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

Form 10-K

- ☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2007

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 000-33393

NORTHWEST BIOTHERAPEUTICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware

*(State or other jurisdiction of
incorporation or organization)*

**7600 Wisconsin Avenue, Suite 750
Bethesda, MD**

(Address of principal executive offices)

94-3306718

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

20814

(Zip Code)

Registrant's telephone number, Including Area Code:

(240) 497-9024

Securities Registered Pursuant to Section 12(b) of the Act:

None

Securities Registered Pursuant to Section 12(g) of the Act:

Common Stock, \$0.001 Par Value

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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

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

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, computed by reference to the closing price on the consolidated transaction reporting system on June 29, 2007 was approximately \$37.3 million.

As of April 14, 2008, the Registrant had an aggregate of 42,346,085 shares of common stock issued and outstanding.

Documents Incorporated by Reference: None

TABLE OF CONTENTS

	<u>Page</u>
PART I	
Item 1. Business	3
Item 1A. Risk Factors	22
Item 1B. Unresolved Staff Comments	33
Item 2. Properties	33
Item 3. Legal Proceedings	34
Item 4. Submission of Matters to a Vote of Security Holders	35
PART II	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	36
Item 6. Selected Financial Data	37
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations . . .	38
Item 7A. Quantitative and Qualitative Disclosures about Market Risk	48
Item 8. Financial Statements and Supplementary Data	48
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure . . .	48
Item 9A. Controls and Procedures	48
Item 9B. Other Information	51
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	51
Item 11. Executive Compensation	53
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	63
Item 13. Certain Relationships and Related Transactions, and Director Independence	64
Item 14. Principal Accountant Fees and Services	67
PART IV	
Item 15. Exhibits and Financial Statement Schedules	68
Signatures	101
Exhibit Index	102

PART I

Forward-Looking Statements

The following description of our business, discussion and analysis of our financial condition and results of operations should be read in conjunction with the information included elsewhere in this Annual Report on Form 10-K. In addition to historical information, this report contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that might cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. The words “believes,” “expects,” “intends,” “anticipates,” “may,” “might,” “will,” “should,” “plans,” “could,” “target,” “projects,” “contemplates,” “estimates,” “predicts,” “potential,” “continue,” the negative of these terms and similar expressions are used to identify forward-looking statements, but their absence does not mean that such statement is not forward-looking. You are encouraged to carefully review the various disclosures made by us in this report and in the documents incorporated herein by reference, in our previous filings with the Securities and Exchange Commission (“SEC”), and those factors described under Item 1A. “Risk Factors.” These factors, among others, could cause results to differ materially from those presently anticipated by us. In addition, past financial or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to publicly revise our forward-looking statements to reflect events or circumstances that arise after the filing of this Annual Report on Form 10-K or documents incorporated by reference herein that include forward-looking statements.

In this Annual Report on Form 10-K, references to “Northwest Biotherapeutics,” the “Company,” “we,” “us,” and “our” refer to Northwest Biotherapeutics, Inc. and its subsidiary.

Item 1. *Business*

Overview

Northwest Biotherapeutics, Inc. was formed in 1996 and incorporated in Delaware in July 1998. We are a development stage biotechnology company focused on discovering, developing, and commercializing immunotherapy products that safely generate and enhance immune system responses to effectively treat cancer. Currently approved cancer treatments are frequently ineffective, can cause undesirable side effects and provide marginal clinical benefits. Our approach in developing cancer therapies utilizes our expertise in the biology of dendritic cells (“DC”), which are a type of white blood cells that activate the immune system. Our primary activities since incorporation have been focused on advancing a proprietary dendritic cell immunotherapy for prostate and brain cancer together with strategic and financial planning, and raising capital to fund our operations.

We have two basic technology platforms applicable to cancer therapeutics: dendritic cell-based cancer vaccines, which we call DCVax®, and monoclonal antibodies for cancer therapeutics. DCVax® is our registered trademark. Our DCVax® dendritic cell-based cancer vaccine program is our main technology platform.

We completed an initial public offering of our common stock on the NASDAQ Stock market in December 2001 and an initial public offering of our common stock on the Alternative Investment Market (“AIM”) of the London Stock Exchange in June 2007.

As described in further detail elsewhere in this report, since 2004 we have undergone a significant recapitalization pursuant to which (i) Toucan Capital Fund II, L.P. (“Toucan Capital”) loaned us an aggregate of \$6.75 million, which notes payable and accrued interest thereon were converted into shares of our Series A-1 cumulative convertible preferred stock (the “Series A-1 Preferred Stock”) in April 2006 and subsequently converted into common stock in June 2007; and (ii) Toucan Partners, LLC (“Toucan Partners”) loaned us an aggregate of

\$4.825 million (excluding \$225,000 in proceeds from a demand note that was received on June 13, 2007 and repaid on June 27, 2007), which borrowings have, in a series of transactions, been converted into convertible notes with an aggregate outstanding principal of \$4.825 million and related warrant coverage. In the fourth quarter of 2007, we repaid all of the remaining outstanding principal and accrued interest pursuant to these convertible notes in the aggregate amount of \$5.3 million to Toucan Partners.

In addition, on January 26, 2005, Toucan Capital purchased 32.5 million shares of our Series A cumulative convertible preferred stock (the “Series A Preferred Stock”) at a purchase price of \$0.04 per share, for a net purchase price of \$1.276 million, net of offering related costs of approximately \$24,000. In June 2007, this Series A Preferred Stock was converted into common stock.

On March 30, 2006, we sold approximately 2.6 million shares of common stock at a purchase price of \$2.10 per share and raised aggregate gross proceeds of approximately \$5.5 million in a closed equity financing with unrelated investors (the “PIPE Financing”). The total cost of the offering recorded, including both cash and non-cash costs, was approximately \$837,000.

On June 22, 2007, we placed 15,789,473 shares of our common stock with foreign institutional investors at a price of £0.95 per share. The gross proceeds from the placement were approximately £15.0 million, or \$29.9 million, while net proceeds from the offering, after deducting commissions and expenses, were approximately £13.0 million, or \$25.9 million.

As of March 31, 2008, we had approximately \$2.2 million of cash on hand. We will need to raise additional capital in the near future to fund our clinical trials and other operating activities. We are in the process of finalizing a debt financing of up to \$8.0 million designed to cover our operating cash requirements until the fourth quarter of this year. It is anticipated that up to \$4.0 million may be available to us by the end of April, and the balance may become available by June. We are also negotiating additional financing with several other parties, which we hope to complete later this year. There can be no assurance that we will be able to complete any of the financings, or that the terms for such financings will be attractive. Our independent auditors have indicated in their report on our December 31, 2007 financial statements that there is substantial doubt about our ability to continue as a going concern. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources” for additional information regarding our liquidity, cash flow and financings.

Industry Background

Incidence of Cancer in the United States

The American Cancer Society estimates that in the U.S., men have a one in two lifetime risk of developing cancer, while women have a one in three lifetime risk of developing cancer. Doctors are expected to diagnose approximately 1.44 million new cases of cancer in the U.S. during 2008. It is the second leading cause of death in the U.S. after heart disease and is estimated to result in approximately 565,650 deaths, or 1,550 per day, in 2008. The direct medical costs related to treating cancer in the U.S. were estimated to be \$89.0 billion in 2007. The Company’s initial therapeutic targets, brain and prostate cancers, cause approximately 7.1 percent of cancer deaths in the

U.S. each year. The American Cancer Society has estimated that the incidence of new diagnosis and deaths resulting from several common cancers during 2008 will be as follows:

<u>Type of Cancer</u>	<u>New Cases</u>	<u>Deaths</u>
Breast.	184,450	40,930
Prostate.	186,320	28,660
Colorectal	148,810	49,960
Lung.	215,020	161,840
Liver.	21,370	18,410
Melanoma.	62,480	8,420
Brain	21,810	13,070
Ovarian.	21,650	15,520

Incidence of Cancer in Europe

Globocan, (Globocan 2002 is a database of cancer prevalence as collected by the Descriptive Epidemiology Group of the International Agency for Research on Cancer) estimates that the incidence of new diagnosis and deaths resulting from several cancers during 2002 (the last year for which estimates are available) would be as follows:

<u>Type of Cancer</u>	<u>Estimated New Cases in 2002</u>	<u>Estimated Deaths in 2002</u>
Breast.	360,749	129,013
Prostate	230,627	83,066
Colorectal.	371,706	203,296
Lung	374,764	341,595
Liver	53,618	57,486
Melanoma	62,367	16,633
Brain	48,385	39,061

Cancer

Cancer is characterized by aberrant cells that multiply uncontrollably. As cancer progresses, the cancer cells may invade other tissues throughout the body producing additional cancers, called metastases. Cancer growth can cause tissue damage, organ failure and, ultimately, death. Many immunologists believe that cancer cells occur frequently in the human body, yet are effectively controlled by the immune system because these cells are recognized as aberrant. Cancer growth occurs if this natural process fails.

Cancer cells produce abnormal kinds and amounts of substances called antigens, which may be distinguishable from those produced by healthy cells. The use of these cancer-associated antigens is essential to the successful development of products capable of stimulating the immune system to seek and destroy cancer cells marked by these antigens.

The Human Immune System

The immune system is the body's defense mechanism responsible for recognizing and eliminating cancer cells, viruses, bacteria and other disease-causing organisms. This system consists of populations of white blood cells whose components are responsible for initiating the cellular immune response, and the humoral, or antibody-based, immune response.

Dendritic cells, a component of white blood cells, initiate the cellular immune response by processing and displaying disease-associated antigen fragments on their outer cell surface, where they are recognized by white blood cells, known as naive T-cells, that have not yet been exposed to antigens. Upon exposure to these antigen

fragments, naive T-cells become disease-specific Helper T-cells or Killer T-cells. Helper T-cells then induce Killer T-cells to locate and potentially destroy the cells marked by the disease-associated antigen.

B-cells direct the immune response by binding to disease-associated antigens on the surface of various cell types, producing disease-specific antibodies. Helper T-cells also enhance B-cell production of disease-specific antibodies. These antibodies bind to and initiate the destruction of cells marked by the associated disease-specific antigens.

A small population of activated Helper T-cells, Killer T-cells, and antibody-producing B-cells survive for long periods of time, retaining the memory of what the disease fragment looks like. These cells can respond very rapidly to subsequent exposure to disease-specific antigens and fragments. The most effective natural immune response is one in which both Killer T-cells and antibody-producing B-cells are activated.

The immune system response to cancer can be generally characterized by the following sequence:

- *Step 1.* Dendritic cells ingest cancer antigens, break them into small fragments and display them on their outer cell surfaces.
- *Step 2.* Dendritic cells bearing these cancer antigen fragments bind to and activate naive T-cells, which become disease-specific Helper T-cells and Killer T-cells.
- *Step 3.* The activated Helper T-cells produce factors that greatly enhance the cell division of Killer T-cells and mature their cancer-killing properties.
- *Step 4.* Cancer cells and their cancer-associated antigens are also recognized by antibody-producing B-cells.
- *Step 5.* The activated Helper T-cells produce factors that greatly enhance antibody production by B-cells that in turn are specific for the cancer-associated antigens.
- *Step 6.* The Killer T-cells and antibodies, acting alone or in combination, destroy cancer cells.

Limitations of Current Cancer Therapies

Traditional treatments for cancer include:

- *Surgery.* Surgery may be used to remove cancer cells, but not all cancer cells can be removed surgically. Surgery may also result in significant adverse side effects such as collateral damage to healthy tissue, bleeding and infection.
- *Radiation Therapy.* Radiation therapy may be used to treat cancers, but it can cause significant damage to healthy tissue surrounding the targeted cancer cells. Recurrent cancers may not be treatable with further radiation therapy. Radiation therapy may also cause additional significant adverse side effects such as burns to treated skin, organ damage and hair loss.
- *Chemotherapy.* Chemotherapy may be used to treat cancer, but involves the use of toxic chemical agents. These toxic chemical agents affect both healthy and diseased cells and may cause additional significant adverse side effects such as hair loss, immune suppression, nausea and diarrhea.
- *Hormone Therapy.* Hormone therapy may be used to treat cancer, but involves the use of substances that chemically inhibit the production of growth and reproductive hormones and is also limited in effectiveness. Hormone therapy may cause significant adverse side effects such as bone loss, hot flashes, impotence and blood clots.

Current Cancer Immunotherapy Approaches

Immunotherapy offers a new approach to be used as an adjuvant in combination with traditional therapies. It can stimulate and enhance the body's natural mechanism for destroying pathogens, such as cancer cells, and may overcome many of the limitations of traditional cancer therapies. In recent years, two cancer immunotherapy

approaches have emerged to address the limitations of traditional therapies, which have resulted in a number of products approved by the U.S. Food and Drug Administration, or FDA:

- *Antibody-Based Therapies.* Currently approved antibody-based cancer therapies have modestly improved survival rates with partially reduced side effects when compared with traditional therapies. However, these antibody-based therapies can elicit an immune response against themselves because they often contain mouse proteins or fragments of such proteins. This can limit their effectiveness and potentially cause toxic side effects.
- *Immune-Modulating Agents.* Currently approved immune-modulating agents, such as IL-2 and alpha-interferon, are known to have some ability to enhance the immune system and limited efficacy to control cancer growth. However, these therapies involve delivery of the immune modulating agent through the blood system and therefore cannot be directed exclusively to cancer cells. This lack of selectivity may result in significant toxicity to healthy tissue.

Our Approaches

We have developed two proprietary approaches, DCVax® and therapeutic antibodies, for stimulating and enhancing a patient's natural cellular and humoral or antibody immune response to cancer. Given appropriate funding for future development, we believe that DCVax® and CXCR4 antibody products may overcome certain limitations of current cancer therapies and offer cancer patients safe and effective treatment alternatives, alone or in combination with other therapies. Based on these technology platforms, we have developed the following product pipeline:

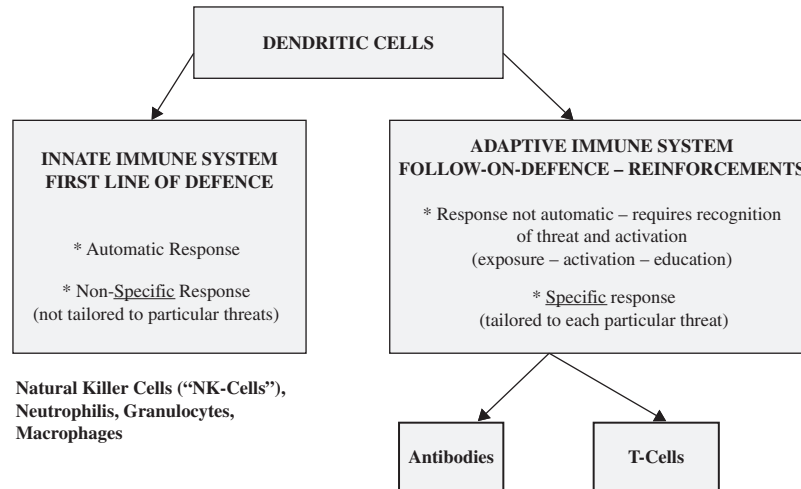
The DCVax® Technology

DCVax® is a platform technology which we believe is applicable to most cancers. It combines a patient's own dendritic cells with a patient's own cancer-related biomarkers, or off-the-shelf antigens, to induce immune responses against a patient's cancer cells. The Company's early-stage clinical trial data, and those of its collaborators, suggest that DCVax®-Brain and DCVax®-Prostate may have the ability to significantly delay disease progression and significantly prolong patient survival, while maintaining a superior quality of life when compared with current therapies.

The natural immune response starts with activation of a single master immune cell type, the dendritic cell. This cell directs all ensuing activities of all components of the immune response. When a virus, bacteria, or a cancer cell, encounters a DC, the DC consumes the virus, bacteria or cancer cell and chops it into small pieces. In the process, the DC becomes activated and starts traveling to the lymph node. In the lymph node, the DC elicits a cascade of events, that leads to an immune response. Importantly, the nature of the virus, bacteria or cancer cell and the nature of the DC activation dictate the type of immune response. Preparing the DC outside the body, as is done for DCVax® products, is intended to allow the greatest degree of control and to begin the immune response in the natural fashion leading to an enhanced response against the virus, bacteria or cancer cell.

In cancer patients, the signaling through which the master immune cells are activated is impaired. Our technology, therefore, involves delivering the necessary signals to activate the master immune cells outside the patients' body. We believe that after receiving these signals, the master immune cells will be able to function normally and mobilize the full immune response in the natural manner.

THE IMMUNE SYSTEM



Different Approaches

Most traditional immunization approaches, including traditional virus, specific antigen or peptide vaccines, as well as some that are used for immunotherapy of cancer, rely upon signaling inside the patient’s body to try to activate and mobilize the already existing DCs in the body, or try to modulate only one arm of the immune system. These approaches have worked well to address infectious diseases, but have generally failed to work in cancer patients because such approaches are reliant upon signaling in the patients’ bodies which, as discussed above, is impaired in cancer patients.

In addition, the immunogen, i.e. the virus, specific antigen, peptide or the cancer cells used to prepare the vaccine, is in those cases injected into the body in a formulation that aims at targeting and activating local DCs. Examples are viral, specific antigen or peptide vaccines formulated with adjuvant, or killed tumor cells alone or modified to produce the DC mobilizing protein GM-CSF. In these instances, it is left to chance as to whether the immunogen arrives at the DC, and whether the DCs are properly activated and effectively migrate to lymph nodes to produce an effective immune response.

