1, 2008, options were granted with a per share exercise price, in U.S. dollars, equal to the closing price of the Company's shares of common stock on The NASDAQ Global Market on the date of grant. In general, options granted under the Option Plan begin to vest after one year from the date of the grant, are exercisable in equal amounts over four years on the anniversary date of the grant, and expire eight years following the date of grant.

A summary of the status of the Option Plan as of December 31, 2008, 2007 and 2006, and changes during the years ended on those dates is presented below. As described above, prior to April 1, 2008, exercise prices were denominated in Canadian dollars and in U.S. dollars thereafter. The weighted average exercise prices listed below are in their respective dollar denominations.

	2008		2007		2006	
	Stock Options	Weighted Average Exercise Price	Stock Options	Weighted Average Exercise Price $CDN	Stock Options	Weighted Average Exercise Price $CDN
Outstanding, beginning of year	**1,315,036**	**$ 13.99**	1,150,414	$ 15.51	726,824	$23.94
Granted $CDN	**8,000**	**4.60**	246,266	7.93	591,500	7.50
Granted $US	**142,600**	**3.43**	—	—	—	—
Forfeited $CDN	**(112,774)**	**17.45**	(81,644)	17.12	(167,910)	23.76
Forfeited $US	**(38,700)**	**3.43**	—	—	—	—
Expired $CDN	**(90,776)**	**59.90**	—	—	—	—
Balance, end of the year $CDN	**1,119,486**	**9.85**	1,315,036	13.99	1,150,414	15.51
Balance, end of the year $US	**103,900**	**3.43**	—	—	—	—
Options exercisable, end of year $CDN	**764,973**	**$ 10.74**	625,704	$20.35	388,970	$28.86

The following table summarizes information on stock options outstanding and exercisable at December 31, 2008. The range of exercise prices and weighted average exercise prices are listed in their respective dollar denominations.

	Stock Options Outstanding			Stock Options Exercisable		
Range of Exercise Prices ($CDN per Share)	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price
4.60 — 7.50	490,299	5.56	$ 7.30	322,147	5.46	$ 7.33
7.51 — 10.00	323,836	4.83	8.22	155,778	4.12	8.43
10.01 — 15.00	267,307	1.93	12.65	249,004	1.91	12.57
15.01 — 35.00	1,396	2.20	19.02	1,396	2.20	19.02
35.01 — 55.00	36,398	0.73	37.44	36,398	0.73	37.44
55.01 — 71.71	250	0.39	71.70	250	0.39	71.70
	1,119,486	4.32	$ 9.85	764,973	3.80	$ 10.74
Range of Exercise Prices ($US per share)						
3.43 — 3.43	103,900	6.54	$ 3.43	—	—	$ —

There were no stock options exercised in 2008, 2007 or 2006. As of December 31, 2008, there were no exercisable, in-the-money options based on the Company's closing share price of CDN $0.92 and US $0.80 on the Toronto Stock Exchange and The NASDAQ Global Market, respectively.

A summary of the status of non-vested stock options as of December 31, 2008 and changes during 2008 is presented below:

	Number of Non-Vested Options	Weighted Average Grant Date Fair Value $
Balance at December 31, 2007 $CDN	689,332	$6.78
Granted $CDN	8,000	3.84
Granted $US	142,600	2.93
Vested $CDN	(292,112)	6.98
Forfeited $CDN	(50,624)	6.94
Forfeited $US	(38,700)	2.93
Expired $CDN	(83)	11.70
Balance at December 31, 2008 $CDN	354,513	$6.54
Balance at December 31, 2008 $US	103,900	$2.93

In 2008, stock based compensation expense of $1,509 (2007 — $1,637; 2006 — $1,888) was recognized, which related to the current period recognition of the estimated fair value of new awards, the unvested portion of existing awards and to awards modified, repurchased or cancelled after January 1, 2006. The expense in 2008 includes an adjustment of $53 (2007 — $82; 2006 — $328) relating to workforce reduction costs described in Note 15. This adjustment includes the immediate expensing of the remaining unrecognized fair value of the affected stock options and modification adjustments of the affected stock options. As of December 31, 2008, total compensation cost related to non-vested stock options not yet recognized was $2,200 (2007 — $3,345; 2006 — $3,186), which will be recognized over the next 17 months on a weighted-average basis.

The Company uses the Black-Scholes option pricing model to value the options at each grant date, under the following weighted average assumptions:

	2008	2007	2006
Weighted average grant-date fair value per stock option $CDN	**$ 3.84**	$ 6.47	$ 6.18
Weighted average grant-date fair value per stock option $US	**$ 2.93**	$ —	$ —
Expected dividend rate	**0%**	0%	0%
Expected volatility	**114.19%**	102.52%	103.86%
Risk-free interest rate	**3.09%**	4.21%	4.07%
Expected life of options in years	**6.0**	6.0	6.0

Historically, the risk-free interest rate for the expected term of the option was based on the yield available on Government of Canada benchmark bonds with an equivalent expected term. In future periods, the Company will use the yield at the time of grant of a U.S. Treasury security. The expected life of options in years represents the period of time stock-based awards are expected to be outstanding, giving consideration to the contractual terms of the awards, vesting schedules and historical employee behavior. The expected volatility is based on the historical volatility of our common stock for a period equal to the stock option's expected life. The amounts estimated according to the Black-Scholes option pricing model may not be indicative of the actual values realized upon the exercise of these options by the holders.

Restricted share unit plan

The Company also sponsors a Restricted Share Unit Plan (the "RSU Plan") for non-employee directors that was established in 2005. The RSU Plan provides for grants to be made from time to time by the Board of Directors or a committee thereof. Each grant will be made in accordance with the RSU Plan and terms specific to that grant and will be converted into one common share of common stock at the end of the grant period (not to exceed five years) without any further consideration payable to the Company in respect thereof. The current maximum number of common shares of the Company reserved for issuance pursuant to the RSU Plan is 166,666.