Treatments that use only a single arm of the immune system may employ large amounts of T-cells, or a single (monoclonal) antibody. We believe that the DCVax® products have a clear advantage compared to this approach in that they are designed to activate all aspects of the immune response, both cellular and antibody, thereby potentially providing a broader and longer lasting immune and clinical response. Our DCVax® products consist of pure, activated DCs loaded with the immunogen as would naturally occur, and that are capable of migrating to lymph nodes. The intended result is a full immune response consisting of both a specific cellular T-cell response and a specific antibody response against the cancer-associated antigen consistent with our Phase I and Phase II clinical trial results for DCVax®-Brain and DCVax®-Prostate, respectively, and that is translated into a potential clinical benefit — in this case, a delay in disease recurrence and an extension of overall survival of the patient.

Cancer and the Immune System

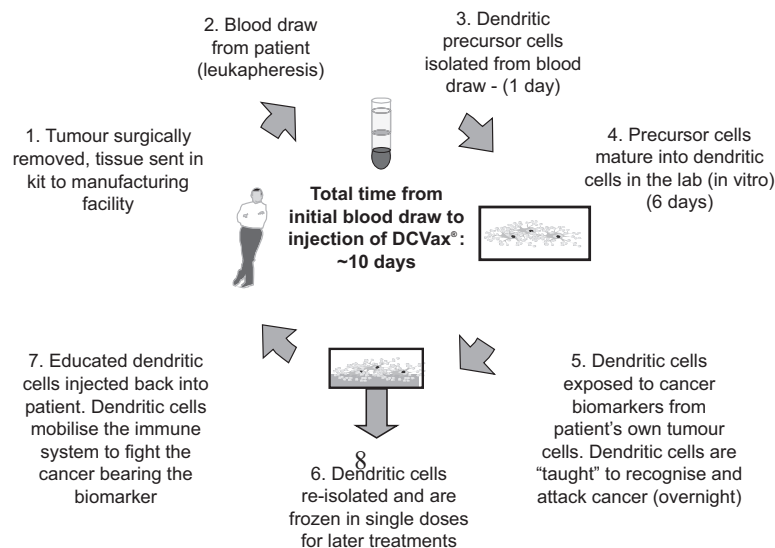
Cancer cells produce many substances that shut down the immune response, as well as substances that suppress or block the DCs that are resident in the body. The optimal time for controlling cancer growth by activating the immune system is, therefore, at the time when tumor burden is low. Our DCVax® products target patients with brain cancer following surgery, radiation and chemotherapy, and hormone independent prostate cancer patients with no detectable tumor. This approach is designed to allow induction of powerful immune responses to control progression of the disease. However, in clinical trials, delays in cancer progression and extension of survival have also been seen in late stage patients treated with DCVax®-Brain and DCVax®-Prostate.

The DCVax® Process

The DCVax® platform uses our proprietary process to efficiently produce and activate DCs outside a patient's body. The clinical trials with DCVax®-Brain and DCVax®-Prostate suggest that these cells can generate an effective immune system response when administered therapeutically. Manufacture of a DCVax® product takes approximately 30 days to complete for DCVax®-Prostate and approximately 10 days for DCVax®-Brain, and is characterized by the following sequence:

- *Collection.* A sample of a patient's white blood cells is collected in a single and simple outpatient procedure called leukapheresis.
- *Isolation of Precursors.* These cells are sent to a manufacturing facility, where DC precursors are isolated from the patient's white blood cells.
- *Differentiation by Growth Factors.* DC precursors are transformed in a manner that mimics the natural process in a healthy person's body, through the application of specific growth factors, into highly pure populations of immature DCs during a six-day culture period.
- *Maturation.* Immature DCs are exposed to a proprietary maturation factor or maturation method in order to maximize Helper T-cell, Killer T-cell, and B-cell activation.
- *Antigen Display.* Cancer-associated antigens, fragments of cancer-associated antigens or deactivated whole cancer cells are added to, ingested, and processed by the maturing DCs, causing the DCs to display fragments of cancer-associated antigens on their outer cell surfaces.
- *Harvest.* These DCs are harvested and separated into standardized single-use DCVax® administration vials, frozen and stored.
- *Quality Control.* DCVax® product lot undergoes, according to current industry standards, rigorous quality control testing, including sterility testing for bacterial and mycoplasma contamination, and potency testing prior to shipment to the administration site for injection.

DCVax®-Brain Manufacturing Steps:



DCVax® — Characteristics

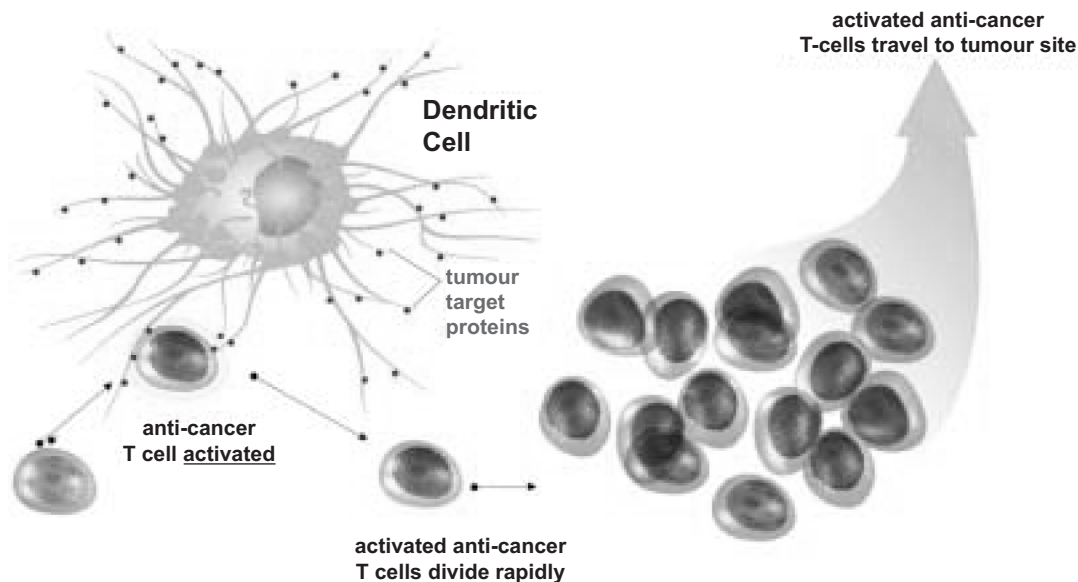
The DCVax® platform combines our expertise in dendritic cell biology, immunology and antigen discovery with our proprietary process of activating DCs outside of a patient's body to develop therapeutic products intended

to stimulate beneficial immune responses to treat cancer in a cost-effective manner. DCVax® has the following significant characteristics, the combination of which we believe makes it a highly attractive alternative to current therapies.

Activation of the Natural Immune System

Our DCVax® product candidates are designed to elicit a natural immune response. Pre-clinical and clinical trials suggest that our DCVax® product candidates can train a patient's own Killer T-cells to locate and destroy specifically targeted cancer cells. These same clinical trials also suggest that DCVax®-Prostate stimulates the body to produce antibodies and/or Killer T-cells that bind to cancer-associated antigens and potentially destroy cancer cells marked by these antigens. Moreover, the clinical trials show that this immune response may be effective in delaying time to disease progression in brain and prostate cancer, and both may prolong survival and improve the quality of life for brain and prostate cancer patients.

Intended Impact of One Educated Dendritic Cell on Anti-Cancer Cells



Multiple Cancer Targets

We believe that our DCVax® platform can be applied towards the treatment of a wide variety of cancers. The platform affords the flexibility to target many different forms of cancer through the pairing of DCs with cancer-associated antigens, fragments of cancer-associated antigens or deactivated whole cancer cells as well as possible direct intra-tumoral injection of partially mature dendritic cells.

Targeting of Serious Cancers with No Effective Treatments

DCVax®-Prostate targets men with rising PSA levels while on hormone therapy, but before metastases develop. There is currently no effective treatment for this growing population of patients who invariably go on to develop complications from the spread of their cancer to the bone and, eventually, succumb to their disease. DCVax®-Brain targets patients with GBM, a highly lethal form of brain cancer. In two Phase I trials carried out at UCLA from 1999 to the present day, patients treated with DCVax®-Brain have survived more than twice as long without relapse compared to matched concurrent controls not receiving DCVax®-Brain (under “matched concurrent controls” patients received standard of care treatment at the same time clinical trial patients were treated with standard of care treatment together with DCVax®-Brain; these control patients have been matched for the major prognostic factors for GBM).

Low Incidence of Significant Adverse Side Effects or Toxicity

Our initial two DCVax®-Brain Phase I trials and DCVax®-Prostate Phase I/II clinical trial have shown no significant adverse side effects in over 250 administered injections. Some patients had moderate injection site reactions, and we observed some severe injection site reactions that we believe to be a result of immune activation. Patients treated with DCVax®-Brain or DCVax®-Prostate therefore might not need to take additional prescription drugs to manage undesirable side effects as is often the case with certain current cancer treatments. We minimize the potential for toxicity by using the patient's own cells to create its DCVax® product candidates. Additionally, because our DCVax® products are designed to target the cancer- associated antigens in the patient, collateral damage to healthy cells is minimized.

Efficient and Cost-Effective Manufacturing

We have developed a second generation closed and automated device based on tangential flow filtration ("TFF-Cell Separation System") for manufacturing DC from patient leukapheresis material. We have a contract with Cognate Bioservices, Inc. ("Cognate") for the manufacture of DCVax®-Brain product for clinical use. This TFF-Cell Separation System is currently undergoing validation. See "— Manufacturing".

Ease of Administration

We initially collect a sample of a patient's white blood cells in a single standard outpatient procedure called leukapheresis. After patient-specific manufacturing and quality control testing, each small dose of a DCVax® product candidate is administered by a simple intradermal injection in an outpatient setting. Dendritic cells administered by intradermal injection migrate to the draining lymph nodes where they interact with and activate T-cells.

Complementary with Other Treatments

Our DCVax® product candidates are designed to stimulate the patient's own immune system to safely target cancer cells. Consequently, we believe these products may be used as an adjuvant to standard therapies such as chemotherapy, radiation therapy, hormone therapy and surgery.

Our Clinical and Pre-clinical Development Programs

The following table summarizes the targeted indications and status of our product candidates:

<u>Product Candidate</u>	<u>Target Indications</u>	<u>Status</u>
DCVax® Platform		
DCVax®-Prostate	Prostate cancer	Phase III — clinical trial cleared by the FDA for recruitment of patients for non-metastatic hormone independent prostate cancer
DCVax®-Brain	Glioblastoma multiforme	Phase II — clinical trial initiated. Orphan Drug designation granted in the U.S. in 2006 and in the European Union in 2007
DCVax®-LB	Non-small cell lung cancer	Phase I — clinical trial cleared by the FDA
DCVax®-Direct	Solid tumors	Phase I — clinical trial cleared by the FDA for ovarian cancer, head and neck cancer and two other indications (expected to be liver and pancreatic cancers)
DCVax®-L	Resectable solid tumors	Phase I/II — clinical trial currently underway at the University of Pennsylvania

Pre-clinical means that a product candidate is undergoing efficacy and safety evaluation in disease models in preparation for human clinical trials. Phase I-III clinical trials denote safety and efficacy tests in humans as follows:

Phase I: Evaluation of safety and dosing.

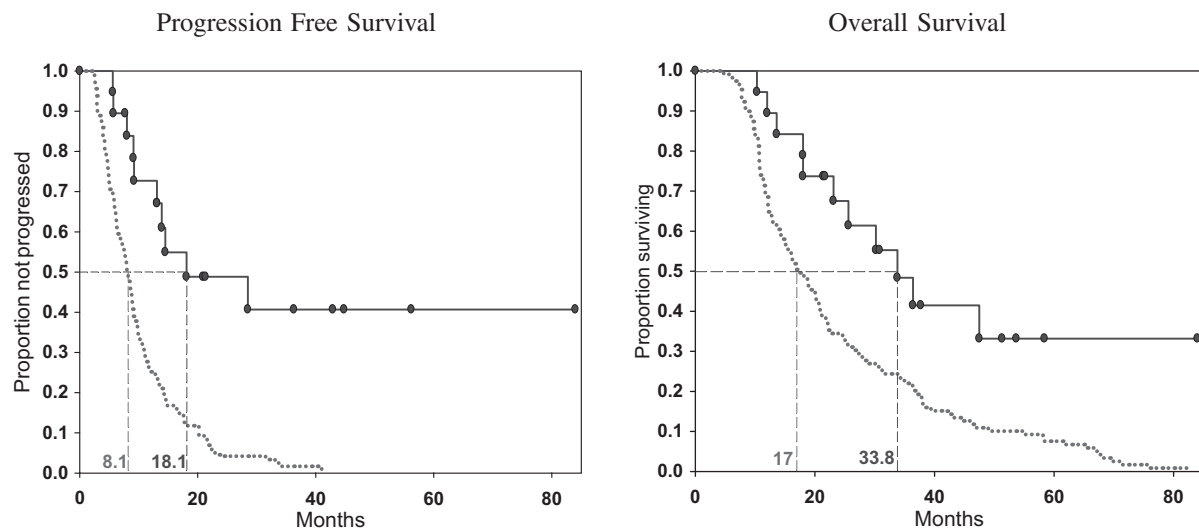
Phase II: Evaluation of safety and efficacy.

Phase III: Larger scale evaluation of safety and efficacy.

DCVax[®] Product Candidates

DCVax[®]-Brain

DCVax[®]-Brain uses our DCVax[®] platform in combination with the patient's own glioblastoma tumor cell lysate antigens. Our clinical collaborators at UCLA conducted two Phase I clinical trials to assess the safety and efficacy of DC-based immunotherapy for Glioblastoma multiforme ("GBM"). In the first Phase I clinical trial, DCVax[®]-Brain was administered to 12 patients and in the second Phase I clinical trial it was administered to 17 patients. The patients in both trials were treated with DCVax[®]-Brain being administered as an adjuvant to the standard of care.



Solid lines: patients treated with DCVax-Brain; dashed lines: institutional controls

The data from progression and survival Kaplan Meier curves of both of these trials together (see figure above) show that newly diagnosed GBM patients treated at UCLA, and matched for the major prognostic factors, with DCVax[®]-Brain had a delay in the median time to recurrence or progression of disease from 8.1 months with standard of care treatments in matched concurrent control patients to 18.1 months in patients treated with DCVax[®]-Brain ($p = 0.00001$). DCVax[®]-Brain increased median overall survival from 17.0 months with standard of care in matched concurrent control patients treatments to 33.8 months in patients treated (and continuing as the median is not yet reached) for DCVax[®]-Brain treated patients, again matched for the major prognostic factors ($p < 0.0015$). The 'p' value measures the likelihood that the difference between the treated and non-treated patients is due to chance. A p value less than or equal to 0.05 (meaning there is a 5 percent or lower possibility that the observed clinical effect is due to chance) is required for product approval by the FDA and European regulatory authorities. The 'p' value of 0.0015 observed with DCVax[®]-Brain means that there is only a 0.15 percent possibility that the observed effect between standard of care and DCVax[®]-treated patients is due to chance. Eight of the 19 patients remained alive for periods ranging, to date, from 24.5 to 92 months, with five patients having lived for over 45 months without cancer recurrence. Similarly, in recurrent (late stage) patients, DCVax[®]-Brain has increased median survival from 6.4 months for those receiving standard of care to 12.2 months for patients receiving DCVax[®]-Brain.

In December 2006, we commenced recruiting patients with newly diagnosed GBM in a 141 patient Phase II DCVax®-Brain clinical trial. We planned to carry out the study at 12 to 15 clinical sites. The study was designed as a randomized study in which patients received either DCVax®-Brain in addition to standard of care or standard of care alone. To date, almost 50 patients have been screened at 4 clinical sites. However, patients have been reluctant to enroll in the study when faced with a 33% chance of being randomized into the control arm of the study under which they will receive standard of care alone. In order to address this issue we redesigned the study as a randomized, placebo controlled, double blinded study with a cross-over arm allowing control patients to be treated with DCVax®-Brain in the event that their cancer progresses. The study size has been increased from 141 to 240 patients and is designed to enable us to petition the FDA for accelerated approval if the study generates results similar to those achieved in earlier Phase I studies. In order to enable rapid enrollment, we are in the process of enrolling 45 to 50 additional clinical sites for this trial. As of April 9, 2008, seven sites are active and a further 31 sites are at various stages of the start-up process. We are engaged in discussions with the FDA concerning the study design and end points. Depending on trial results, we plan to seek product approval in both the U.S. and the European Union.

In February 2007, we, through our legal representative, applied to the Bundesamt für Gesundheit (“BAG” or “Office Fédéral de la Santé Publique”) in Switzerland for an Authorization for Use (“Autorisation”). In June 2007, we, through our legal representative, received such Autorisation from the BAG to make DCVax®-Brain available at limited selected medical centers in Switzerland, as well as an authorization (“Autorisation pour activités transfrontalières avec des transplants”) to export patients’ cells and tissues from Switzerland for vaccine manufacturing in the United States, and to import patients’ DCVax®-Brain finished vaccines into Switzerland. These authorizations are conditional upon certain implementation commitments which must be fulfilled to the satisfaction of Swissmedic (“Institut Suisse des Agents Thérapeutiques”) before the product may be made available (e.g., finalizing our arrangements for a clean-room suite for processing of patients’ immune cells). We believe we have fulfilled these commitments and are awaiting Swissmedic confirmation.

In the BAG’s processing of and decision on our application and data with respect to the authorizations described above, Swissmedic conducted an inspection of our facilities. A comprehensive evaluation of DCVax®-Brain will be conducted by Swissmedic during its processing of our Marketing Authorization Application (“MAA”) which we filed with Swissmedic in December 2007. The assessment by Swissmedic of our MAA will include a full review by Swissmedic of the safety and efficacy data generated in our DCVax®-Brain clinical studies to date. This review could take up to one year from December 28, 2007, the date on which the MAA was submitted. Until such a Market Authorization is granted, and assuming the Company completes its implementation commitments to the satisfaction of Swissmedic, DCVax®-Brain may only be made available at the selected Medical Centers in Switzerland under the Autorisation granted by the BAG. The term of the BAG Autorisation is five years from June 2007.

Standard of Care: The current standard of care for GBM was established in a 573 patient study as set out by Stupp et al. in *N Engl J Med* 352:10, and resulted in a median time to progression of 6.9 months and a median overall survival rate of 14.6 months in patients receiving a standard of care treatment regimen. The standard of care established in the Stupp trial for GBM patients consists of surgery followed two weeks later by radiation therapy with concomitant Temodar chemotherapy, followed by six monthly cycles of Temodar chemotherapy. The DCVax®-Brain treatment regimen fits between the steps of this current standard of care, and does not require a change in clinical practices, other than one 30-day delay after the first chemotherapy treatment.

Target Market: The American Cancer Society estimates that about 21,810 new cases of brain cancer will be diagnosed in the U.S. during 2008. Deaths from newly diagnosed malignant primary brain cancer in the U.S. are estimated to be approximately 13,070 per year. Globocan has estimated that about 48,385 new cases of brain cancer would be diagnosed in Europe in 2002 (the last year for which estimates are available). Deaths from brain cancer in Europe were estimated at 39,061 in 2002.

Current Treatments: Existing treatments for GBM include surgery, radiation and chemotherapy. Such treatments are often used in various combinations and/or sequences and have significant adverse side effects such as bleeding, seizures, nausea and collateral tissue damage. Following initial treatment, virtually all cases of this cancer recur, with a life expectancy of approximately six months following recurrence. Few, if any, effective

therapies exist for these patients. We believe that DCVax®-Brain has the potential to address this critical unmet medical need.

Cost Recovery: We submitted an application to the FDA for cost recovery for our Phase II trial in brain cancer. Approval of this application would permit us to charge patients or their insurers for the direct costs of manufacturing DCVax®-Brain during this clinical trial. However because we have changed the study design to include a placebo control arm we have no ability to charge patients for DCVax®-Brain without unblinding the study and as a result we have ceased pursuing the application.

DCVax®-Prostate

DCVax®-Prostate targets hormone independent (i.e. late stage) prostate cancer. DCVax®-Prostate combines our DCVax® platform with the cancer-associated antigen “prostate specific membrane antigen” or “PSMA”. PSMA is located on the surface of prostate cells. It is expressed at very low levels on benign or healthy prostate cells, and at much higher levels on prostate cancer cells. Because PSMA is over-expressed in virtually all prostate cancers, it represents an effective target for prostate cancer therapeutics. In addition, since PSMA is over-expressed in virtually all prostate cancer tissues, we do not have to screen patients. DCVax®-Prostate is designed to be used in the whole patient population. In contrast, the use of other cancer vaccines in development may be limited to part of the patient population and require screening of patients.

In September 1999, we filed an application to conduct a Phase I/II clinical trial for DCVax®-Prostate to treat late-stage prostate cancer patients for whom hormone therapy was no longer effective. This trial, which was carried out at the M.D. Anderson Cancer Centre and at UCLA, involved the administration of DCVax®-Prostate to 33 evaluable patients in order to establish the safety of three different dosage levels of DCVax®-Prostate.

Additional data from our Phase I/II DCVax®-Prostate clinical trial in 33 patients with non-metastatic and metastatic hormone independent prostate cancer indicates the following. Of a total of 33 patients who have been treated in this trial, 11 were non-metastatic hormone independent prostate cancer patients (group A) and 22 were metastatic hormone independent prostate cancer patients (group B). In group A, there has been an increase in survival from 36 months for the natural course of the disease to >54 months for DCVax®-Prostate treated patients. The median had not yet been reached as of the end of 2005 (the latest date to which long-term data is so far available). In this group the time to metastases under the natural course of the disease is 28 to 36 weeks. This time was lengthened to 59 weeks in patients who received DCVax®-Prostate. In group A, none of the 11 patients had progressed at 28 weeks and only five had progressed at 59 weeks. The group A patient population is the patient population that we will focus on in our Phase III clinical trial.

In group B (hormone independent patients with metastases), there was an increase in median overall survival from 18.9 months for standard of care to 38.7 months for DCVax®-Prostate treated patients. Patients in this study had a six-times greater chance of being alive at 36 months compared to patients treated with the standard of care.

Many cancer therapeutics elicit a clinical response in only a small fraction of patients. In clinical trials, DCVax®-Prostate has been shown to elicit a specific PSMA antibody response and a specific and strong T-cell response in about 80 percent of patients. The Company believes that the administration of DCVax®-Prostate may enhance progression free survival relative to placebo, delay the development of symptomatic disease and increase overall survival.

DCVax®-Prostate has been cleared by the FDA for a Phase III clinical trial in about 600 patients in 50 centers. The patient population is non-metastatic hormone independent prostate cancer. We currently intend to separate the 600 patient Phase III trial into two Phase III clinical trials in non- metastatic hormone independent prostate cancer patients with about 300 patients per trial.

Standard of Care. The standard of care for metastatic hormone independent prostate cancer was established in a 674 patient study as set out by Petrylak et al. in *N Engl J Med* 351;15 and resulted in a median overall survival rate of 18.9 months. This standard of care consists of Taxotere (chemotherapy) being administered as a single dose every three weeks or in a weekly regime. Other drugs, such as mitoxantrone and prednisone, are also administered to patients for pain derived from bone metastasis. The DCVax®-Prostate treatment regimen fits between the steps of current standard of care, and does not require a change in clinical practices. There is no established standard of care

for non-metastatic hormone independent prostate cancer as there is no FDA approved therapeutic product for this type of prostate cancer.

Target Market. The American Cancer Society estimates that 186,320 new cases of prostate cancer will be diagnosed in the U.S. during 2008. Deaths from prostate cancer in the U.S. are estimated to be 28,660 for 2008. We estimate that there is an initial DCVax®-Prostate target population in the U.S. consisting of approximately 100,000 patients per year with non-metastatic hormone independent prostate cancer. Globocan has estimated that 230,627 new cases of prostate cancer would be diagnosed in Europe in 2002 (the last year for which estimates are available). Deaths from prostate cancer in Europe were estimated at 83,066 in 2002.

Current Treatments. Existing treatments for localized (i.e. newly-diagnosed) prostate cancer include surgery and/or various forms of radiation therapy. The current standard of care for treating patients who fail primary therapy is hormone therapy through which the effect of male hormones is blocked. Although this therapy achieves temporary tumor control, prostate cancer patients eventually fail hormone treatments, meaning that blocking of hormones no longer keeps the cancer under control. The United States National Cancer Institute's 1989-1996 five-year survival rate for metastatic prostate cancer is only 32 percent. Moreover, hormone therapy may cause significant adverse side effects, including bone loss, hot flushes and impotence. Disease progression despite hormone therapy occurs on average in two years, and is then classified as hormone independent prostate cancer. Approximately 55 percent of patients with hormone independent prostate cancer will die within two years of its onset. Currently, the only FDA approved treatments for hormone independent prostate cancer are chemotherapy and radioactive pharmaceuticals, which can alleviate cancer-related symptoms but may cause significant toxic side effects and only prolong survival by approximately two and a half months. A large proportion of hormone independent patients do not have objective metastatic disease as measured by bone and CT scans. We believe that DCVax®-Prostate has the potential to address this critical unmet medical need.

DCVax®-LB

DCVax®-LB is targeting non-small cell lung cancer, the largest cause of cancer deaths in both the U.S. and Europe. DCVax®-LB combines our DCVax® platform with isolated and killed lung cancer cells as antigens. The autologous DCs used to formulate DCVax®-LB are activated through a process similar to that used in the manufacturing of DCVax®-Prostate. We had an investigational new drug application cleared by the FDA in May 2006 for a Phase I clinical trial using DCVax®-LB in non-small cell lung cancer.

Target Market. The American Cancer Society estimates that 215,020 new cases of lung cancer will be diagnosed in the U.S. during 2008. Approximately 80 percent of these cases are expected to be attributable to non-small cell lung cancer, the indication that we are targeting. Deaths from all forms of lung cancer are estimated to be 161,840 for 2008. Globocan has estimated that 374,764 new cases of lung cancer would be diagnosed in Europe in 2002 (the last year for which estimates are available). Deaths from lung cancer in Europe were estimated at 341,595 in 2002.

Current Treatments. Existing treatments for non-small cell lung cancer include surgery and radiation therapy, which are used in various combinations. These treatments have significant toxic side effects and have limited clinical benefit. The American Cancer Society has reported that only 16 percent of patients diagnosed with non-small cell lung cancer survive after five years. Following initial treatment, virtually all cases of this cancer recur, with a life expectancy of approximately one year following recurrence.

DCVax®-L

DCVax®-L targets any kind of solid tumor cancer and it combines our DCVax® platform with patient specific tumor lysate. Following surgery, the tumor is prepared as a lysate (i.e. the tumor tissue is finely chopped) for loading into autologous dendritic cells. The patient's tumor lysate contains cancer specific biomarkers which will be added to the patient's own dendritic cells and subsequently injected back into the patient to elicit a cancer specific immune response. The company commenced a Phase I/II study using DCVax®-L at the University of Pennsylvania in 2007.

Target Market: The American Cancer Society estimates that 21,650 new cases of ovarian cancer will be diagnosed in 2008 and that there will be approximately 15,520 deaths from the disease. Globocan has estimated that

63,467 new cases of ovarian cancer were diagnosed in Europe in 2002 (the last year for which estimates are available). Once ovarian cancer has recurred, there are currently no effective treatments for the disease. Thus, new treatment modalities that prevent or delay cancer recurrence are of importance in prolonging survival in women with ovarian cancer. This study is being funded by the Ovarian Cancer Vaccine Initiative (OCVI), a private philanthropic organization.

Current Treatments: Standard therapy includes surgical debulking, followed by chemotherapy with a taxane/platinum combination for six to eight cycles. Of the patients who present with advanced stage disease (III or IV), 70 percent will have an initial clinical remission following surgery and chemotherapy, with no evidence of disease by physical examination, radiographic imaging (such as CT or MRI) or normalization of the CA125 tumor marker. However, for most of these patients, the ovarian cancer will recur within two years. The median time to progression is approximately 20 months even for patients who received total or near-total surgical removal of the initial tumor and is approximately 14 months for patients with less complete surgical removal of the initial tumor. Once ovarian cancer has recurred, it is not considered curable and progression to death is usually inevitable, despite aggressive chemotherapy strategies. The overall five year survival for advanced ovarian cancer remains at only 20 to 30 percent.

DCVax®-Direct

DCVax®-Direct uses our DCVax® platform to activate DCs suitable for direct injection into solid tumors. DCVax®-Direct is designed to treat cancer patients whose tumor tissue is not available or whose tumors are considered to be inoperable. Several scientific studies have shown that DCs injected into solid tumors in animal models can result in tumor regression. We have demonstrated in pre-clinical animal studies the ability of activated DCs, when injected directly into just a single tumor of mice bearing multiple tumors, to cause all tumors to regress. In these studies, subsequent challenge of these now tumor-free mice with the injection of additional tumor cells was met with total rejection of tumor growth demonstrating an immunization of the mouse against regrowth of the tumor. The DCs used in the formulation of DCVax®-Direct are activated through a process similar to that used for DCVax®-Brain and DCVax®-Prostate (i.e. using heat-killed and formalin-fixed BCG mycobacteria and interferon gamma), although they are not loaded with tumor antigens prior to injection. Rather, the antigen loading takes place *in vivo* after injection of the DCVax®-Direct DCs into the tumor tissue, typically following radiation therapy, chemotherapy, or other treatments that kill tumor cells.

We have a Phase I clinical trial protocol under the DCVax®-Direct IND for the treatment of head and neck cancer. This clinical trial protocol was cleared by the FDA in the third quarter of 2006. We intend to identify the most appropriate cancers for the remaining two available trials under the DCVax®-Direct IND at the appropriate time, although our present intention is to pursue liver and pancreatic cancers.

Target markets: The American Cancer Society estimates that 21,650 new cases of ovarian cancer and 35,310 new cases of head and neck cancer will be diagnosed in the U.S. during 2008. Globocan has estimated that 63,467 new cases of ovarian cancer and 98,175 new cases of head and neck cancer were diagnosed in Europe in 2002 (the last year for which estimates are available). Deaths from ovarian cancer and head and neck cancer in Europe were estimated at 41,024 and 43,273 respectively. Deaths from all solid tumors are estimated to be approximately 500,000 in 2008. Deaths from all solid tumors are estimated at approximately 815,000 in the E.U. in 2002 (the last year for which estimates are available).

Current treatments: Current treatments for solid tumors typically involve cytotoxic therapy aimed at killing tumor cells. Such treatments include radiation therapy, chemotherapy, or other cell killing treatments such as cryotherapy. These treatments can still be used along with DCVax®-Direct as they can potentially prepare the tumor tissue for the injection of DCVax®-Direct. The ability to still use conventional cytotoxic agents along with DCVax®-Direct will enable DCVax®-Direct to be adopted in the market without requiring any change of existing clinical practice if so desired.

Therapeutic Antibody Product Candidates

We have been issued patent coverage by the U.S. Patent and Trademark Office which gives us broad rights to the use of CXCR4 antibodies to treat cancer. CXCR4 is a protein that plays a key role in the progression of primary cancers and in the metastatic process. CXCR4 is over-expressed in more than 75 percent of cancers including non-

small cell lung cancer, breast cancer, GBM, colon cancer, melanoma, prostate, pancreatic, kidney, ovarian, and certain blood cancers. In all of these cancers CXCR4 is centrally involved in all three phases of disease progression: proliferation of the primary tumor, migration of cancer cells out of the primary tumor, and establishment of distant metastatic sites.

We have completed substantial research and pre-clinical testing phases with two versions of CXCR4 antibodies. We intend to identify the most appropriate cancers for clinical trial or multiple clinical trials using CXCR4 antibodies at the appropriate time.

Multiple Therapeutic Applications

Therapeutic antibodies may be used as stand-alone products that bind to cancer-associated antigens and potentially destroy cancer cells marked by these antigens. Therapeutic antibodies may also enable the targeted delivery of existing therapies such as radiation and cytotoxic agents. The inherent toxic effects of cytotoxic agents and radioactive materials on normal tissue could be minimized by coupling these agents to antibodies that have a high degree of specificity to cancer cells.

Manufacturing

We have developed a proprietary manufacturing system that enables us to produce vaccines for an entire multi-year course of treatments in a single manufacturing run using the cancer patient's own DCs and the patient's own tumor biomarkers. This manufacturing process results in sufficient patient-specific DCVax[®] product for at least a course of 11 injections of DCVax[®], which is sufficient for three years of treatment. The product thus becomes like an "off-the-shelf" drug after the initial manufacturing run. The advantages of this method, compared to other cell vaccine production, include not only the "off-the-shelf" feature of drug delivery to clinics and patients, but also the significant reduction in product cost due to the fact that the product does not have to be separately manufactured for each and every treatment injection.

We have entered into a services agreement with Cognate pursuant to which Cognate will provide certain consulting and, when needed, manufacturing services, for our DCVax[®]-Brain Phase II clinical trial. In this process, DC precursor cells are isolated from the patient's blood and matured into new functional DCs. These DCs are combined with a patient's own cancer biomarkers from the patient's tumor tissue removed in surgery. The finished vaccine is then frozen in single-dose vials where they can remain for many years until required for treatment of the patient.

The current capacity of Cognate's existing California cGMP (clean room manufacturing under current Good Manufacturing Practices) facility is approximately 300 patients per year, which we believe will be sufficient for our Phase II clinical trial for DCVax[®]-Brain. We have a plan with Cognate to accommodate an increase in production capacity based on demand and have detailed plans and cost analysis for four modular expansions which should increase the capacity of the current facilities from approximately 300 patients to over 5,000 patients per year. We believe that Cognate's current facilities are sufficient to cover additional agreements for our initial commercialization efforts in Switzerland, and potentially in the United States and/or Europe, as well as to meet demands of clinical trial activity once commenced.

We intend to commence use of the TFF-Cell Separation System in an upcoming DCVax[®] Phase I clinical trials. The TFF-Cell Separation System is also targeted to be implemented into the DCVax[®]-Brain product after bioequivalence studies have been completed. Since the product economics are favorable even with the existing first generation manufacturing process, the Company intends to only implement the TFF-Cell Separation System at a time and in a manner that does not interfere with the pivotal Phase II clinical trial for DCVax[®]-Brain, or product approval or launch.

Marketing

In the event that we secure adequate funding and develop an approved product, we will then determine whether to market and sell that product ourselves, or to partner with one or more established pharmaceutical companies. If we chose to enter into marketing and sales agreements with partners, our collaboration with these companies may

take the form of royalty agreements, licensing agreements or other co-marketing arrangements. However, there is a substantial likelihood that we will choose to market and sell our products ourselves.