A summary of the status of the Company's RSU Plan as of December 31, 2008, 2007 and 2006, and changes during the years ending on those dates is presented below. Calculations of restricted share units to be issued are based on Canadian dollars.

	2008		2007		2006	
	Restricted Share Units	Weighted Average Fair Value per Unit $CDN	Restricted Share Units	Weighted Average Fair Value per Unit $CDN	Restricted Share Units	Weighted Average Fair Value per Unit $CDN
Outstanding, beginning of year	**86,092**	**$ 8.61**	80,158	$8.65	18,996	$9.60
Granted	**—**	**—**	5,934	8.04	64,328	7.92
Converted	**(6,543)**	**8.80**	—	—	(3,166)	9.60
Outstanding, end of year	**79,549**	**8.61**	86,092	8.61	80,158	8.65
Restricted share units convertible, end of year	**6,543**	**$8.80**	6,543	$8.80	—	$ —

In 2008, stock based compensation expense of nil (2007 — $44; 2006 — $610) was recognized on the RSU Plan, representing the remaining estimated fair value of restricted share units granted.

An amount of $51 (2007 — nil; 2006 — $26) arising from the conversion of these restricted share units during the year was credited to share capital.

The fair value of the restricted share units has been determined to be the equivalent of the Company's common shares closing trading price on the date immediately prior to the grant as quoted in Canadian dollars on the Toronto Stock Exchange.

13. COLLABORATIVE AGREEMENTS

On May 3, 2001, the Company entered into a collaborative arrangement with Merck KGaA to pursue joint global product development, licensing, and commercialization of the Company's lead candidate, Stimuvax, for the treatment of various cancer indications.

Upon execution of the collaborative agreements, Merck KGaA made an aggregate upfront payment of $1,229 to the Company which was comprised of technology access, licensing, and other fees related to Stimuvax. This payment was recorded as deferred revenue and, until the December 2008 transactions described below, was being recognized as revenue ratably over the estimated product life.

In February 2007, the Company announced that the first patient had been enrolled in the global phase 3 Stimuvax clinical trial for non-small cell lung cancer, triggering a milestone

payment by Merck KGaA to the Company of $2,500, before associated payments to third parties of $421. This milestone payment was received in March 2007.

In August 2007, the Company and Merck KGaA entered into amended and restated collaboration and supply agreements related, which restructured the 2001 agreements. Among other things, under the terms of such collaboration and supply agreements, (1) Merck KGaA obtained world-wide marketing rights to, and entire responsibility for, the further clinical development of Stimuvax, (2) the Company was entitled to development and sales-based milestone payments and a royalty on net commercial sales, (3) prior to the December 2008 transactions described below, the Company retained the right to manufacture of Stimuvax, including process development and scale-up for commercial manufacturing and Merck KGaA agreed to purchase Stimuvax from the Company and (4) the milestone payments related to manufacturing scale-up and process transfer were revised. The entry into such collaboration and supply agreements also triggered a milestone payment to Oncothyreon of $2,500, before associated payments to third parties of $86, which was received in September 2007.

In December 2007, the Company received from Merck KGaA a $5,000 milestone payment related to the transfer of certain assays and methodology related to Stimuvax pursuant to the 2007 supply agreement,

In May 2008, the Company received from Merck KGaA a $3,000 milestone payment related to the transfer of certain assays and manufacturing technology related to Stimuvax pursuant to the 2007 supply agreement.

On December 18, 2008, the Company entered into a new license agreement with Merck KGaA pursuant to which the amended and restated collaboration and supply agreements were replaced. Under the new license agreement, among other things, the Company licensed to Merck KGaA the right to manufacture Stimuvax in return for an upfront payment of approximately $10,452 and the royalties rates on net sales to which the Company is entitled if Stimuvax is commercialized were reduced by a specified amount which management believes is consistent with the estimated costs of goods, manufacturing scale up costs and certain other expenses assumed by Merck KGaA All other milestone payments remained the same and the Company expects to receive a milestone payment in 2009 related to process development.

In connection with the entry into the new license agreement, the Company also entered into an asset purchase agreement pursuant to which the Company sold to Merck KGaA certain assets related to the manufacture of, and inventory of, Stimuvax, placebo and raw materials, and Merck KGaA agreed to assume certain liabilities related to the manufacture of Stimuvax and the Company's obligations related to the lease of the Company's Edmonton, Alberta, Canada facility.

The plant and equipment in the Edmonton facility and inventory of raw materials, work in process and finished goods were sold for a purchase price of $604 (including the assumption of lease obligation of $56) and $11,215, respectively. The purchase price of the inventory was first offset against advances made in prior periods resulting in net cash to the company of $1,979. The Company recorded the net gain from the sale of the plant and equipment of $55 in other income and $11,215 as contract manufacturing revenue.

As a result of the December 2008 transactions, 43 persons who had previously been employed by the Company in its Edmonton facility were transferred to Merck KGaA, which will significantly reduce the Company's operating expenses in future periods.

Following the recommendations of EITF Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables* ("EITF 00-21"), the Company evaluates revenue from collaborative arrangements with multiple deliverables to determine whether the deliverables represent one or more units of accounting. A delivered item is considered a separate unit of accounting if the following separation criteria are met: (1) the delivered item has standalone value to the customer; (2) there is objective and reliable evidence of the fair value of any undelivered items; and (3) if the arrangement includes a general right of return relative to the delivered item, the delivery of undelivered items is probable and substantially in the Company's control. The relevant revenue recognition accounting policy is applied to each separate unit of accounting.