Intellectual Property

We protect our proprietary technologies through patents issued and licensed throughout the world. We have 28 issued and licensed patents (9 in the U.S. and 19 in other jurisdictions) and 134 patent applications pending (17 in the U.S. and 117 in other jurisdictions) which cover the use of DCs in DCVax® as well as targets for either the Company's DC or monoclonal antibody therapy candidates and isolation and manufacturing, handling and administration of DCVax®. The issued patents expire at various dates between 2015 and 2026. We intend to continue using our scientific expertise to pursue and patent new developments with respect to uses, methods, and compositions to enhance our position in the field of cancer treatment.

We have received orphan designation in the U.S. and the E.U. for our DCVax®- Brain product candidate applicable to gliomas, which comprise most primary brain cancers, including GBM. Orphan designation in the U.S. entitles us to seven years of market exclusivity for the particular indication and active ingredient provided that the product is the first such orphan to be approved for that indication. Orphan designation in the E.U. entitles us to ten years of market exclusivity on a similar basis.

Any patents that we obtain may be circumvented, challenged or invalidated by our competitors. Our patent applications may not result in the issuance of any patents, and any patents that may be issued may not offer any protection against others who seek to practice the claimed inventions. We have obtained licenses for certain technologies that we use, but we may be unable to maintain those licenses and may be unable to secure additional licenses in the future. Thus, we may be forced to abandon certain product areas or develop alternative methods for operating in those areas.

In addition to patents, we rely on copyright protection, trade secrets, proprietary know-how and trademarks to maintain our competitive position. Our future success will depend in part on our ability to preserve our copyrights and trade secrets. Although our officers, employees, consultants, contractors, manufacturers, outside scientific collaborators, sponsored researchers and other advisors are required to sign agreements obligating them not to disclose our confidential information, these parties may nevertheless disclose such information and compromise our confidential data. We may not have adequate remedies for any such breach. It is also possible that our trade secrets or proprietary know-how will otherwise become known or be independently replicated or otherwise circumvented by competitors.

Our technologies may infringe the patents or violate other proprietary rights of third parties. In the event of infringement or violation, we may be prevented from pursuing further licensing, product development or commercialization. Such a result would materially adversely affect our business, financial condition and results of operations.

If we become involved in any litigation, interference or other administrative proceedings, we will incur substantial expenses and the efforts of our technical and management personnel will be significantly diverted. An adverse determination may subject us to significant liabilities or require us to seek licenses, which may not be available. We may also be restricted or prevented from manufacturing and selling our products, if any, in the event of an adverse determination in a judicial or administrative proceeding, or if we fail to obtain necessary licenses. In addition, any potential litigation or dispute may, as a result of our lack of funding, require us to further reduce or even curtail our operations entirely.

Competition

The biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies and a strong emphasis on proprietary products. Several companies, such as Cell Genesys, Inc., Dendreon Corporation, Immuno-Designed Molecules, Inc., Celldex Therapeutics, Inc., Ark Therapeutics plc, Oxford Biomedica plc, Argos Therapeutics, Inc. and Antigenics, are actively involved in the research and development of immunotherapies or cell-based cancer therapeutics.

Of these companies, we believe that only Dendreon and Cell Genesys are carrying out Phase III clinical trials with a cell-based therapy. These clinical trials target patients with prostate cancer, although their patient populations are different from those targeted by our Phase III DCVax[®]-Prostate product candidate. Celldex Therapeutics is commencing a Phase II clinical trial, which could become a Phase II/III trial, with a peptide immunotherapy for newly diagnosed GBM. Ark Therapeutics is in a Phase III trial with a gene therapy for operable high grade gliomas. The clinical trial data reported to date by these companies for brain and prostate cancer have not shown as long a delay in disease progression, or as long an extension of survival, as have our clinical data to date. As far as we are aware, no cell-based therapeutic product for cancer is currently available for commercial sale.

Additionally, several companies, such as Medarex, Inc., Amgen, Inc., Agensys, Inc., and Genentech, Inc. are actively involved in research and development of monoclonal antibody-based cancer therapies. Currently, at least seven antibody-based products are approved for commercial sale for cancer therapy. Genentech is also engaged in several Phase III clinical trials for additional antibody-based therapeutic products for a variety of cancers, and several other companies are in early stage clinical trials for such products. Many other third parties compete with us in developing alternative therapies to treat cancer, including:

- biopharmaceutical companies;
- biotechnology companies;
- pharmaceutical companies;
- academic institutions; and
- other research organizations.

Most of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing. In addition, many of these competitors have become more active in seeking patent protection and licensing arrangements in anticipation of collecting royalties for use of technology they have developed. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors may prevent us from recruiting and retaining qualified scientific and management personnel, or from acquiring technologies complementary to our programs.

We expect that our ability to compete effectively will be dependent upon our ability to:

- secure the necessary funding to continue our development efforts with respect to our product candidates;
- successfully complete clinical trials and obtain all requisite regulatory approvals;
- maintain a proprietary position in our technologies and products;
- attract and retain key personnel; and
- maintain existing or enter into new partnerships.

Governmental Regulation

Governmental authorities in the United States and other countries extensively regulate the pre-clinical and clinical testing, manufacturing, labeling, storage, record-keeping, advertising, promotion, export, marketing and distribution, among other things, of immunotherapeutics. In the United States, the FDA subjects pharmaceutical and biologic products to rigorous review. Even if we ultimately receive FDA approval for one or more of our products, if we or our partners do not comply with applicable requirements, we may be fined, our products may be recalled or seized, our production may be totally or partially suspended, the government may refuse to approve our marketing applications or allow us to distribute our products and we may be criminally prosecuted. The FDA also has the authority to revoke previously granted marketing authorizations.

In order to obtain approval of a new product from the FDA, we must, among other requirements, submit proof of safety and efficacy as well as detailed information on the manufacture and composition of the product. In most cases, this proof requires documentation of extensive laboratory tests, and pre-clinical and clinical trials. This

testing, and the preparation of necessary applications and processing of those applications by the FDA, are expensive and typically take several years to complete. The FDA may not act quickly or favorably in reviewing these applications, and we may encounter significant difficulties or costs in our efforts to obtain FDA approvals that could delay or preclude us from marketing any products we may develop. The FDA also may require post-marketing testing and surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of these products. Regulatory authorities may withdraw product approvals if we fail to comply with regulatory standards or if we encounter problems following initial marketing. With respect to patented products or technologies, delays imposed by the governmental approval process may materially reduce the period during which we might have the exclusive right to exploit the products or technologies.

After an Investigational New Drug, or IND, application becomes effective, a sponsor may commence human clinical trials in the United States. The sponsor typically conducts human clinical trials in three sequential phases, but these phases may overlap. In Phase I clinical trials, the product is tested in a small number of patients or healthy volunteers, primarily for safety at one or more doses. In Phase II, in addition to safety, the sponsor evaluates the efficacy of the product in a patient population somewhat larger than Phase I clinical trials. Phase III clinical trials typically involve additional testing for safety and clinical efficacy in an expanded population at geographically dispersed test sites. The sponsor must submit to the FDA a clinical plan, or protocol, accompanied by the approval of a clinical site responsible for ongoing review of the investigation, prior to commencement of each clinical trial. The FDA or a clinical site may order the temporary or permanent discontinuation of a clinical trial at any time, if the trial is not being conducted in accordance with FDA or clinical site requirements or presents a danger to its subjects.

The sponsor must submit to the FDA the results of the pre-clinical and clinical trials, together with, among other data, detailed information on the manufacture and composition of the product, in the form of a new drug application or, in the case of a biologic, a biologics license application. The FDA is regulating our therapeutic vaccine product candidates as biologics and, therefore, we must submit biologics license applications, or BLA, to the FDA to obtain approval of our products. The clinical trial process generally takes several years, and the FDA reviews the BLA and, when and if it decides that adequate data is available to show that the new compound is both safe and effective and that all other applicable requirements have been met, the FDA approves the drug or biologic for marketing. The amount of time taken for this approval process is a function of a number of variables, including the quality of the submission and studies presented, the potential contribution that the compound will make in improving the treatment of the disease in question, and the workload at the FDA. It is possible that our product candidates will not successfully proceed through this approval process or that the FDA will not approve them in any specific period of time.

The FDA may, during its review of a new drug application or biologics license application, ask for additional test data. If the FDA does ultimately approve a product, it may require post-marketing testing, including potentially expensive Phase IV studies, and surveillance to monitor the safety and effectiveness of the drug. In addition, the FDA may in some circumstances impose restrictions on the use of an approved drug, which may be difficult and expensive to administer, and may require prior approval of promotional materials.

Before approving a new drug application or biologics license application, the FDA also will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facilities are in compliance with guidelines for the manufacture, holding and distribution of a product. Following approval, the FDA periodically inspects drug and biologic manufacturing facilities to ensure continued compliance with manufacturing guidelines. Manufacturers must continue to expend time, money and effort in the areas of production, quality control, record keeping and reporting to ensure full compliance with those requirements. The labeling, advertising, promotion, marketing and distribution of a drug or biologic product must also be in compliance with FDA regulatory requirements. Failure to comply with applicable requirements can lead to the FDA demanding that production and shipment cease, and, in some cases, that the manufacturer recall products, or to FDA enforcement actions that can include seizures, injunctions and criminal prosecution. These failures can also lead to FDA withdrawal of marketing approval for the product.

We and our partners are also subject to regulation by the Occupational Safety and Health Administration, the Environmental Protection Agency, the Nuclear Regulatory Commission and other foreign, federal, state and local agencies under various regulatory statutes, and may in the future be subject to other environmental, health and

safety regulations that may affect our research, development and manufacturing programs. We are unable to predict whether any agency will adopt any regulation which could limit or impede on our operations.

Sales of pharmaceutical products outside the United States are subject to foreign regulatory requirements that vary widely from country to country. Whether or not we have obtained FDA approval, we must obtain approval of a product by comparable regulatory authorities in foreign countries prior to the commencement of marketing the product in those countries. The time required to obtain this approval may be longer or shorter than that required for FDA approval. The foreign regulatory approval process includes all the risks associated with FDA regulation set forth above, as well as country-specific regulations.

Employees

The Company employs seven full-time employees, as of March 20, 2008. Each of our employees has signed a confidentiality and invention assignment agreement, and none are covered by a collective bargaining agreement. We have never experienced employment-related work stoppages and consider our employee relations to be positive.

Available Information

We are subject to the informational requirements of the Exchange Act and, accordingly, file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements and other information with the SEC. You may read and copy this Annual Report on Form 10-K and the other reports and information we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, DC 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC maintains a web site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC.

Our website address is www.nwbio.com. The information available on or through our website is not part of this Annual Report on Form 10-K.

Executive Officers of Northwest Biotherapeutics, Inc.

Our executive officers and their ages and positions as of March 20, 2008, are shown below. Their biographies follow the table.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Alton L. Boynton, Ph.D.	63	President, Chief Executive Officer, Secretary and Director
Anthony P. Deasey	58	Senior Vice President of Finance, Chief Financial Officer and Director

Alton L. Boynton, Ph.D. Dr. Boynton co-founded the Company, has served as Secretary since August 2001, has served as our Chief Scientific Officer and a director since our inception in 1998, was appointed our Chief Operating Officer in August 2001, was appointed President in May 2003 and was appointed Chief Executive Officer in June 2007. Dr. Boynton has also served as Director of the Department of Molecular Medicine of Northwest Hospital from 1995-2003 where he coordinated the establishment of a program centered on carcinogenesis. Prior to joining Northwest Hospital, Dr. Boynton was Associate Director of the Cancer Research Center of Hawaii, The University of Hawaii, where he also held the positions of Director of Molecular Oncology of the Cancer Research Center and Professor of Genetics and Molecular Biology. Dr. Boynton received his Ph.D. in Radiation Biology from the University of Iowa in 1972.

Anthony P. Deasey. Mr. Deasey was elected to the Board on September 28, 2007. Mr. Deasey was appointed Senior Vice President of Finance and Chief Financial Officer of the Company on October 2, 2007. Prior to joining the Company, from November 2000 to September 2007, Mr. Deasey served as Executive Vice President, Chief Financial Officer of Celsion Corporation, an oncology drug development company. From 1998 to 2000, he was Senior Vice President and Chief Financial Officer of World Kitchen Inc. From 1996 to 1998 he served as Senior Vice President and Chief Financial Officer of Rollerblade Inc. and from 1988 to 1995 he served as Vice President Finance and Chief Financial Officer of Church and Dwight Co. Inc. Mr. Deasey is a Chartered Accountant who gained his early experience in the international operations of Chesebrough Ponds and Price Waterhouse.

Item 1A. Risk Factors

Our business, operations and financial condition are subject to various risks and uncertainties, including those described below and elsewhere in this Annual Report on Form 10-K. This section discusses factors that, individually or in the aggregate, we think could cause our actual results to differ materially from expected and historical results. Our business, operations or financial condition could be materially adversely affected by the occurrence of any of these risks.

We will need to raise additional capital, which may not be available.

As of March 31, 2008, we had approximately \$2.2 million of cash on hand. We will need additional capital in the near future to support and fund the research, development and commercialization of our product candidates and to fund our other operating activities. Specifically, we will need additional funding to complete our current DCVax®-Brain Phase II clinical trial. We are in the process of finalizing a debt financing of up to \$8.0 million designed to cover our operating cash requirements until the fourth quarter of this year. It is anticipated that up to \$4.0 million may be available to us by the end of April, and the balance may become available by June. We are also negotiating additional financing with several other parties, which we hope to complete later this year. There can be no assurance that we will be able to complete any of the financings, or that the terms for such financings will be attractive. If we are unable to obtain additional funds on a timely basis or on acceptable terms, we may be required to curtail or cease certain of our operations. We may raise additional funds by issuing additional common stock or securities (equity or debt) convertible into shares of common stock, in which case, the ownership interest of our stockholders will be diluted. Any debt financing, if available, is likely to include restrictive covenants that could limit our ability to take certain actions. Further, we may seek funding from Toucan Capital or Toucan Partners or their affiliates or other third parties. Such parties are under no obligation to provide us any additional funds, and any such funding may be dilutive to stockholders and may contain restrictive covenants. If we are unable to obtain sufficient additional capital in the near term, we may cease operations at any time.

We are likely to continue to incur substantial losses, and may never achieve profitability.

We have incurred net losses every year since our formation in March 1996 and had a deficit accumulated during the development stage of approximately \$142.3 million as of December 31, 2007. We expect that these losses will continue and anticipate negative cash flows from operations for the foreseeable future. Despite the receipt of approximately \$25.9 million of net proceeds from an offering of our common stock on AIM in June 2007, we will need additional funding, and over the medium term we will need to generate revenue sufficient to cover operating expenses, clinical trial expenses and some research and development costs to achieve profitability. We may never achieve or sustain profitability.

Our auditors have issued a “going concern” audit opinion.

Our independent auditors have indicated in their report on our December 31, 2007 financial statements that there is substantial doubt about our ability to continue as a going concern. A “going concern” opinion indicates that the financial statements have been prepared assuming we will continue as a going concern and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. Therefore, you should not rely on our consolidated balance sheet as an indication of the amount of proceeds that would be available to satisfy claims of creditors, and potentially be available for distribution to stockholders, in the event of liquidation.

As a company in the early stage of development with an unproven business strategy, our limited history of operations makes an evaluation of our business and prospects difficult.

We have had a limited operating history and we are at an early stage of development. We may not be able to achieve revenue growth in the future. We have generated the following limited revenues: \$529,000 in 2003; \$390,000 in 2004; \$124,000 in 2005; \$80,000 in 2006; and \$10,000 in 2007. We have derived most of these limited revenues from the sale of research products to a single customer, contract research and development for related

parties, research grants and royalties from licensing fees generated from a licensing agreement. Our limited operating history makes it difficult to assess our prospects for generating revenues.

We may not be able to retain existing personnel.

We employ seven full-time employees. The uncertainty of our business prospects and the volatility in the price of our common stock may create anxiety and uncertainty, which could adversely affect employee morale and cause us to lose employees whom we would prefer to retain. To the extent that we are unable to retain existing personnel, our business and financial results may suffer.

We may not be able to attract expert personnel.

In order to pursue our product development and marketing plans, we will need additional management personnel and personnel with expertise in clinical testing, government regulation, manufacturing and marketing. Attracting and retaining qualified personnel, consultants and advisors will be critical to our success. There can be no assurance that we will be able to attract personnel on acceptable terms given the competition for such personnel among biotechnology, pharmaceutical and healthcare companies, universities and non-profit research institutions. The failure to attract any of these personnel could impede the achievement of our development objectives.

We must rely at present on a single relationship with a third-party contract manufacturer, which will limit our ability to control the availability of our product candidates in the near-term.

We rely upon a single contract manufacturer, Cognate. The majority owner of Cognate is Toucan Capital, one of our majority stockholders. Cognate provides consulting services and is the manufacturer of our product candidates. We have an agreement in place with Cognate pursuant to which Cognate has agreed to provide manufacturing and other services in connection with our pivotal Phase II clinical trial for DCVax®-Brain. The agreement requires us to make minimum monthly payments to Cognate irrespective of whether any DCVax® products are manufactured. The agreement does not extend to providing services in respect of commercialization of the DCVax®-Brain product, nor for other clinical trials or commercialization of any of our other product candidates. If and to the extent we wish to engage Cognate to manufacture our DCVax®-Brain for commercialization or any of our other product candidates (including DCVax®-Prostate) for clinical trials or commercialization, we will need to enter into a new agreement with Cognate or another third-party manufacturer which might not be feasible on a timely or favorable basis. The failure to timely enroll patients in our clinical trials will have an adverse impact on our financial results due, in part, to the minimum monthly payments that we make to Cognate.