The Company evaluated the three milestone payments received from Merck KGaA in 2007 against the separation criteria under EITF 00-21 and determined that the payments did not meet all of the separation criteria. As a result, the milestone payments were been recorded as deferred revenue and were being recognized as revenue ratably over the remaining patent life of the Stimuvax product. However, with the signing of the license agreement in December 2008, all future performance obligations were removed and continuing involvement in the development and manufacturing ceased. Therefore, the Company recognized the balance of all previously deferred revenue of $12,932 relating to the Merck KGaA collaboration and the associated payments to third parties have been expensed.

Prior to December 2008, under the terms of the 2007 supply agreement, the Company was entitled to invoice and receive a specified upfront payment on the contractual purchase price for Stimuvax clinical trial material at any time on or after the receipt of Merck KGaA's quarterly 12 month rolling forecast requirements. Prior to the December 2008 transactions, the Company invoiced the remaining balance of the contractual purchase price after shipment of the clinical trial material to Merck KGaA. As a result, the upfront entitlements were recorded as deferred revenue and were being recognized as contract manufacturing revenue after shipment to Merck KGaA upon the earlier of the expiration of a 60-day return period and formal acceptance of the clinical trial material by Merck KGaA. The remaining balance of the contractual purchase price was recognized after shipment and upon the earlier of the expiration of the 60-day return period or formal acceptance.

The table below presents the accounting treatment of the payments received in respect of the agreements:

	2008	2007	2006
Deferred revenue balance, beginning of year	**$ 17,968**	$ 889	$1,067
Additional revenues deferred in the year:			
Licensing revenues from collaborative agreements	**3,000**	10,000	—
Contract manufacturing	**4,060**	7,040	—
Less revenue recognized in the year:			
Licensing revenue from collaborative agreements	**(24,728)**	(528)	(182)
Contract research and development	**—**	(506)	—
Effect of changes in foreign exchange rates	**(118)**	1,073	4
Deferred revenue balance, end of year	**182**	17,968	889
Less deferred revenue — current portion	**(18)**	(5,801)	(178)
Deferred revenue — long term	**$ 164**	$ 12,167	$ 711

Prior to the entry into the 2007 collaboration and supply agreements, Merck KGaA reimbursed the Company for a portion of the Stimuvax manufacturing costs and revenue and associated clinical trial material costs related to the supply of Stimuvax were reported under contract research and development revenue and research and development expense, respectively. From the date of the 2007 collaboration and supply agreements to the date of the December 2008 license agreement, the Company's financial reporting reflects the revenue and associated clinical trial material costs related to the supply of Stimuvax separately in the consolidated statements of operations as contract manufacturing revenue and manufacturing expense, respectively. Prior to the entry into the December 2008 license agreement, contract manufacturing revenue was recognized after shipment of the clinical trial material to Merck KGaA upon the earlier of the expiration of a 60-day return period and formal acceptance of the clinical trial material by Merck KGaA and the associated costs of the clinical trial material (See Note 7) was removed from inventory and recorded as manufacturing expense at the same time.

Under a letter of undertaking dated May 3, 2001, both parties have agreed to mutually indemnify each other for any withholding tax liability arising from payments under the agreements. It is the Company's understanding that payments under the agreements should not be subject to withholding taxes, which would otherwise constitute a tax liability of approximately $1,000. There is no further recourse from third parties for payment of this amount, which has not been recorded in the consolidated financial statements at December 31, 2008.

On May 2, 2001, under the terms of a common stock purchase agreement , the Company issued to Merck KGaA 318,702 common shares for proceeds of $15,000, net of issue costs of $9. Upon achievement of certain milestones, additional common shares will be issued for contractual proceeds of $1,500, the number of common shares to be determined based on a premium over the 90-day weighted average price of the common shares immediately prior to the milestone date. During periods presented, no additional common shares were issued to Merck KGaA under such agreement.

14. RESEARCH AND DEVELOPMENT COSTS

Government grant funding received in the year ended December 31, 2008 of $1,250 (2007 — $2,090; 2006 — $175) was credited against research and development costs for the year.

15. WORKFORCE REDUCTION COSTS

In 2008, as a result of the sale of the manufacturing rights and know-how to Merck KGaA, the Company reduced its workforce by 8 employees (which does not take into account employees who became employed by Merck KGaA as a result of December 2008 transactions described above, for which there were no workforce reduction costs). During 2007 and 2006 the Company reduced its workforce by 3 and 28 respectively. The reduction in 2006 was as a result of the transition of most of the financial and administrative responsibility for Stimuvax to Merck KGaA. During 2008, the Company recorded workforce reduction costs of $832 (2007 — $923; 2006 — $2,064), of which $317 (2007 — $407; 2006 - $1,685), $515 (2007 — $80; 2006 — $379) and nil (2007 — $436; 2006 — nil) have been reported as research and development, general and administrative, and marketing and business development respectively in the consolidated statements of operations.

The following table provides details of the workforce reduction costs for 2008:

	Accrued Workforce Reduction Costs at Beginning of Year	Workforce Reduction Costs	Draw downs		Accrued Workforce Reduction Costs at End of Year
			Cash	Non-Cash	
2006					
Salaries and benefits	$ —	$ 1,673	$(1,265)	$ —	$408
Stock compensation expense	—	328	—	(328)	—
Other	—	63	(59)	—	4
	$ —	$2,064	$ 1,324	$(328)	$ 412
2007					
Salaries and benefits	$408	$ 926	$ (652)	$ —	$682
Stock compensation expense	—	82	—	(82)	—
Other	4		(4)		—
Effect of changes in foreign exchange rates	—	(85)	85	—	—
	$ 412	$ 923	$ (571)	$ (82)	$682
2008					
Salaries and benefits	$682	$ 777	$ (567)	$ —	$892
Stock compensation expense (See Note 12)	—	53	—	(53)	—
Effect of changes in foreign exchange rates	—	2	(2)	—	—
	$682	$ 832	$ (569)	$ (53)	$892

The accrued workforce reduction costs at December 31, 2008 and December 31, 2007 have been recorded in accounts payable and accrued liabilities in the consolidated balance sheets. The accrued workforce reduction costs at December 31, 2008 will be fully paid by the end of June 2010.