Problems with our contract manufacturer's facilities or processes could result in a failure to produce, or a delay in production, of adequate supplies of our product candidates. Any prolonged interruption in the operations of our contract manufacturer's facilities could result in cancellation of shipments or a shortfall in availability of a product candidate. A number of factors could cause interruptions, including the inability of a supplier to provide raw materials, equipment malfunctions or failures, damage to a facility due to natural disasters, changes in FDA regulatory requirements or standards that require modifications to our manufacturing processes, action by the FDA or by us that results in the halting or slowdown of production of components or finished products due to regulatory issues, the contract manufacturer going out of business or failing to produce product as contractually required or other similar factors. Because manufacturing processes are highly complex and are subject to a lengthy FDA approval process, alternative qualified production capacity may not be available on a timely basis or at all. Difficulties or delays in our contract manufacturer's manufacturing and supply of components could delay our clinical trials, increase our costs, damage our reputation and, if our product candidates are approved for sale, cause us to lose revenue or market share if it is unable to timely meet market demands.

Our success partly depends on existing and future collaborators.

We work with scientists and medical professionals at academic and other institutions, including UCLA, the University of Pennsylvania, M.D. Anderson Cancer Centre and the H. Lee Moffitt Cancer Centre, among others, some of whom have conducted research for us or have assisted in developing our research and development strategy. We do not employ these scientists and medical professionals. They may have commitments to, or contracts with,

other businesses or institutions that limit the amount of time they have available to work with us. We have little control over these individuals. We can only expect that they devote time to us as required by our license, consulting and sponsored research agreements. In addition, these individuals may have arrangements with other companies to assist in developing technologies that may compete with our products. If these individuals do not devote sufficient time and resources to our programs, or if they provide substantial assistance to our competitors, our business could be seriously harmed.

The success of our business strategy may partially depend upon our ability to develop and maintain our collaborations and to manage them effectively. Due to concerns regarding our ability to continue our operations or the commercial feasibility of our personalized DCVax[®] product candidates, these third parties may decide not to conduct business with us or may conduct business with us on terms that are less favorable than those customarily extended by them. If either of these events occurs, our business could suffer significantly.

We may have disputes with our collaborators, which could be costly and time consuming. Failure to successfully defend our rights could seriously harm our business, financial condition and operating results. We intend to continue to enter into collaborations in the future. However, we may be unable to successfully negotiate any additional collaboration and any of these relationships, if established, may not be scientifically or commercially successful.

We are involved in legal proceedings that could result in an adverse outcome, or that could otherwise harm our business. In addition, future litigation could be costly to defend or pursue and uncertain in its outcome.

We are party to various legal actions, as more fully described below under Item 3. “Legal Proceedings.” These pending legal proceedings include a dispute with Soma Partners, LLC, an investment bank, regarding certain fees Soma claims it is entitled to under an engagement letter with us, as well as a patent infringement claim filed against us by Lonza Group AG alleging infringement of certain patents relating to recombinant DNA methods, sequences, vectors, cell lines and host cells. In addition, a consolidated class action complaint has been filed against us alleging violations of Section 10(b) of the Exchange Act, and Rule 10b-5 thereunder, based on certain of our public announcements regarding the status of certain regulatory approvals for our DCVax[®]-Brain vaccine in Switzerland. We are also cooperating with a formal SEC investigation into the same matter. We can provide no assurances as to the outcome of the foregoing legal proceedings.

The defense of these or future legal proceedings could divert management’s attention and resources from the needs of our business. We may be required to make substantial payments or incur other adverse effects, in the event of adverse judgments or settlements of any such claims, investigations, or proceedings. Any legal proceeding, even if resolved in our favor, could result in negative publicity or cause us to incur significant legal and other expenses. Actual costs incurred in any legal proceedings may differ from our expectations and could exceed any amounts for which we have made reserves.

Clinical trials for our product candidates are expensive and time consuming and their outcome is uncertain.

The process of obtaining and maintaining regulatory approvals for new therapeutic products is expensive, lengthy and uncertain. It can vary substantially, based upon the type, complexity and novelty of the product involved. Accordingly, any of our current or future product candidates could take a significantly longer time to gain regulatory approval than we expect or may never gain approval, either of which could reduce our anticipated revenues and delay or terminate the potential commercialization of our product candidates.

We have limited experience in conducting and managing clinical trials.

We rely on third parties to assist us in managing and monitoring all our clinical trials. Our reliance on these third parties may result in delays in completing, or failure to complete, these trials if the third parties fail to perform under the terms of our agreements with them. We may not be able to find a sufficient alternative supplier of these services in a reasonable time period, or on commercially reasonable terms, if at all. If we were unable to obtain an alternative supplier of these services, we might be forced to curtail our Phase II clinical trial for DCVax[®]-Brain.

Our product candidates will require a different distribution model than conventional therapeutic products.

The nature of our product candidates means that different systems and methods will need to be followed for the distribution and delivery of the products than is the case for conventional therapeutic products. The personalized nature of these products, the need for centralized storage, and the requirement to maintain the products in frozen form may mean that we are not able to take advantage of distribution networks normally used for conventional therapeutic products. If our product candidates are approved, it may take time for hospitals and physicians to adapt to the requirements for handling and storage of these products, which may adversely affect their sales.

We lack sales and marketing experience and as a result may experience significant difficulties commercializing our research product candidates.

The commercial success of any of our product candidates will depend upon the strength of our sales and marketing efforts. We do not have a sales force and have no experience in sales, marketing or distribution. To fully commercialize our product candidates, we will need a substantial marketing staff and sales force with technical expertise and the ability to distribute these products. As an alternative, we could seek assistance from a third party with a large distribution system and a large direct sales force. We may be unable to put either of these plans in place. In addition, if we arrange for others to market and sell our products, our revenues will depend upon the efforts of those parties. Such arrangements may not succeed.

Even if one or more of our product candidates is approved for marketing, if we fail to establish adequate sales, marketing and distribution capabilities, independently or with others, our business will be seriously harmed.

Competition in the biotechnology and biopharmaceutical industry is intense and most of our competitors have substantially greater resources than us.

The biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Several companies, such as Cell Genesys, Inc., Dendreon Corporation, Immuno-Designed Molecules, Inc., Celldex Therapeutics, Inc., Ark Therapeutics plc, Oxford Biomedica plc, Argos Therapeutics, Inc. and Antigenics, are actively involved in the research and development of immunotherapies or cell-based cancer therapeutics. Of these companies, we believe that only Dendreon and Cell Genesys are carrying-out Phase III clinical trials with a cell-based therapy. To our knowledge no DC-based therapeutic product is currently approved for commercial sale. Additionally, several companies, such as Medarex, Inc., Amgen, Inc., Agensys, Inc., and Genentech, Inc., are actively involved in the research and development of monoclonal antibody-based cancer therapies. Currently, at least seven antibody-based products are approved for commercial sale for cancer therapy. Genentech is also engaged in several Phase III clinical trials for additional antibody-based therapeutics for a variety of cancers, and several other companies are in early stage clinical trials for such products. Many other third parties compete with us in developing alternative therapies to treat cancer, including: biopharmaceutical companies; biotechnology companies; pharmaceutical companies; academic institutions; and other research organizations.

Most of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing than we do. In addition, many of these competitors are actively seeking patent protection and licensing arrangements in anticipation of collecting royalties for use of technology they have developed. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies complementary to our programs.

We expect that our ability to compete effectively will be dependent upon our ability to: obtain additional funding; successfully complete clinical trials and obtain all requisite regulatory approvals; maintain a proprietary position in our technologies and products; attract and retain key personnel; and maintain existing or enter into new partnerships.

Our competitors may develop more effective or affordable products, or achieve earlier patent protection or product marketing and sales. As a result, any products developed by us may be rendered obsolete and non-competitive.

Our intellectual property rights may not provide meaningful commercial protection for our research products or product candidates, which could enable third parties to use our technology, or very similar technology, and could reduce our ability to compete in the market.

We rely on patent, copyright, trade secret and trademark laws to limit the ability of others to compete with us using the same or similar technology in the United States and other countries. However, as described below, these laws afford only limited protection and may not adequately protect our rights to the extent necessary to sustain any competitive advantage we may have. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and we may encounter significant problems in protecting our proprietary rights in these countries.

We have 28 issued and licensed patents (9 in the United States and 19 in other jurisdictions) and 134 patent applications pending (17 in the United States and 117 in other jurisdictions) which cover the use of dendritic cells in DCVax[®] as well as targets for either our dendritic cell or fully human monoclonal antibody therapy candidates. The issued patents expire at various dates from 2015 to 2026.

We will only be able to protect our technologies from unauthorized use by third parties to the extent that they are covered by valid and enforceable patents or are effectively maintained as trade secrets. The patent positions of companies developing novel cancer treatments, including our patent position, generally are uncertain and involve complex legal and factual questions, particularly concerning the scope and enforceability of claims of such patents against alleged infringement. Recent judicial decisions in the United States are prompting a reinterpretation of the limited case law that exists in this area, and historical legal standards surrounding questions of infringement and validity may not apply in future cases. A reinterpretation of existing U.S. law in this area may limit or potentially eliminate our patent position and, therefore, our ability to prevent others from using our technologies. The biotechnology patent situation outside the United States is even more uncertain. Changes in either the patent laws or the interpretations of patent laws in the United States and other countries may, therefore, diminish the value of our intellectual property.

We own or have rights under licenses to a variety of issued patents and pending patent applications. However, the patents on which we rely may be challenged and invalidated, and our patent applications may not result in issued patents. Moreover, our patents and patent applications may not be sufficiently broad to prevent others from using our technologies or from developing competing products. We also face the risk that others may independently develop similar or alternative technologies or design around our patented technologies.

We have taken security measures to protect our proprietary information, especially proprietary information that is not covered by patents or patent applications. These measures, however, may not provide adequate protection for our trade secrets or other proprietary information. We seek to protect our proprietary information by entering into confidentiality agreements with employees, partners and consultants. Nevertheless, employees, collaborators or consultants may still disclose our proprietary information, and we may not be able to protect our trade secrets in a meaningful way. In addition, others may independently develop substantially equivalent proprietary information or techniques or otherwise gain access to our trade secrets.

Our success will depend substantially on our ability to operate without infringing or misappropriating the proprietary rights of others.

Our success will depend to a substantial degree upon our ability to develop, manufacture, market and sell our research products and product candidates without infringing the proprietary rights of third parties and without breaching any licenses entered into by us regarding our product candidates.

There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and biopharmaceutical industries generally. Infringement and other intellectual property claims, with or without merit, can be expensive and time-consuming to litigate and can divert management's attention from

our core business. For example, Lonza Group AG has filed a complaint against us in the United States District Court for the District of Maryland alleging patent infringement. In addition, we may be exposed to future litigation by third parties based on claims that our products infringe their intellectual property rights. This risk is exacerbated by the fact that there are numerous issued and pending patents in the biotechnology industry and the fact that the validity and breadth of biotechnology patents involve complex legal and factual questions for which important legal principles remain unresolved.

Competitors may assert that our products and the methods we employ are covered by U.S. or foreign patents held by them. In addition, because patents can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our products may infringe. There could also be existing patents of which we are not aware that one or more of our products may inadvertently infringe.

If we lose a patent infringement claim, we could be prevented from selling our research products or product candidates unless we can obtain a license to use technology or ideas covered by such patent or we are able to redesign our products to avoid infringement. A license may not be available at all or on terms acceptable to us, or we may not be able to redesign our products to avoid infringement. If we are not successful in obtaining a license or redesigning our products, we may be unable to sell our products and our business could suffer.

We may not receive regulatory approvals for our product candidates or there may be a delay in obtaining such approvals.

Our products and our ongoing development activities are subject to regulation by governmental and other regulatory authorities in the countries in which we or our collaborators and distributors wish to test, manufacture or market our products. For instance, the FDA will regulate the product in the U.S. and equivalent authorities, such as the European Medicines Agency (“EMA”), will regulate in other jurisdictions. Regulatory approval by these authorities will be subject to the evaluation of data relating to the quality, efficacy and safety of the product for its proposed use.

The time taken to obtain regulatory approval varies between countries. Different regulators may impose their own requirements and may refuse to grant, or may require additional data before granting, an approval, notwithstanding that regulatory approval may have been granted by other regulators. Regulatory approval may be delayed, limited or denied for a number of reasons, including insufficient clinical data, the product not meeting safety or efficacy requirements or any relevant manufacturing processes or facilities not meeting applicable requirements.

Further trials and other costly and time-consuming assessments of the product may be required to obtain or maintain regulatory approval.

Medicinal products are generally subject to lengthy and rigorous pre-clinical and clinical trials and other extensive, costly and time-consuming procedures mandated by regulatory authorities. We may be required to conduct additional trials beyond those currently planned, which could require significant time and expense. For example, the field of cancer treatment is evolving, and the standard of care for a particular cancer could change while we are in the process of conducting the clinical trials for our product candidates. Such a change in standard of care could make it necessary for us to conduct additional clinical trials, which could delay our opportunities to obtain regulatory approval of our product candidates.

As for all biological products, we may need to provide pre-clinical and clinical data evidencing the comparability of products before and after any changes in manufacturing process both during and after product approval. Regulators may require that we generate data to demonstrate that products before or after any change are of comparable safety and efficacy if we are to rely on studies using earlier versions of the product. DCVax®-Brain has been the subject of process changes during the early clinical phase of its development and regulators may require comparability data unless they are satisfied that changes in process do not affect the quality, and hence efficacy and safety, of the product.

We plan to rely on our current DCVax®-Brain Phase II clinical trial as a single study in support of regulatory approval. While under certain circumstances, both EMA and the FDA will accept a Phase II study as a single study in support of approval, it is not yet known whether they will do so in this case. If the regulators do not consider the

Phase II study adequate on its own to support a finding of efficacy, we may be required to perform additional clinical trials in DCVax®-Brain. There is some possibility that changes requested by the FDA could complicate the licensing application process. Only the data for DCVax®-Brain has been discussed with European regulators. On an informal basis, a number of European national regulators have indicated that additional pre-clinical and clinical data could be required before the DCVax®-Brain product would be approved. However, it is not clear whether such data will be required until formal scientific advice is sought from the EMEA, which is the regulator that will ultimately review any application for approval of this product. Unless the EMEA grants a deferral or a waiver, we may also be obliged to generate clinical data in pediatric populations.

The FDA previously identified a number of deficiencies regarding the design of our original proposed Phase III clinical trial for DCVax®-Prostate. We believe we remedied these deficiencies in the new trial design for a 600-patient Phase III clinical trial, which was cleared by the FDA in January 2005. However, we now intend to split this single 600-patient Phase III trial into two separate 300-patient Phase III trials. These revisions in trial design may cause delay in the development process for DCVax®-Prostate. It is not yet known whether the FDA will consider the two-trial design sufficient for marketing approval, or whether the agency will require us to design and carry out additional studies. If, after the Phase III studies are carried out, the FDA is not satisfied that its concerns were adequately addressed, those studies could be insufficient to demonstrate efficacy and additional clinical studies could be required at that time.

Any delay in completing sufficient trials or other regulatory requirements will delay our ability to generate revenue from product sales and we may have insufficient capital resources to support its operations. Even if we do have sufficient capital resources, our ability to generate meaningful revenues or become profitable may be delayed.

Regulatory approval may be withdrawn at any time.

After regulatory approval has been obtained for medicinal products, the product and the manufacturer are subject to continual review and there can be no assurance that such approval will not be withdrawn or restricted. Regulators may also subject approvals to restrictions or conditions, or impose post-approval obligations on the holders of these approvals, and the regulatory status of such products may be jeopardized if we do not comply. Extensive post-approval safety studies are likely to be a condition of the approval and will commit us to significant time and expense.

We may fail to comply with regulatory requirements.

Our success will be dependent upon our ability, and our collaborative partners' abilities, to maintain compliance with regulatory requirements, including regulators' current good manufacturing practices ("cGMP") and safety reporting obligations. The failure to comply with applicable regulatory requirements can result in, among other things, fines, injunctions, civil penalties, total or partial suspension of regulatory approvals, refusal to approve pending applications, recalls or seizures of products, operating and production restrictions and criminal prosecutions.

We may be subject to sanctions if we are determined to be promoting our investigational products prior to regulatory approval or for unapproved uses.

Laws in both the U.S. and Europe prohibit us from promoting any product that has not received approval from the appropriate regulator, or from promoting a product for an unapproved use. If any regulator determines that we have engaged in such pre-approval, or off-label promotion, through our website, press releases, or other communications, the authority could require us to change the content of those communications and could also take regulatory enforcement action, including the issuance of a warning letter, requirements for corrective action, civil fines, and criminal penalties. In the event of a product liability lawsuit, materials that appear to promote a product for unapproved uses may increase our product liability exposure.

We may not obtain or maintain orphan drug status and the associated benefits, including marketing exclusivity.