16. INVESTMENT AND OTHER (INCOME) LOSS, NET

Included in investment and other (income) loss, net of $(298) (2007 — $371; 2006 — $(916)) in the consolidated statements of operations is investment income of $(295) (2007 — $(1,069); 2006 — $(912)) a net foreign exchange loss (gain) of $53 (2007 — $1,440; 2006 — $(4)) and income from the sale of equipment of $(56) (2007 — nil; 2006 — nil).

17. INCOME TAX

The provision for income taxes is different from applying the statutory federal income tax rate as follows:

	2008	2007	2006
Tax expense at statutory rate	**35.0%**	35.0%	35.0%
Previously recognized revenue	**(63.5)%**	—	—
Research and development credits	**(1.3)%**	6.3%	0.9%
In process R&D write-off	**—**	—	(23.7)%
Other	**—**	(0.4)%	1.3%
Change in valuation allowance	**29.8%**	(40.9)%	(13.5)%
Income tax recovery — benefit from sale of subsidiary losses	**—**	—	1.3%
Income tax provision	**—**	—	1.3%

Deferred income taxes are comprised of:

	2008	2007	2006
Deferred income tax asset			
Plant and equipment	**$ (58)**	$ 660	$ 826
Other	**837**	—	—
Tax benefits from losses carried forward and tax credits	**61,738**	63,718	58,582
Deferred income tax asset before allowance	**62,517**	64,378	59,408
Less valuation allowance	**(62,517)**	(64,378)	(59,408)
	$ —	$ —	$ —

United States

The Company has accumulated net operating losses in the U.S. of $50,918 (2007 — $43,154; 2006 — $35,988) for federal purposes and $17,764 (2007 — $17,764; 2006 — $10,590) for state purposes, some of which are restricted pursuant to Section 382 of the Internal Revenue Code, and which may not be available entirely for use in future years. These losses expire in fiscal years 2008 through 2027. During 2007, the Company sold New Jersey State operating loss carry forwards and research and development tax credits, resulting in the recognition of a tax benefit of nil (2006 — $462). The Company also has

federal research and development and New Jersey general business tax credit carry forwards of $909 and $410 respectively, that will expire in fiscal years 2009 through 2023, if not utilized.

Canada

At December 31, 2008, the Company has unclaimed federal investment tax credits of $16,440 (2007 — $20,302; 2006 — $16,640) that expire in fiscal years 2009 through 2019. Also available to offset income in future periods are Canadian scientific research and experimental development expenditures of $113,655 (2007 — $136,437; 2006 — $109,301) for federal purposes and $50,296 (2007 — $60,138; 2006 — $46,614) for provincial purposes. These expenditures may be utilized in any period and may be carried forward indefinitely. The Company also has capital losses of $37,741 (2007 — $20,565; 2006 — $19,714) and provincial capital losses of $18,945 (2007 — $20,657; 2006 — $19,802) that can be carried forward indefinitely to offset future capital gains. The Company has accumulated net operating losses of $4,349 for federal tax purposes which expire between 2017 and 2019.

Other

The losses and credits of other subsidiaries have not been included as their tax effect on the consolidated results is immaterial due to the low tax rates in those jurisdictions.

18. CONTINGENCIES, COMMITMENTS, AND GUARANTEES

Royalties

In connection with the issuance of the Class UA preferred stock (See Note 11), the Company has agreed to pay a royalty in the amount of 3% of the net proceeds of sale of any products sold by the Company employing technology acquired in exchange for the shares. None of the Company's products currently under development employ the technology acquired.

Pursuant to various license agreements, the Company is obligated to pay royalties based both on the achievement of certain milestones and a percentage of revenues derived from the licensed technology.

In addition, the Company is committed to minimum annual payments of $100 during the existence of a royalty term in exchange for a non-exclusive worldwide royalty-bearing license of technology. Upon the achievement of certain milestones, additional payments will be triggered under the terms of the licensing agreement. These payments will be recognized as expense upon performance of obligations defined as milestones in the agreement.

Employee benefit plan

Under a defined contribution plan available to permanent employees, the Company is committed to matching employee contributions up to limits set by the terms of the plan, as well as limits set by the and U.S. tax authorities. In 2008, the Company's matching contributions to the plan totaled $195 (2007 - $190; 2006 — $175). There were no changes to the plan during the year.

Guarantees

The Company is contingently liable under a mutual undertaking of indemnification with Merck KGaA for any withholding tax liability that may arise from payments under the license agreement (See Note 13).

In the normal course of operations, the Company provides indemnities to counterparties in transactions such as purchase and sale contracts for assets or shares, service agreements, director/officer contracts and leasing transactions. These indemnification agreements may require the Company to compensate the counterparties for costs incurred as a result of various events, including environmental liabilities, changes in (or in the interpretation of) laws and regulations, or as a result of litigation claims or statutory sanctions that may be suffered by the counterparties as a consequence of the transaction. The terms of these indemnification agreements vary based upon the contract, the nature of which prevents the Company from making a reasonable estimate of the maximum potential amount that could be required to pay to counterparties. Historically, the Company has not made any significant payments under such indemnities and no amounts have been accrued in the accompanying consolidated financial statements with respect to these indemnities.

Under the agreement pursuant to which the Company acquired ProlX (See Note 4), the Company agreed to indemnify the former ProlX stockholders with respect to certain tax liabilities that may arise as a result of actions taken by the Company through 2011. The Company estimates that the maximum potential amount of future payments to satisfy hypothetical, future claims under such indemnities is $15 million. The Company believes the risk of having to make any payments pursuant to such indemnities to be remote and therefore no amounts have been recorded thereon.

19. FINANCIAL INSTRUMENTS

Financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, government grant receivable and notes receivable that will result in future cash receipts, as well as accounts payable and accrued liabilities, capital lease obligations and notes payable that require future cash outlays.

Credit risk

The Company is exposed to credit risk on its short-term investments in the event of non-performance by counterparties, but does not anticipate such non-performance. The Company monitors the credit risk and credit standing of counterparties on a regular basis and deals with a small number of companies that management believes are reputable and stable. Restricting its portfolio to investment grade securities, and diversifying its investments across industries, geographic regions, and types of securities mitigates the Company's exposure to concentration of credit risk.

Interest rate risk

Historically, the Company's short-term investments are primarily comprised of fixed interest securities. The Company's earnings from its short-term investments are exposed to interest rate risk since individual investments held within the portfolio re-price to market interest rates as they mature and new investments are purchased. A 100 basis points decline in interest rates, occurring January 1, 2008 and sustained throughout the period ended December 31, 2008, would result in a decline in investment income of approximately $161 for that same period.

Foreign exchange risk

Historically, the Company has purchased goods and services denominated primarily in U.S. and Canadian currencies and, to a lesser extent, in certain European currencies. Since the Company migrated to the United States in 2008, expenditures are incurred primarily in U.S. dollars. The Company does not utilize, derivative instruments.

At December 31, 2008, the Company had a minimal amount of Canadian dollar denominated cash and cash equivalents therefore, as a result, for the foreseeable future exchange rate fluctuations should not have a material effect on our results of operations.

During 2008, the Company did not enter into any foreign exchange forward contracts in order to reduce its exposure to fluctuating foreign currency exchange rates. As there were no open foreign exchange forward contracts at December 31, 2008, 2007, or 2006, respectively, no assets or liabilities with respect to such contracts have been recorded in the consolidated balance sheets at those dates.

Short-term investments

Our short term investments have historically been invested in short-term obligations of the U.S. Treasury and Government of Canada, and commercial paper. When available, the Company uses quoted market prices to determine the fair value of its marketable securities. When quoted market prices are unavailable, the Company uses quotes provided by its fund manager based on recent trading activity and other relevant information. At December 31, 2008 the Company did not hold any short term investments.

Accounts receivable, government grant receivable and accounts payable and accrued liabilities

The carrying amounts of accounts receivable, government grant receivable and accounts payable and accrued liabilities approximate their fair values due to the short-term nature of these financial instruments.

Notes receivable, employees

The fair value of notes receivable are assumed to be equal to their carrying value as the interest rate charged on the investments (See Note 6) approximates market.

Capital lease obligations

The estimated fair value of the capital lease obligations is based on the present value of expected future cash flows discounted using an estimate of the Company's current borrowing rate. As at December 31, 2008 the Company did not have any outstanding capital lease obligations.

Notes payable

The fair value of notes payable (See Note 10) is assumed to be equal to their carrying value as the amounts that will be paid and the timing of the payments cannot be determined with any certainty.

Limitations

Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties and matters of significant judgment; therefore, they

cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Additional disclosure as required by SFAS 157 for assets and liabilities measured at fair value on a recurring basis are not presented as the Company had no such assets and liabilities at December 31, 2008.

20. SEGMENT INFORMATION

The Company is engaged world-wide in a single business segment — research and development of therapeutic products for the treatment of cancer. Operations and long-lived assets by geographic region for the periods indicated are as follows:

	2008	2007	2006
Revenue from operations in			
Canada	**$ 16**	$ 120	$ 137
United States	**39,450**	—	—
Barbados	**509**	3,605	3,773
Europe	**23**	73	69
	$39,998	$3,798	$3,979
Depreciation			
Canada	**$ 280**	$ 204	$ 213
United States	**142**	42	34
	$ 422	$ 246	$ 247
Long-lived assets			
Canada	**$ 99**	$ 833	$ 371
United States	**2,885**	2,662	628
	$ 2,984	$3,495	$ 999

Long-lived assets consist of plant and equipment and goodwill.

The Company derives significant revenue from one customer / collaboration partner. Such customer / collaboration partner is the only one that individually accounts for more than 10% of revenue and total revenue, as presented in the following table:

	Customers	Revenue
2008	**1**	**$39,983**
2007	1	$ 3,642
2006	1	$ 3,845

21. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN GENERALLY ACCEPTED ACCOUNTING PRINCIPLES IN THE UNITED STATES AND CANADA

Canadian regulations allow issuers that are required to file reports with the SEC, upon meeting certain conditions, to satisfy their Canadian continuous disclosure obligations by using financial statements prepared in accordance with U.S. GAAP. Accordingly, for the years ended 2008, 2007 and 2006 the Company is including in its notes to the consolidated financial statements a reconciliation highlighting the material differences between its financial statements prepared in accordance with U.S. GAAP as compared to financial statements presented in accordance with Canadian GAAP. Subsequent to 2008 no further reconciliation or financial statement presentation in accordance with Canadian GAAP will be required. The Company will therefore not present Canadian GAAP financial statements or reconciliation from U.S. GAAP to Canadian GAAP in 2009.

These consolidated financial statements have been prepared in accordance with U.S. GAAP that differs in some respects from Canadian GAAP. The following adjustments and disclosures would be required in order to present these consolidated financial statements in accordance with Canadian GAAP.