We may not receive the benefits associated with orphan drug designation. This may result from a failure to achieve or maintain orphan drug status or the development of a competing product that has an orphan designation for the same indication. In Europe, the orphan status of DCVax®-Brain will be reassessed shortly prior to the product receiving any regulatory approval. The EMEA will need to be satisfied that there is evidence that DCVax®-Brain offers a significant benefit relative to existing therapies for the treatment of glioma if DCVax®-Brain is to maintain its orphan drug status.

New legislation may have an adverse effect on our business.

Changes in applicable legislation and/or regulatory policies or discovery of problems with the product, production process, site or manufacturer may result in delays in bringing products to market, the imposition of restrictions on the product's sale or manufacture, including the possible withdrawal of the product from the market, or may otherwise have an adverse effect on our business.

The availability and amount of reimbursement for our product candidates and the manner in which government and private payers may reimburse for our potential products is uncertain.

In many of the markets where we intend to operate, the prices of pharmaceutical products are subject to direct price controls (by law) and to drug reimbursement programs with varying price control mechanisms.

We expect that many of the patients in the United States who may seek treatment with our products that may be approved for marketing will be eligible for coverage under Medicare, the federal program that provides medical coverage for the aged and disabled. Other patients may be covered by private health plans or may be uninsured. The Medicare program is administered by the Centers for Medicare & Medicaid Services ("CMS"), an agency within the U.S. Department of Health and Human Services. Coverage and reimbursement for products and services under Medicare are determined pursuant to regulations promulgated by CMS and pursuant to CMS's subregulatory coverage and reimbursement determinations. It is difficult to predict how CMS will apply those regulations and subregulatory determinations to novel products such as ours.

Moreover, the methodology under which CMS makes coverage and reimbursement determinations is subject to change, particularly because of budgetary pressures facing the Medicare program. For example, the Medicare Prescription Drug, Improvement, and Modernization Act (the "Medicare Modernization Act"), enacted in 2003, provided for a change in reimbursement methodology that has reduced the Medicare reimbursement rates for many drugs, including oncology therapeutics. Even if our product candidates are approved for marketing in the U.S., if we are unable to obtain or retain coverage and adequate levels of reimbursement from Medicare or from private health plans, our ability successfully to market such products in the U.S. will be adversely affected. The manner and level at which the Medicare program reimburses for services related to our product candidates (e.g., administration services) also may adversely affect our ability to market or sell any of our product candidates that may be approved for marketing in the U.S.

In the U.S., efforts to contain or reduce health care costs have resulted in many legislative and regulatory proposals at both the federal and state level, and it is difficult to predict which, if any, of these proposals will be enacted, and, if so, when. Cost control initiatives by governments or third party payers could decrease the price that we receive for any one or all of our potential products or increase patient coinsurance to a level that makes our product candidates unaffordable for patients. In addition, government and private health plans are more persistently challenging the price and cost-effectiveness of therapeutic products. If third-party payers were to determine that one or more of our product candidates is not cost-effective, this could result in refusal to cover those products or in coverage at a low reimbursement level. Any of these initiatives or developments could prevent us from successfully marketing and selling any of our potential products.

In the E.U., governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of such products to consumers. The approach taken varies from member state to member state. Some jurisdictions operate positive

and/or negative list systems under which products may only be marketed once a reimbursement price has been agreed. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products, as exemplified by the role of the National Institute for Health and Clinical Excellence in the U.K. which evaluates the data supporting new medicines and passes reimbursement recommendations to the government. In addition, in some countries cross-border imports from low-priced markets (parallel imports) exert commercial pressure on pricing within a country.

DCVax® is our only technology in clinical development.

Unlike many pharmaceutical companies that have a number of products in development and which utilize many technologies, we are dependent on the success of our DCVax® platform and, potentially, our CXCR4 antibody technology. While DCVax® technology has a number of potentially beneficial uses, if that core technology is not commercially viable, we would have to rely on the CXCR4 technology, which is at an early pre-clinical stage of development, for our success. If the CXCR4 technology also fails, we currently do not have other technologies to fall back on and our business could fail.

We may be prevented from using the DCVax® name in Europe.

The EMEA has indicated that DCVax® may not be an acceptable name because of the suggested reference to a vaccine. Failure to obtain the approval for the use of the DCVax® name in Europe would require us to market our potential products in Europe under a different name which could impair the successful marketing of our product candidates and may have a material adverse effect on our results of operations and financial condition.

Competing generic medicinal products may be approved.

In the E.U., there exists a process for the approval of generic biological medicinal products once patent protection and other forms of data and market exclusivity have expired. If generic medicinal products are approved, competition from such products may reduce sales of our products. Other jurisdictions, including the U.S., are considering adopting legislation that would allow the approval of generic biological medicinal products.

We may be exposed to potential product liability claims, and insurance against these claims may not be available to us at a reasonable rate in the future, if at all.

Our business exposes us to potential product liability risks that are inherent in the testing, manufacturing, marketing and sale of therapeutic products. Our insurance coverage may not be adequate to cover claims against us or may not be available to us at an acceptable cost, if at all. Regardless of their merit or eventual outcome, product liability claims may result in decreased demand for a product, injury to our reputation, withdrawal of clinical trial volunteers and loss of revenues. Thus, whether or not we are insured, a product liability claim or product recall may result in losses that could be material.

We use hazardous materials and must comply with environmental, health and safety laws and regulations, which can be expensive and restrict how we do business.

We store, handle, use and dispose of controlled hazardous, radioactive and biological materials in our business. Our current use of these materials generally is below thresholds giving rise to burdensome regulatory requirements. Our development efforts, however, may result in our becoming subject to additional requirements, and if we fail to comply with applicable requirements we could be subject to substantial fines and other sanctions, delays in research and production, and increased operating costs. In addition, if regulated materials were improperly released at our current or former facilities or at locations to which we send materials for disposal, we could be liable for substantial damages and costs, including cleanup costs and personal injury or property damages, and incur delays in research and production and increased operating costs.

Insurance covering certain types of claims of environmental damage or injury resulting from the use of these materials is available but can be expensive and is limited in its coverage. We have no insurance specifically covering

environmental risks or personal injury from the use of these materials and if such use results in liability, our business may be seriously harmed.

Toucan Capital and Toucan Partners beneficially own a majority of our shares of common stock and, as a result, the trading price for our common stock may be depressed and these stockholders can take actions that may be adverse to the interests of other investors.

As of March 20, 2008, Toucan Capital and its affiliate, Toucan Partners collectively beneficially owned an aggregate of 21,872,196 shares of our common stock, representing approximately 51.7 percent of our outstanding common stock. In addition, as of March 20, 2008, Toucan Capital may acquire an aggregate of approximately 22.0 million shares of common stock upon exercise of warrants and Toucan Partners may acquire an aggregate of approximately 8.8 million shares of common stock upon the exercise of warrants. This significant concentration of ownership may adversely affect the trading price of our common stock because investors often perceive disadvantages in owning stock in companies with controlling stockholders. Toucan Capital has the ability to exert substantial influence over all matters requiring approval by our stockholders, including the election and removal of directors and any proposed merger, consolidation or sale of all or substantially all of our assets. In addition, a managing member of the manager of Toucan Capital is a member of the Board. In light of the foregoing, Toucan Capital can significantly influence the management of our business and affairs. This concentration of ownership could have the effect of delaying, deferring or preventing a change in control, or impeding a merger or consolidation, takeover or other business combination that could be favorable to investors.

Our Certificate of Incorporation and Bylaws and stockholder rights plan may delay or prevent a change in our management.

Our Seventh Amended and Restated Certificate of Incorporation, as amended (the “Certificate of Incorporation”), Third Amended and Restated Bylaws (the “Bylaws”) and stockholder rights plan contain provisions that could delay or prevent a change in our management team. Some of these provisions:

- authorize the issuance of preferred stock that can be created and issued by the Board without prior stockholder approval, commonly referred to as “blank check” preferred stock, with rights senior to those of the common stock;
- allow the Board to call special meetings of stockholders at any time but restrict the stockholders from calling special meetings;
- authorize the Board to issue dilutive common stock upon certain events; and
- provide for a classified Board.

These provisions could allow our Board to affect the rights of an investor since the Board can make it more difficult for holders of common stock to replace members of the Board. Because the Board is responsible for appointing the members of the management team, these provisions could in turn affect any attempt to replace the current management team.

There may not be an active, liquid trading market for our common stock.

Our common stock is currently listed on the Over-The-Counter Bulletin Board, or OTCBB, and on AIM, which are generally recognized as being less active markets than NASDAQ, the stock exchange on which our common stock previously was listed. You may not be able to sell your shares at the time or at the price desired. There may be significant consequences associated with our stock trading on the OTCBB rather than a national exchange. The effects of not being able to list our securities on a national exchange include:

- limited release of the market price of our securities;
- limited news coverage;
- limited interest by investors in our securities;
- volatility of our stock price due to low trading volume;

- increased difficulty in selling our securities in certain states due to “blue sky” restrictions; and
- limited ability to issue additional securities or to secure additional financing.

The resale, or the availability for resale, of the shares placed in the PIPE Financing could have a material adverse impact on the market price of our common stock.

The PIPE Financing, completed in March 2006, included the private placement of an aggregate of approximately 2.6 million shares of common stock and accompanying warrants to purchase an aggregate of approximately 1.3 million shares of common stock. In connection with the PIPE Financing, we agreed to register, and subsequently did register, the resale of the shares of common stock sold in the PIPE Financing and the shares underlying the warrants issued in the PIPE Financing. The resale of a substantial number of the shares placed in the PIPE Financing or even the availability of these shares for resale, could have a material adverse impact on our stock price.

Because our common stock is subject to “penny stock” rules, the market for the common stock may be limited.

Because our common stock is subject to the SEC’s “penny stock” rules, broker-dealers may experience difficulty in completing customer transactions and trading activity in our securities may be adversely affected. Under the “penny stock” rules promulgated under the Exchange Act, broker-dealers who recommend such securities to persons other than institutional accredited investors must:

- make a special written suitability determination for the purchaser;
- receive the purchaser’s written agreement to a transaction prior to sale;
- provide the purchaser with risk disclosure documents which identify certain risks associated with investing in “penny stocks” and which describe the market for these “penny stocks” as well as a purchaser’s legal remedies; and
- obtain a signed and dated acknowledgment from the purchaser demonstrating that the purchaser has actually received the required risk disclosure document before a transaction in a “penny stock” can be completed.

As a result of these rules, broker-dealers may find it difficult to effectuate customer transactions and trading activity in our common stock may be adversely affected. As a result, the market price of our common stock may be depressed, and stockholders may find it more difficult to sell our common stock.

The price of our common stock may be highly volatile.

The share price of publicly traded biotechnology and emerging pharmaceutical companies, particularly companies without earnings and consistent product revenues, can be highly volatile and are likely to remain highly volatile in the future. The price at which our common stock is quoted and the price which investors may realize in sales of their shares of our common stock will be influenced by a large number of factors, some specific to us and our operations and some unrelated to our operating performance. These factors could include the performance of our marketing programs, large purchases or sales of the shares, currency fluctuations, legislative changes and general economic conditions. In the past, share class action litigation has often been brought against companies that experience volatility in the market price of their shares. Whether or not meritorious, litigation brought against us following fluctuations in the trading price of our common stock could result in substantial costs, divert management’s attention and resources and harm our financial condition and results of operations.

Our business could be adversely affected by animal rights activists.

Our business activities have involved animal testing. These types of activities have been the subject of controversy and adverse publicity. Some organizations and individuals have attempted to stop animal testing by pressing for legislation and regulation in these areas. To the extent the activities of such groups are successful, our business could be adversely affected. Negative publicity about us, our pre-clinical trials and our product candidates could have an adverse impact on our sales and profitability.

The requirements of the Sarbanes-Oxley Act of 2002 and other U.S. securities laws reporting requirements impose cost and operating challenges on us.

We are subject to certain of the requirements of the Sarbanes-Oxley Act of 2002 in the U.S. and the reporting requirements under the Exchange Act. These laws require, among other things, an attestation report of our independent auditor on the effectiveness of our internal control over financial reporting, currently expected to begin with our annual report for the year ended December 31, 2009, as well as the filing of annual reports on Form 10-K, quarterly reports on Form 10-Q and periodic reports on Form 8-K following the happening of certain material events. To meet these compliance deadlines, we will need to have our internal controls designed, tested and operational by early 2008 to ensure compliance with applicable standards. We initiated the process of documenting and evaluating our internal controls and financial reporting procedures in early 2008. This process is ongoing and will continue to likely be time consuming and will result in us having to significantly change our controls and reporting procedures due to our small number of employees and lack of governance controls. Most similarly-sized companies registered with the SEC have had to incur significant costs to ensure compliance. Moreover, any failure by us to comply with such provisions would be required to be disclosed publicly, which could lead to a loss of public confidence in our internal controls and could harm the market price of our common stock.

Our management has identified significant internal control deficiencies, which management and our independent auditor believe constitute material weaknesses.

In connection with the preparation of our financial statements for the year ended December 31, 2007, certain significant internal control deficiencies became evident to management that, in the aggregate, represent material weaknesses, including:

- lack of a sufficient number of independent directors on our audit committee;
- insufficient segregation of duties in our finance and accounting function due to limited personnel;
- insufficient corporate governance policies; and
- inadequate approval and control over transactions and commitments made on our behalf by related parties.

As part of the communications by our independent auditors with our audit committee with respect to audit procedures for the year ended December 31, 2007, our independent auditors informed the audit committee that these deficiencies constituted material weaknesses, as defined by Auditing Standard No. 5, "An Audit of Internal Control Over Financial Reporting that is Integrated with an Audit of Financial Statements and Related Independence Rule and Conforming Amendments," established by the Public Company Accounting Oversight Board, or PCAOB. We intend to take appropriate and reasonable steps to make the necessary improvements to remediate these deficiencies but we cannot be certain that we will have the necessary financing to address these deficiencies or that we will be able to attract qualified individuals to serve on our Board and to take on key management roles within the Company. Our failure to successfully remediate these issues could lead to heightened risk for financial reporting mistakes and irregularities and a further loss of public confidence in our internal controls that could harm the market price of our common stock.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

Prior to September 2007, we maintained our headquarters in Bothell, Washington, where we currently sublease approximately 2,325 square feet of general administration space. Our current sublease expires on June 30, 2008. On March 21, 2008, we executed a sublease agreement with Toucan Capital Corporation, an affiliate of Toucan Capital and Toucan Partners, for our new corporate headquarters located at 7600 Wisconsin Avenue, Suite 750, Bethesda, Maryland 20814. This sublease agreement is effective as of July 1, 2007 and expires on October 31, 2016, unless sooner terminated according to its terms. Previously, we had been occupying our Bethesda headquarters under an oral arrangement with Toucan Capital Corporation, whereby we were required to pay base rent of \$32,949.10 per

month through December 31, 2007. Under the Sublease Agreement, we are required to pay base rent of \$34,000 per month during the year 2008, which monthly amount increases by \$1,000 on an annual basis, to a maximum of \$42,000 per month during 2016, the last year of the term of the lease. In addition to monthly base rent, we are obligated to pay operating expenses allocable to the subleased premises under Toucan Capital Corporation's master lease.

Item 3. *Legal Proceedings*

From time to time, we are involved in claims and suits that arise in the ordinary course of our business. Although management currently believes that resolving any such claims against us will not have a material adverse impact on our business, financial position or results of operations, these matters are subject to inherent uncertainties and management's view of these matters may change in the future. In addition to any such claims and suits, we are involved in the following legal proceedings.

SOMA Arbitration

We signed an engagement letter, dated October 15, 2003, with Soma Partners, LLC, or Soma, a New Jersey-based investment bank, pursuant to which we engaged them to locate potential investors. Pursuant to the terms of the engagement letter, any disputes arising between the parties would be submitted to arbitration in the New York metropolitan area. A dispute arose between the parties. Soma filed an arbitration claim against us with the American Arbitration Association in New York, NY claiming unpaid commission fees of \$186,000 and seeking declaratory relief regarding potential fees for future transactions that may be undertaken by us with Toucan Capital. We vigorously disputed Soma's claims on multiple grounds. We contended that we only owed Soma approximately \$6,000.

Soma subsequently filed an amended arbitration claim, claiming unpaid commission fees of \$339,000 and warrants to purchase 6% of the aggregate securities issued to date, and seeking declaratory relief regarding potential fees for future financing transactions which may be undertaken by us with Toucan Capital and others, which could potentially be in excess of \$4 million. Soma also requested the arbitrator award its attorneys' fees and costs related to the proceedings. We strongly disputed Soma's claims and defended ourselves.

The arbitration proceedings occurred from March 8-10, 2005 and on May 24, 2005, the arbitrator ruled in our favor and denied all claims of Soma. In particular, the arbitrator decided that we did not owe Soma the fees and warrants sought by Soma, that we would not owe Soma fees in connection with future financings, if any, and that we had no obligation to pay any of Soma's attorneys' fees or expenses. The arbitrator agreed with us that the only amount we owed Soma was \$6,702.87, which payment we made on May 27, 2005.

On August 29, 2005, Soma filed a notice of petition to vacate the May 24, 2005 arbitration award with the Supreme Court of the State of New York. On December 30, 2005, the Supreme Court of the State of New York dismissed Soma's petition.