	2008	2007	2006
Consolidated statements of operations and other comprehensive income			
Net income (loss) — U.S. GAAP	**$ 7,125**	$ (20,340)	$ (36,394)
Intangible assets(1),(3)	**(3,256)**	(2,462)	(543)
Future income taxes(1)	**1,798**	1,780	154
Acquired in-process research and development, net of future income taxes(1)	**—**	—	24,920
Impairment of intangible assets(6)	**(11,822)**	—	—
Change in fair value of warrants(4)	**—**	(1,421)	(3,849)
Net loss — Canadian GAAP	**$ (6,155)**	$ (22,443)	$ (15,712)
Weighted average number of common shares outstanding	**19,490,621**	19,485,889	15,316,697
Income (loss) per common share			
Earnings (loss) per share — basic — U.S. GAAP	**$ 0.37**	$ (1.04)	$ (2.38)
Earnings (loss) per share — diluted — U.S. GAAP	**$ 0.36**	$ (1.04)	$ (2.38)
Basic and diluted loss per share — Canadian GAAP	**$ (0.32)**	$ (1.15)	$ (1.03)
Other comprehensive income — U.S. GAAP	**$ —**	$ 3,243	$ 164
Unrealized holding (gain) loss on available-for-sale securities(2)	**—**	—	(99)
Foreign currency translation adjustments	**—**	4,402	735
Other comprehensive income — Canadian GAAP	**$ —**	$ 7,645	$ 800

	2008		2007	
	U.S. GAAP	Canadian GAAP	U.S. GAAP	Canadian GAAP
Consolidated balance sheets				
Intangible assets(1),(3)	**—**	**$ 16,803**	—	$ 37,972
Future income tax liability(1)	**—**	**2,579**	—	10,468
Warrant liability(4)	**64**	**—**	64	—
Common stock(1),(4),(5)	**325,043**	**324,188**	324,992	324,137
Warrants(4)	**—**	**4,778**	—	4,778
Additional paid-in capital(4),(5)	**15,094**	**23,061**	13,636	21,603
Deficit(1),(3),(4),(5)	**(314,418)**	**(315,840)**	(321,543)	(309,685)
Accumulated other comprehensive loss	**(5,066)**	**(1,246)**	(5,066)	(1,246)
Total Stockholders' equity	**20,717**	**34,941**	12,019	39,587

The cumulative effect of these adjustments on consolidated stockholders' equity is as follows:

	2008	2007
Stockholders' equity — U.S. GAAP	**$20,717**	$ 12,019
Intangible assets(1),(3)	**16,803**	37,972
Future income tax liability(1)	**(2,579)**	(10,468)
Warrant liability reclassification(4)	**—**	64
Stockholders' equity — Canadian GAAP	**$34,941**	$ 39,587

Included in stockholders' equity under U.S. GAAP is accumulated and other comprehensive income (loss), which refers to revenues, expenses, gains and losses that under U.S. GAAP are included in comprehensive income (loss) but are excluded from income (loss) as these amounts are recorded directly as an adjustment to stockholders' equity, net of tax. As at December 31, 2006, there was no concept similar to comprehensive income under current Canadian GAAP; however, effective January 1, 2007, the Company adopted the recommendations of Canadian Institute of Chartered Accountants ("CICA") Handbook Section 3855, *Financial Instruments — Recognition and Measurement*, Section 3865, Hedges, Section 1530, *Comprehensive Income* ("Section 1530"), Section 3251, Equity and Section 3861, *Financial Instruments — Disclosure and Presentation*. The adoption of the new standards resulted in changes in accounting for financial instruments and hedges as well as the recognition of certain transition adjustments that have been recorded in opening accumulated other comprehensive income. The comparative consolidated financial statements have not been restated except for the presentation of cumulative translation adjustments. Prior to the adoption of Section 1530, foreign currency translation gains and losses were reported separately in stockholders' equity or on the balance sheet as cumulative translation adjustments. The reclassification of the cumulative translation adjustment to accumulated other comprehensive income was retroactive.

The only effect of these differences on accumulated other comprehensive loss are foreign currency translation adjustments arising before the Company's change in functional currency as follows:

	2008	2007
Accumulated other comprehensive loss — U.S. GAAP	**$(5,066)**	$(5,066)
Foreign currency translation adjustments	**3,820**	3,820
Accumulated other comprehensive loss — Canadian GAAP	**$ (1,246)**	$ (1,246)

	2008	2007	2006
Consolidated statements of cash flow — Canadian GAAP			
Cash and cash equivalents, beginning of year	**$12,035**	$13,409	$ 7,946
Cash used in operating activities(3)	**(4,886)**	(6,488)	(13,684)
Cash provided by (used in) investing activities(3)	**11,825**	3,616	(8,793)
Cash (used in) provided by financing activities	**(93)**	(236)	27,681
Effect of exchange rate fluctuations on cash and cash equivalents	**285**	1,734	259
Cash and cash equivalents, end of year	**$ 19,166**	$12,035	$ 13,409

(1) Business acquisitions

Under U.S. GAAP, the acquisition of Biomira USA Inc. (formerly OncoTherapeutics Inc.) in 1995 was valued at the stock market price of the shares issued at the date of closing. Under Canadian GAAP, the acquisition is valued at the fair value of the net assets acquired at the time the agreement was negotiated. The effect of this difference is that under U.S. GAAP the value of the net shares issued was higher, increasing the research and development acquired on acquisition by an equal amount. In addition, under U.S. GAAP, acquired technologies, which require regulatory approval to be commercialized and which have no proven alternative future uses are considered in-process research and development, and are immediately expensed on the date of acquisition. Under Canadian GAAP, the acquired technologies are considered to be development assets which are capitalized and amortized over their expected useful lives.

On October 30, 2006, Oncothyreon acquired a 100% interest in ProlX. Under U.S. GAAP, ProlX's acquired technologies, which are primarily comprised of patents and technologies which require regulatory approval to be commercialized and which have no proven alternative future uses, are considered in-process research and development and are immediately expensed upon acquisition. The intangible assets acquired include $24,920 of acquired technologies that do not have an alternative future use given their specialized nature and limited alternative use. Under Canadian GAAP, the acquired technologies are considered to be development assets which are capitalized and amortized over their expected useful lives. In addition, a future income tax liability, representing the difference between the carrying amount and the tax basis, measured using the substantively enacted tax rates, is recognized on the acquired technology.

The acquired technology assets are tested for recoverability whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. An impairment loss is recognized when the carrying value exceeds the total undiscounted cash flows expected from use and eventual disposition. The amount of the impairment loss is determined as the excess of the carrying value of the assets over its fair value.

(2) Available-for-sale securities

Under U.S. GAAP, SFAS 115 requires that available-for-sale securities be reported at fair value, with unrealized temporary holding gains and losses excluded from earnings and reported in other comprehensive income and also as a net amount in accumulated other comprehensive income until realized. Prior to January 1, 2007 Canadian GAAP required that these securities be carried at the lower of cost and market value with any unrealized losses recorded in the consolidated statements of operations. Once written down, these securities are not adjusted upward for subsequent appreciation in market value. Such gains are recognized only upon final disposition of the securities. Subsequent to December 31, 2006 Canadian GAAP now requires the same accounting treatment as U.S. GAAP for these securities.

(3) Intangible assets acquired from others for use in research and development

Under U.S. GAAP, amounts paid for intangible assets used solely in research and development activities with no alternative future use are expensed. Under Canadian GAAP, finite life intangible assets, such as patents and licenses, acquired from others for use in research and development activities, are deferred and recognized over the period of the related development project for which reasonable certainty exits.

(4) Warrants

Under U.S. GAAP, the application of SFAS 133 requires share purchase warrants with an exercise price denominated in a currency other than the Company's functional currency to be recorded as liabilities. Changes in the fair value of the warrants are required to be recognized in income through realized gains or losses each reporting period. Under Canadian GAAP, the fair value of the warrants on the issue date is recorded as a reduction to the proceeds from the issuance of common shares and convertible debentures, with the offset to the warrant component of stockholders' equity. The warrants are not re-valued under Canadian GAAP.

As disclosed in Note 2, effective January 1, 2008 the Company changed its functional currency to the U.S. dollar from the Canadian dollar and therefore the exercise price of the warrants is now denominated in the Company's functional currency. Accordingly, under U.S. GAAP the previously recognized liability associated with the fair value of the warrants as at December 31, 2007 of $64 was reclassified to stockholders' equity on January 1, 2008.

(5) Stock-based compensation

Under U.S. GAAP, effective January 1, 2006 the Company adopted SFAS 123(R). As described in Note 2 to the consolidated financial statements, SFAS 123(R) requires the Company to recognize in the income statement the grant date fair value of stock-based compensation awards granted to employees over the requisite service period. Pursuant to the provisions of SFAS 123(R), the Company applied the modified prospective transition method such that SFAS 123(R) will apply to new awards, the unvested portion of existing awards and to awards modified, repurchased or cancelled after the effective date. The adoption of the SFAS 123(R) has eliminated an existing U.S. GAAP reconciling item with the exception of the recording of forfeitures. Forfeitures must be estimated under U.S. GAAP, while the Company has elected to record forfeitures as incurred under Canadian GAAP. The Company has determined that the effect of estimated forfeitures on stock-based compensation expense for 2008 and comparative years is not material. The Company also evaluated the need to record a cumulative effect adjustment for estimated forfeitures upon the adoption of SFAS 123(R) and determined that no adjustment was required.

Under Canadian GAAP, effective January 1, 2004, the Company adopted the fair value based method of accounting for employee stock options granted on or after January 1, 2002, retroactively without restatement as allowed under the transitional provisions of CICA Handbook Section 3870. The Company records stock-based compensation expense in the consolidated statements of operations, based on allocating the estimated fair value of the stock options granted over their vesting period, with the offset to contributed surplus.

(6) Impairment of intangible assets

As a result of the acquisition of ProlX in October 2006, the Company recorded intangible assets representing acquired technologies aggregating $24,920, net of future income taxes of $11,069, in accordance with Canadian GAAP. These assets were comprised mainly of three product candidates PX -12, PX — 866 and PX — 476. In September 2008 the Company announced that it intended to focus the Company's resources on the clinical development of PX-478 and PX-866 and that it would seek a partner for further clinical development of PX-12 beyond the ongoing trials. The prioritization plan was intended to

concentrate the Company's efforts and available resources on those programs with the potential for the greatest near-term value creation for the Company's stockholders.

Based on the reprioritization, and the uncertainty of a future partnership for PX-12, the Company determined that the expected future economic benefits from PX-12 were uncertain and an impairment allowance of $11,822 (net of future income taxes — $6,091) was recorded.

Canadian GAAP accounting standards adopted in the current year

Inventories

In June 2007, the Accounting Standards Board ("AcSB") of the CICA issued Handbook Section 3031, Inventories ("Section 3031"). Section 3031 prescribes the measurement of inventory at the lower of cost and net realizable value. The cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. Section 3031 applies to interim and annual consolidated financial statements for fiscal years beginning on or after January 1, 2008. The adoption of Section 3031 resulted in a change to the Company's accounting policy for raw material supplies to be valued at the lower of cost and net realizable value, instead of at the lower of cost and replacement cost under the Company's previous accounting policy; however this change did not result in a material impact on the Company's financial position or results of operations, for the current and prior years presented.