On February 3, 2006, Soma filed another notice of appeal with the Supreme Court of the State of New York. On December 6, 2006, we filed our brief for this appeal and on December 12, 2006, Soma filed its reply brief. On June 19, 2007, the Appellate Division, First Department of the Supreme Court of the State of New York, reversed the December 30, 2005 decision and ordered a new arbitration proceeding. On July 26, 2007, we filed a Motion for Leave to Appeal with the Court of Appeals of the State of New York and on August 3, 2007 Soma filed its reply brief. On October 16, 2007, the Court of Appeals of the State of New York denied our motion to appeal. We intend to continue to vigorously defend ourselves against the claims of Soma.

Lonza Patent Infringement Claim

On July 27, 2007, Lonza Group AG ("Lonza") filed a complaint against us in the United States District Court for the District of Delaware alleging patent infringement relating to recombinant DNA methods, sequences, vectors, cell lines and host cells. The complaint sought temporary and permanent injunctions enjoining us from infringing Lonza's patents and unspecified damages. On November 27, 2007, the complaint was dismissed from the United States District Court for the District of Delaware. Also on November 27, 2007, a new complaint was

filed by Lonza in the United States District Court for the District of Maryland. The new complaint alleged the same patent infringement relating to recombinant DNA methods, sequences, vectors, cell lines and host cells by the Company's DCVax®. We believe that Lonza's remaining claim is meritless and intend to vigorously defend this action. On December 13, 2007, Lonza withdrew all of its claims relating to all of our products other than DCVax®-Prostate.

Stockholder Class Action Lawsuits

On August 13, 2007, a complaint was filed in the U.S. District Court for the Western District of Washington naming the Company, the Chairperson of the Board, Linda F. Powers, and our Chief Executive Officer, Alton L. Boynton, as defendants in a class action for violation of federal securities laws. After this complaint was filed, five additional complaints were filed in other jurisdictions alleging similar claims. The complaints were filed on behalf of purchasers of the Company's common stock between July 9, 2007 and July 18, 2007 and allege violations of Section 10(b) of the Exchange Act and Rule 10b-5 thereunder. The complaints seek unspecified compensatory damages, costs and expenses. We dispute these claims and intend to vigorously defend these actions.

On December 18, 2007, a consolidated complaint was filed in the U.S. District Court for the Western District of Washington consolidating the shareholder actions previously filed.

SEC Inquiry

On August 13, 2007, we were notified that the SEC had initiated a non-public informal inquiry regarding the events surrounding our application for Swiss regulatory approval and related press releases dated July 9, 2007 and July 16, 2007. On March 3, 2008 we were notified that the SEC had initiated a formal investigation regarding this matter. We have been cooperating with the SEC in connection with the inquiry, and will continue to do so.

Management Warrants

On November 13, 2003, we borrowed an aggregate of \$335,000 from certain members of our management. As part of the consideration for this loan, the lenders received warrants exercisable to acquire an aggregate of 0.25 million shares of our common stock. From March 2006 through May 2006, all of these warrants were exercised for common stock on a net exercise basis, pursuant to the terms of the warrants.

Two former members of management who had participated as lenders in our management loans have claimed that they are entitled to receive, for no additional cash consideration, an aggregate of up to approximately 630,000 additional shares of our common stock due to the alleged triggering of an anti-dilution provision in the warrant agreements. We do not believe that these claims have merit and, in the event such claims are pursued, we intend to vigorously defend against them.

We have no other legal proceedings pending at this time.

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

There were no matters submitted for stockholders' approval in the quarter ended December 31, 2007.

PART II

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

Market Information and Price Range of Common Stock

Our common stock is quoted on the OTCBB under the symbol "NWBO.OB" The following table summarizes our common stock's high and low sales prices for the periods indicated as reported by the OTCBB. Quotations on the OTCBB reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	2006		2007	
	High	Low	High	Low
4th Quarter	\$ 4.50	\$0.90	\$2.40	\$0.75
3rd Quarter	8.25	2.25	7.33	1.85
2nd Quarter	8.25	3.30	3.75	1.35
1st Quarter	10.35	1.35	2.40	0.75

As of April 14, 2008, there were approximately 335 holders of record of our common stock. Such holders include any broker or clearing agencies as holders of record but exclude the individual stockholders whose shares are held by brokers or clearing agencies.

Dividend Policy

We have never declared or paid cash dividends on our capital stock. We currently intend to retain future earnings, if any, to fund the development and growth of our business and do not currently anticipate paying any cash dividends in the foreseeable future. The payment of future dividends, if any, will be determined by our Board.

Item 6. Selected Financial Data

The following selected financial data as of and for each of the years ending December 31, 2003 to December 31, 2007 and for the period from our inception through December 31, 2007 is derived from our audited consolidated financial statements. The financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” our financial statements and notes thereto and other financial information included elsewhere in this Annual Report on Form 10-K.

	Year Ended December 31,					Period from March 18, 1996 (Inception) to December 31, 2007
	2003	2004	2005	2006	2007	
	(Dollar amounts in thousands)					
Statement of Operations Data:						
Total Revenues	\$ 529	\$ 390	\$ 124	\$ 80	\$ 10	\$ 2,729
Operating Costs and Expenses						
Cost of research material sales	79	40	12	—	—	382
Research and development	1,624	3,621	4,469	3,777	8,778	44,622
General and administrative	4,059	2,845	2,005	2,273	7,171	40,138
Depreciation and amortization	207	132	63	37	19	2,322
Loss on facility sublease	174	—	—	—	—	895
Asset impairment loss and (gain) loss on disposal of equipment	904	130	—	(10)	—	2,056
Total operating costs and expenses	7,047	6,768	6,549	6,077	15,968	90,415
Loss from operations	(6,518)	(6,378)	(6,425)	(5,997)	(15,958)	(87,686)
Other Income (expense), net						
Warrant valuation	—	(368)	—	7,127	—	6,759
Gain on sale of intellectual property to Medarex	816	—	—	—	—	3,656
Interest expense	(73)	(1,765)	(3,517)	(2,564)	(5,629)	(21,330)
Interest income and other	23	3	5	39	340	1,115
Net loss	(5,752)	(8,508)	(9,937)	(1,395)	(21,247)	(97,486)
Issuance of common stock in connection with elimination of Series A and Series A-1 preferred stock preferences	—	—	—	—	(12,349)	(12,349)
Modification of Series A preferred stock warrants	—	—	—	—	(2,306)	(2,306)
Modification of Series A-1 preferred stock warrants	—	—	—	—	(16,393)	(16,393)
Series A preferred stock dividends	—	—	—	—	(334)	(334)
Series A-1 preferred stock dividends	—	—	—	—	(917)	(917)
Warrants issued on Series A and Series A-1 preferred stock dividends	—	—	—	—	(4,664)	(4,664)
Accretion of redemption value of mandatorily redeemable membership units and preferred stock	—	—	—	—	—	(1,872)
Series A preferred stock redemption fee	—	—	—	—	—	(1,700)
Beneficial conversion feature of series D convertible preferred stock	—	—	—	—	—	(4,274)
Net loss applicable to common stockholders	<u>\$(5,752)</u>	<u>\$(8,508)</u>	<u>\$(9,937)</u>	<u>\$(1,395)</u>	<u>\$(58,210)</u>	<u>\$(142,295)</u>
Net loss per share applicable to common stockholders — basic and diluted	<u>\$ (4.56)</u>	<u>\$ (6.70)</u>	<u>\$ (7.82)</u>	<u>\$ (0.39)</u>	<u>\$ (2.38)</u>	
Weighted average shares used in computing basic and diluted net loss per share	<u>1,261</u>	<u>1,269</u>	<u>1,271</u>	<u>3,562</u>	<u>24,420</u>	

	December 31,				
	2003	2004	2005	2006	2007
	(In thousands)				
Balance Sheet Data:					
Cash	\$ 255	\$ 248	\$ 352	\$ 307	\$7,861
Working capital (deficit)	\$(392)	\$(5,353)	\$(11,502)	\$(5,998)	\$5,785
Total assets	\$ 871	\$ 558	\$ 631	\$ 504	\$8,706
Long-term obligations, net of current portion and discounts	\$ 49	\$ 12	\$ 3	\$ —	\$ —
Total stockholders' equity (deficit)	\$ 16	\$(5,217)	\$(11,418)	\$(5,949)	\$5,807

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 Item 8. "Financial Statements and Supplementary Data" included below in this Annual Report on Form 10-K. Operating results are not necessarily indicative of results that may occur in future periods.

This discussion and analysis contains forward-looking statements that involve a number of risks, uncertainties and assumptions. Actual events or results may differ materially from our expectations. Important factors that could cause actual results to differ materially from those stated or implied by our forward-looking statements include, but are not limited to, those set forth in Item 1A. "Risk Factors" in this Annual Report. All forward-looking statements included in this Annual Report are based on information available to us on the date of this Annual Report and, except as required by law, we undertake no obligation to update publicly or revise any forward-looking statements.

Overview

We are a development stage biotechnology company focused on discovering, developing and commercializing immunotherapy products that generate and enhance immune system responses to treat cancer. Data from our clinical trials suggest that our cancer therapies significantly extend both time to recurrence and survival, while providing a superior quality of life with no debilitating side effects when compared with current therapies. For additional information regarding our business, product candidates and the status of our clinical trials, see Item 1. "Business" in this Annual Report on Form 10-K.

Our financing activities are described below under "— Liquidity and Capital Resources". We will need to raise additional capital to fund our operations, including our Phase II DCVax®-Brain clinical trial. Depending on the trial results, we plan to seek product approval for DCVax®-Brain, our leading product candidate, in both the U.S. and E.U.

We have experienced recurring losses from operations and have a deficit accumulated during the development stage of \$142.3 million at December 31, 2007. In addition, our independent registered public accounting firm has indicated in its report on our financial statements included in this Annual Report on Form 10-K that there is substantial doubt about our ability to continue as a going concern.

Going Concern

Our financial statements for the year ended December 31, 2007 have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. Nevertheless, we have experienced recurring losses from operations and have a deficit accumulated during the development stage of \$142.3 million that raises substantial doubt about our ability to continue as a going concern and our auditors have issued an opinion, for the year ended December 31, 2007, which states that there is substantial doubt about our ability to continue as a going concern.

If we are unable to continue as a going concern, we would consider all opportunities for creating value in the Company, including investigating ways to advance our dendritic cell-based product and monoclonal antibody candidates, including pursuing potential corporate partnerships for our monoclonal antibody candidates, and other alternatives, including the possible sale of some or all of our assets.

Expenses

From our inception through December 31, 2007, we incurred costs of approximately \$44.6 million associated with our research and development activities. Because our technologies are unproven, we are unable to estimate with any certainty the costs we will incur in the continued development of our product candidates for commercialization.

General and administrative expenses include salary and benefit expenses related to administrative personnel, cost of facilities, insurance, legal support, as well as amortization costs of stock options granted to employees and warrants issued to consultants for their professional services.

To date, our revenues have primarily been derived from the manufacture and sale of research materials, contract research and development services and research grants from the federal government.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") require our management to make estimates and assumptions that affect the amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of our financial statements, as well as the amounts of revenues and expenses during periods covered by our financial statements. The actual amounts of these items could differ materially from those estimates. Our accounting policies are described in more detail in Note 3 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. We have identified the following as the most critical accounting policies and estimates used in this preparation of our consolidated financial statements.

Restructuring Liabilities.

When circumstances warrant, we may elect to discontinue certain business activities or change the manner in which we conduct ongoing operations. When such a change is made, management will estimate the costs to exit a business or restructure ongoing operations. The components of the estimates may include estimates and assumptions regarding the timing and costs of future events and activities that represent management's best expectations based on known facts and circumstances at the time of estimation. Management periodically reviews its restructuring estimates and assumptions relative to new information, if any, of which it becomes aware. Should circumstances warrant, management will adjust its previous estimates to reflect what it then believes to be a more accurate representation of expected future costs. Because management's estimates and assumptions regarding restructuring costs include probabilities of future events, such estimates are inherently vulnerable to changes due to unforeseen circumstances, changes in market conditions, regulatory changes, changes in existing business practices and other circumstances that could materially and adversely affect the results of operations.

Impairment of Long-Lived Assets

As of December 31, 2007, we had approximately \$19,000 of property and equipment, net of accumulated depreciation. In accounting for these long-lived assets, we make estimates about the expected useful lives of the assets, the expected residual values of the assets, and the potential for impairment based on events or circumstances. The events or circumstances could include a significant decrease in market value, a significant change in asset condition or a significant adverse change in regulatory climate. Application of the test for impairment requires judgment.

Stock-Based Compensation

Effective January 1, 2006, we adopted Statement of Financial Accounting Standards, or SFAS, No. 123 (revised 2004), *Share-Based Payment* ("SFAS 123R"), using the modified prospective method, and therefore were not required to restate prior periods' results. Under this method, we recognized compensation expense (a) for all equity incentive awards granted prior to, but not yet vested as of January 1, 2006, based on the grant-date fair value estimated in accordance with the original provisions of SFAS 123 and Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* ("APB 25"), and (b) for all equity incentive awards granted, modified or settled subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS 123R.

Determining the appropriate fair-value model and calculating the fair value of share-based awards at the date of grant requires judgment. We use the Black-Scholes option pricing model to estimate the fair value of employee stock options and rights to purchase shares under stock plans, consistent with the provisions of SFAS 123R. Option pricing models, including the Black-Scholes model, also require the use of input assumptions, including expected volatility, expected life, expected dividend rate, and expected risk-free rate of return. We estimate the volatility of our common stock based on the historical volatility over the most recent period corresponding with the estimated expected life of the award. We estimate expected life of the award based on historical experience with similar awards, giving consideration to the contractual terms, vesting schedules and pre-vesting and post-vesting forfeitures. Higher volatility and expected lives result in a proportional increase to share-based compensation determined at the date of grant. The expected dividend rate and expected risk-free rate of return are not as significant to the calculation of fair value. Although the fair value of our share-based awards is determined in accordance with SFAS 123R and SEC Staff Accounting Bulletin, or SAB, 107, *Share-Based Payment*, the Black-Scholes option pricing model requires the input of highly subjective assumptions, and other reasonable assumptions could provide differing results.

In addition, SFAS 123R requires us to develop a forfeiture rate which is an estimate of the number of share-based awards that will be forfeited prior to vesting. Quarterly changes in the estimated forfeiture rate can potentially have a significant effect on reported share-based compensation, as the effect of adjusting the forfeiture rate for all expense amortization after January 1, 2006 is recognized in the period the forfeiture estimate is changed.

Revenue Recognition

We earn revenues through research grants and previously earned revenues through sale of research materials and providing research services to third parties. Revenues from sale of research materials are to multiple customers with whom there is no other contractual relationship and are recognized when shipped to the customer and title has passed.

Research contracts and grants require us to perform research activities as specified in each respective contract or grant on a best efforts basis, and we are paid based on the fees stipulated in the respective contracts and grants which approximate the costs incurred by us in performing such activities. We recognize revenue under the research contracts and grants based on completion of performance under the respective contracts and grants where no ongoing obligation on our part exists. Direct costs related to these contracts and grants are reported as research and development expenses.

Results of Operations

Operating costs:

Operating costs and expenses consist primarily of research and development expenses, including clinical trial expenses which rise when we are actively participating in clinical trials, and general and administrative expenses.

Research and development:

Discovery and preclinical research and development expenses include scientific personnel related salary and benefit expenses, costs of laboratory supplies used in our internal research and development projects, travel, regulatory compliance, and expenditures for preclinical and clinical trial operation and management when we are actively engaged in clinical trials.

Because we are a development stage company, we do not allocate research and development costs on a project basis. We adopted this policy, in part, due to the unreasonable cost burden associated with accounting at such a level of detail and our limited number of financial and personnel resources. We shifted our focus, starting in 2002, from discovering, developing, and commercializing immunotherapy products to conserving cash and primarily concentrating on securing new working capital to re-activate our two DCVax® clinical trial programs.

General and administrative:

General and administrative expenses include administrative personnel related salary and benefit expenses, cost of facilities, insurance, travel, legal support, property and equipment depreciation, amortization of stock options and warrants, and amortization of debt discounts and beneficial conversion costs associated with our debt financing.

Year Ended December 31, 2006 Compared to the Year Ended December 31, 2007

For the year ended December 31, 2007, our loss from operations was approximately \$16.0 million, compared to \$6.0 million for the year ended December 31, 2006. Approximately 55% of our expended resources in 2007 were apportioned to the re-activation of our two DCVax® protocols and other research and development ventures. From our inception through December 31, 2007, we incurred costs of approximately \$44.6 million associated with our research and development activities. Because our technologies are unproven, we are unable to estimate with any certainty the costs we will incur in the continued development of our product candidates for commercialization.

Total Revenues. Revenues decreased 88% from \$80,000 for the year ended December 31, 2006 to \$10,000 for the year ended December 31, 2007. The overall decrease is primarily due to the fact we completed a sale of certain license rights during 2006 which was not duplicated in 2007.

Research and Development Expense. Research and development expense increased 132% from \$3.8 million for the year ended December 31, 2006 to \$8.8 million for the year ended December 31, 2007. This increase was primarily due to an increase in monthly contract manufacturing costs, as well as an increase in support costs related to the development of a clinical trial program and potential compassionate use/named patient programs in Switzerland and elsewhere. In January 2007, we began to prepare for the enrollment of our first patients in our Phase II DCVax®-Brain clinical trial, which increased our pre-manufacturing costs. These costs have continued to increase as we initiate additional sites and prepare to and enroll new patients in this clinical trial.