Financial instruments — disclosures and presentations

In December 2006, the AcSB of the CICA issued Handbook Section 3862, *Financial Instruments — Disclosures*, which modifies the disclosure requirements of Section 3861, *Financial Instruments — Disclosures and Presentation*, and Section 3863, *Financial Instruments — Presentations*, which carries forward unchanged the presentation requirements for financial instruments of Section 3861. Section 3862 requires entities to provide disclosures in their financial statements that enable users to evaluate the significance of financial instruments on the entity's financial position and its performance, and the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the balance sheet date, and how the entity manages those risks. Section 3863 establishes standards for presentation of financial instruments and non-financial derivatives. It deals with the classification of related interest, dividends, losses and gains, and circumstances in which financial assets and financial liabilities are offset. Sections 3862 and 3863 apply to interim and annual financial statements relating to fiscal years beginning on or after October 1, 2007. The adoption of these revised Sections did not result in a material impact on the Company's financial position or results of operations. The above additional disclosures with respect to the potential impact of risks arising from financial instruments as required by the Section 3862 are provided in Note 19.

Capital disclosures

In November 2006, the AcSB of the CICA issued Handbook Section 1535, *Capital Disclosures* ("Section 1535"). Section 1535 establishes standards for disclosing information about an entity's capital and how it is managed. The standard is effective for interim and annual consolidated financial statements relating to fiscal years beginning on or after October 1, 2007. The adoption of Section 1535 did not result in a material impact on the Company's financial position or results of operations; however, the additional disclosures as required by Section 1535 have been provided below.

Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

The Company monitors capital with the objective of having sufficient cash, cash equivalents and short-term investments to fund budgeted expenditures over a minimum of the next 12 months. The Company issues additional equity securities as required to finance its operations.

At December 31, 2008 cash and cash equivalents were approximately $19,166. Historically, the Company's cash equivalents and short-term investments have been invested in money market funds, short-term obligations of certain Canadian provinces and commercial paper. At December 31, 2008 the Company did not have any short-term investments.

Going concern

In April 2007, the CICA approved amendments to Handbook Section 1400, *General Standards of Financial Statement Presentation*. These amendments require management to assess an entity's ability to continue as a going concern. When management is aware of material uncertainties related to events or conditions that may cast doubt on an entity's ability to continue as a going concern, those uncertainties must be disclosed. In assessing the appropriateness of the going concern assumption, the standard requires management to consider all available information about the future, which is at least, but not limited to, 12 months from the applicable balance sheet date. The adoption of these amendments did not result in a material impact on the Company's financial position or results of operations.

These financial statements are were prepared using GAAP applicable to a going concern which contemplates that the Company will continue in operation in the foreseeable future and will be able to realize assets and settle liabilities in the normal course of business as they come due. Management believed that there are no material uncertainties related to the foreseeable future events that may cast significant doubt on whether the Company can continue as a going concern.

Corporate Officers

Robert L. Kirkman, MD
President and Chief Executive Officer

Gary Christianson, PE
Chief Operating Officer

Shashi K. Karan
Corporate Controller and Principal Financial Officer

Board of Directors

Christopher S. Henney, PhD, DSc (1)(2)(3)
Chairman of the Board, Oncothyreon Inc.
Vice-Chairman of Cyclacel Pharmaceuticals, Inc.

Daniel K. Spiegelman (2)(3)
Senior Vice President and Chief Financial Officer of CV Therapeutics, Inc.

Richard L. Jackson, PhD (1)(3)
President
Richard Jackson Associates, LLC

Robert L. Kirkman, MD
President and Chief Executive Officer, Oncothyreon Inc.

W. Vickery Stoughton, BSc, MBA (1)(2)
Corporate Director

Corporate Office

Oncothyreon Inc.
www.oncothyreon.com

Oncothyreon's Annual Report, Quarterly Reports, Corporate Governance Documents, Press Releases and other relevant investor relations information are available electronically on the Internet at www.oncothyreon.com

Company Contact

Robert L. Kirkman, MD
Chief Executive Officer
President
(206) 801-2100

Investor and Media Relations Contact

Rathbun Communications, Inc.
(206) 769-9219
ir@oncothyreon.com

Registrar and Transfer Agents

Computershare Trust Company, N.A.
250 Royall Street
Canton, MA 02021
(800) 962-4284
Internet: http://www.computershare.com

Auditors

Deloitte & Touche LLP
Seattle, Washington, USA

Stock Listing

The Company's common shares are traded in the United States on the Nasdaq Global Market under the trading symbol ONTY and in Canada on the Toronto Stock Exchange under the trading symbol ONY.

Board of Directors and Corporate Governance

In the era of increased attention linked to corporate governance, Oncothyreon Inc. is committed to the highest standards, having adopted formal governance practices in compliance with all requirements relating to corporate governance imposed by the United States Securities and Exchange Commission and the Nasdaq Global Market and by applicable Canadian regulatory authorities. We have addressed among other matters, issues dealing with the responsibility of our Board of Directors and its various Committees, along with the operation and governance of the Corporation. We have also paid attention to the independence of the Board from management, the ongoing monitoring of the Board's and Management's performance and compensation, the recruitment of new members to the Board, and the appointment to and mandate of the various Board committees.

Code of Ethics

Oncothyreon's Code of Ethics for the Chief Executive Officer and Principal Financial Officer and the Code of Ethics and Business Conduct for all Board Members, Officers and employees can be found on the investors section of the Oncothyreon web site at www.oncothyreon.com under Corporate Governance.

(1) Member of Compensation Committee

(2) Member of Audit Committee

(3) Member of Corporate Governance and Nominating Committee

ONCOTHYREON

WWW.ONCOTHYREON.COM