General and Administrative Expense. General and administrative expense increased 215% from approximately \$2.3 million for the year ended December 31, 2006 to \$7.2 million for the year ended December 31, 2007. In addition to higher staffing costs and costs associated with our AIM listing in the United Kingdom, specifically board of directors and insurance costs, general and administrative costs increased due to a number of potentially non-recurring costs including, start-up costs, mainly consulting and travel costs, due to expansion of our business activities in the United States and internationally, specifically in Switzerland, Spain and Israel; legal costs associated with ongoing litigation; and FAS 123(R) expense associated with stock option grants to executives.

Depreciation and Amortization. Depreciation and amortization decreased 49% from \$37,000 for the year ended December 31, 2006 to \$19,000 for the year ended December 31, 2007. This decrease was primarily due to the fact that our remaining assets are either fully depreciated or were previously impaired. We acquired a minimal amount of new assets during the year ended December 31, 2007.

Total Other Income (Expense), Net. Interest expense increased from approximately \$2.6 million for the year ended December 31, 2006 to \$5.6 million for the year ended December 31, 2007. Interest expense is primarily related to the debt discount and interest accretion associated with our outstanding convertible promissory notes and warrants. Interest expense increased significantly during the year ended December 31, 2007 compared to the same period in the prior year due to the immediate amortization of the debt discount associated with the June 1, 2007 amendment to certain convertible notes payable to Toucan Partners. In addition, we recorded a warrant valuation gain of \$7.1 million during the year ended December 31, 2006 with respect to the revaluation of the potential shares that could be issued in excess of the available authorized shares. See "Warrant Valuation" below for further discussion. We did not have a similar gain or loss during the year ended December 31, 2007.

Year Ended December 31, 2005 Compared to the Year Ended December 31, 2006

Total Revenues. Revenues decreased 36% from \$124,000 for the year ended December 31, 2005 to \$80,000 for the year ended December 31, 2006. The overall decrease is primarily due to the fact we completed two research grants in 2005, offset by a one time sale of certain license rights during 2006.

Research and Development Expense. Research and development expense decreased 16% from approximately \$4.5 million for the year ended December 31, 2005 to \$3.8 million for the year ended December 31, 2006. This decrease was primarily due to a decrease in contract manufacturing costs.

General and Administrative Expense. General and administrative expense increased 13% from approximately \$2.0 million for the year ended December 31, 2005 to \$2.3 million for the year ended December 31, 2006. This increase was primarily due to an increase in SEC filing costs and initial investigations into establishing a European presence.

Depreciation and Amortization. Depreciation and amortization decreased 41% from \$63,000 for the year ended December 31, 2005 to \$37,000 for the year ended December 31, 2006. This decrease was primarily due to the fact that our remaining assets are either fully depreciated or were previously impaired. We did not acquire any new assets during the year ended December 31, 2006.

Total Other Income (Expense), Net. Interest expense decreased from approximately \$3.5 million for the year ended December 31, 2005 to \$2.6 million for the year ended December 31, 2006. This decrease was due primarily to the fact that the Toucan Capital and management loans were converted into equity in April 2006, offset by the fact that the average note payable balance was higher prior to conversion in 2006 as compared to the balances outstanding during the year ended December 31, 2005. Additionally, we recorded a warrant valuation gain of \$7.1 million during 2006 with respect to the revaluation of the potential shares that could be issued in excess of the available authorized shares. We did not have a similar gain during 2005.

Warrant Valuation. In accordance with Emerging Issues Task Force, or EITF, 00-19, we account for potential shares that can be converted to common stock, that are in excess of authorized shares, as a liability that is recorded at fair value. Total potential outstanding common stock exceeded our authorized shares as of December 31, 2005 when we entered into another convertible promissory note and warrant agreement with Toucan Partners on December 30, 2005. The fair value of the warrants in excess of the authorized shares at December 31, 2005 totaling approximately \$604,000 was recognized as a liability on December 31, 2005. This liability was required to be remeasured at each reporting date with any change in value included in other income/(expense) until such time as enough shares were authorized to cover all potentially convertible instruments. Accordingly, during the first quarter of 2006, we recognized a loss totaling \$2.1 million with respect to the revaluation of this warrant liability. Further, during March 2006, we issued an additional warrant to Toucan Partners, along with a convertible promissory note. The fair value of the warrants in excess of the authorized shares was approximately \$6.7 million and was recognized as an additional liability as of March 31, 2006. During April 2006, we sold common stock to outside investors in the Pipe Financing. In addition, members of management and Toucan Capital elected to convert their promissory notes and related accrued interest into common stock and Series A-1 Preferred Stock, respectively. As a result, the fair value of the potential common stock in excess of the authorized shares was \$24.4 million and was recognized as an additional liability during April 2006.

Effective May 25, 2006, the number of authorized shares of common stock was increased to 800 million. The liability for potential shares in excess of total authorized shares was revalued at that date. This valuation resulted in a gain of approximately \$7.1 million during year ended December 31, 2006, due to the net decreases in the net fair value of the related warrants on the date the authorized shares were increased. This gain is included in the statement of operations as a warrant valuation. As we exceeded our authorized shares of common stock on December 31, 2005, no corresponding charges to the statement of operations were recorded for the year ended December 31, 2005.

Liquidity and Capital Resources

Toucan Capital and Toucan Partners

Since 2004, we have undergone a significant recapitalization pursuant to which Toucan Capital loaned us an aggregate of \$6.75 million and Toucan Partners loaned us an aggregate of \$4.825 million (excluding \$225,000 in proceeds from a demand note that was received on June 13, 2007 and repaid on June 27, 2007). Our Chairperson, Linda Powers, is the managing director of Toucan Capital and the managing member of Toucan Partners.

On January 26, 2005, we entered into a securities purchase agreement with Toucan Capital pursuant to which it purchased 32.5 million shares of our Series A Preferred Stock at a purchase price of \$0.04 per share, for a net

purchase price of \$1.276 million, net of offering related costs of approximately \$24,000. In April 2006, the \$6.75 million of notes payable plus all accrued interest due to Toucan Capital were converted into shares of the Company's Series A-1 Preferred Stock.

Simultaneously with Toucan Capital's notes payable conversion, Alton Boynton, our President and Chief Executive Officer, and Marnix Bosch, our Chief Technical Officer, each elected to convert the principal and accrued interest on certain convertible promissory notes held by each of them into 146,385 and 32,796 shares, respectively, of our common stock. In conjunction with the PIPE Financing, Drs. Boynton and Bosch exercised certain warrants held by each of them on a net exercise basis for 126,365 and 28,311 shares of our common stock, respectively.

The \$4.825 million loaned to us by Toucan Partners was advanced in a series of transactions. From November 14, 2005 through March 9, 2006, we issued three promissory notes to Toucan Partners, pursuant to which Toucan Partners loaned us an aggregate of \$950,000. In addition to the \$950,000 of promissory notes, Toucan Partners provided \$3.15 million in cash advances from October 2006 through April 2007, which were converted into convertible notes (the "2007 Convertible Notes") and related warrants (the "2007 Convertible Warrants") in April 2007. In April 2007, the three promissory notes were amended and restated to conform to the 2007 Convertible Notes. Payment was due under the notes upon written demand on or after June 30, 2007. Interest accrued at 10% per annum, compounded annually, on a 365-day year basis. The principal amount of, and accrued interest on, these notes, as amended, was convertible at Toucan Partners' election into common stock on the same terms as the 2007 Convertible Notes.

Toucan Partners also entered into two promissory notes with us to fix the terms of two additional cash advances provided by Toucan Partners to us on May 14, 2007 and May 25, 2007 in the aggregate amount of \$725,000, and we issued warrants to purchase shares of our common stock to Toucan Partners in connection with each such note. These notes and warrants are on the same terms as the 2007 Convertible Notes and 2007 Warrants and the proceeds of these notes enabled us to continue to operate and advance programs while raising additional equity financing.

During the fourth quarter of 2007, we repaid the entire \$5.3 million in principal and related accrued interest due to Toucan Partners pursuant to the convertible notes.

Conversion of Preferred Stock and Related Matters

On June 1, 2007, we issued to Toucan Capital a new warrant to purchase our Series A-1 Preferred Stock ("Toucan Capital Series A-1 Warrant") in exchange for the cancellation of all previously issued warrants to purchase Series A-1 Preferred Stock (or, at the election of Toucan Capital, any other equity or debt security of ours) held by Toucan Capital. The new Toucan Capital Series A-1 Warrant is exercisable for 6,471,333 shares of Series A-1 Preferred Stock plus shares of Series A-1 Preferred Stock attributable to accrued dividends on the shares of Series A-1 Preferred Stock held by Toucan Capital (with each such Series A-1 Preferred Share convertible into 2.67 shares of common stock at \$0.60 per share), compared to the 3,062,500 shares of Series A-1 Preferred Stock (with each such Series A-1 Preferred Share convertible into 2.67 shares of common stock at \$0.60 per share) that were previously issuable to Toucan Capital upon exercise of the warrants being cancelled.

Also on June 1, 2007, we and Toucan Capital amended Toucan Capital's warrant to purchase Series A Preferred Stock (the "Toucan Capital Series A Warrant") to increase the number of shares of Series A Preferred Stock that are issuable upon exercise of the warrant to 32,500,000 shares of Series A Preferred Stock (plus shares of Series A Preferred Stock attributable to accrued dividends on the shares of Series A Preferred Stock held by Toucan Capital) from 13,000,000 shares of Series A Preferred Stock.

In connection with the modifications of the Series A and Series A-1 Preferred Stock warrants, we recognized reductions in earnings applicable to common stockholders in June 2007 of \$2.3 million and \$16.4 million, respectively. The fair value of the warrant modifications were determined using the Black-Scholes option pricing model with the following assumptions: expected dividend yield of 0%, risk-free interest rate of 5.0% volatility of 398%, and a contractual life of seven years.

On June 15, 2007, we, Toucan Capital, and Toucan Partners entered into a conversion agreement ("Conversion Agreement") which became effective on June 22, 2007 upon the admission of our common stock to trade on AIM ("Admission").

Pursuant to the terms of the Conversion Agreement (i) Toucan Capital agreed to convert and has converted all of its shares of the Company's Series A Preferred Stock and Series A-1 Preferred Stock (in each case, excluding any accrued and unpaid dividends) into common stock and agreed to eliminate a number of rights, preferences and protections associated with the Series A Preferred Stock and Series A-1 Preferred Stock, including the liquidation preference entitling Toucan Capital to certain substantial cash payments and (ii) Toucan Partners agreed to eliminate all of its existing rights to receive Series A-1 Preferred Stock under certain notes and warrants (and thereafter to receive shares of common stock rather than shares of Series A-1 Preferred Stock), and the rights, preferences and protections associated with the Series A-1 Preferred Stock, including the liquidation preference that would entitle Toucan Partners to certain substantial cash payments. In return for these agreements, we issued to Toucan Capital and Toucan Partners 4,287,851 and 2,572,710 shares of common stock, respectively. In connection with the issuance of these shares, we recognized a further reduction of earnings applicable to common stockholders of \$12.3 million in June 2007.

Under the terms of the Conversion Agreement (i) the Toucan Capital Series A Warrant became exercisable for 2,166,667 shares of common stock rather than shares of Series A Preferred Stock (plus shares of common stock, rather than shares of Series A Preferred Stock, attributable to accrued dividends on the shares of Series A Preferred Stock previously held by Toucan Capital that were converted into common stock upon Admission, subject to the further provisions of the Conversion Agreement as described below) and (ii) the Toucan Capital Series A-1 Warrant became exercisable for an aggregate of 17,256,888 shares of common stock rather than shares of Series A-1 Preferred Stock (plus shares of common stock, rather than shares of Series A-1 Preferred Stock, attributable to accrued dividends on the shares of Series A-1 Preferred Stock previously held by Toucan Capital that were converted into common stock upon Admission), subject to further provisions of the Conversion Agreement as described below.

As noted above, the 32,500,000 shares of Series A Preferred Stock held by Toucan Capital converted, in accordance with their terms, into 2,166,667 shares of common stock and the 4,816,863 shares of Series A-1 Preferred Stock held by Toucan Capital converted, in accordance with their terms, into 12,844,968 shares of common stock.

Under the terms of the Conversion Agreement, Toucan Capital also agreed to temporarily defer receipt of the accrued and unpaid dividends on its shares of Series A Preferred Stock and Series A-1 Preferred Stock of an amount equal to \$334,340 and \$917,451, respectively, until not later than September 30, 2007. In September 2007, we paid these dividends in full to Toucan Capital.

As a result of the financings described above, as of December 31, 2007, Toucan Capital held:

- an aggregate of 19,299,486 shares of common stock;
- warrants to purchase 14,150,732 shares of common stock at an exercise price of \$0.60 per share; and
- warrants to purchase 7,884,357 shares of common stock at an exercise price of \$0.15 per share.

As a result of the financings described above, as of December 31, 2007, Toucan Partners held:

- an aggregate of 2,572,710 shares of common stock; and
- warrants to purchase 8,832,541 shares of common stock at an exercise price of \$0.60 per share.

The investments made by Toucan Capital and Toucan Partners were made pursuant to the terms and conditions of a Recapitalization Agreement originally entered into on April 26, 2004 with Toucan Capital. The Recapitalization Agreement, as amended, originally contemplated the investment of up to \$40 million through the issuance of new securities to Toucan Capital and a syndicate of other investors to be determined.

We and Toucan Capital amended the Recapitalization Agreement in conjunction with each successive loan agreement. The amendments generally (i) updated certain representations and warranties of the parties made in the Recapitalization Agreement, and (ii) made certain technical changes in the Recapitalization Agreement in order to facilitate the bridge loans described therein.

In accordance with the Recapitalization Agreement, we accrued and paid certain legal and other administrative costs on Toucan Capital's behalf. During the year ended December 31, 2007, we recognized approximately \$1.0 million of general and administrative costs related to this recapitalization agreement and to certain other costs incurred by Toucan Capital on our behalf. Approximately \$175,000 of these costs relate to activities which took place prior to 2007. Pursuant to the terms of the Conversion Agreement, the Recapitalization Agreement was terminated on June 22, 2007.

As of December 31, 2007, Toucan Capital, including the holdings of Toucan Partners, beneficially owned 21,872,196 shares of our capital stock, representing approximately 51.7% of our outstanding common stock.

Other Financings

On November 13, 2003, we borrowed an aggregate of \$335,000 from certain members of our current and former management. These notes were either been repaid or converted into common stock prior to December 31, 2006.

On March 30, 2006, we completed the PIPE Financing pursuant to which we raised aggregate gross proceeds of approximately \$5.5 million.

On June 22, 2007, we placed 15,789,473 shares of our common stock with foreign institutional investors at a price of £0.95 per share. The gross proceeds from the placement were approximately £15.0 million, or \$29.9 million, while net proceeds from the offering, after deducting commissions and expenses, were approximately £13.0 million, or \$25.9 million. The net proceeds from the placement are being used to fund clinical trials, product and process development, working capital needs and repayment of certain existing debt.

We submitted an application to the FDA for cost recovery for our Phase II trial in brain cancer. Approval of this application would permit us to charge patients or their insurers for the direct costs of manufacturing DCVax®-Brain during this clinical trial. However because we have changed the study design to include a placebo control arm we have no ability to charge patients for DCVax®-Brain without unblinding the study and as a result, have ceased pursuing this application.

As of March 31, 2008, we had approximately \$2.2 million of cash on hand. We will need to raise additional capital in the near future to fund our clinical trials and other operating activities. We are in discussions with multiple parties regarding potential funding transaction. However, these parties are not obligated to provide such financing.

We estimate that our available cash is sufficient to enable us to proceed with our continuing activities under our pivotal DCVax®-Brain trial and begin treating patients with the DCVax®-Brain vaccine pursuant to the BAG Authorisation. Although we believe that we have funding available to pursue the activities described above, its adequacy will depend on many factors, including the speed with which we are able to identify and hire people to fill key positions, the speed of patient enrollment in our pivotal brain cancer trial, the timing of the clearance by Swissmedic and subsequent potential adoption of DCVax®-Brain in the selected hospitals in Switzerland, the cost of establishing clinical studies and compassionate use/named patient programs in other countries and unanticipated developments, including potential adverse developments in pending litigation matters. However, without additional capital, we will not be able to complete our DCVax®-Brain clinical trial or move forward with any of our other product candidates for which investigational new drug applications have been cleared by the FDA. We will also be constrained in developing our second generation manufacturing processes, which offer substantial product cost reductions.

Additional funding will be required in the near future and there can be no assurance that our efforts to seek such funding will be successful. If our capital raising efforts are unsuccessful, our inability to obtain additional cash as needed could have a material adverse effect on our financial position, results of operations and our ability to continue our existence. Our independent registered public accounting firm has indicated in its report on our financial statements included in the Annual Report on Form 10-K for the year ended December 31, 2007 that there is substantial doubt about our ability to continue as a going concern. We may seek additional funds through the issuance of additional common stock or other securities (equity or debt) convertible into shares of common stock, which could dilute the ownership interest of our stockholders. We may seek funding from Toucan Capital or Toucan Partners or their affiliates or other third parties. Such parties are under no obligation to provide us any additional

funds, and any such funding may be dilutive to stockholders and may contain restrictive covenants that could limit our ability to take certain actions.

Sources of Cash

During the year ended December 31, 2007, we received \$2.375 million in cash advances from Toucan Partners, which were converted into the 2007 Convertible Notes and 2007 Warrants discussed above. Additionally, we received \$225,000 from Toucan Partners on June 13, 2007 in the form of a \$225,000 demand note bearing interest of 10% ("Demand Note"). The Demand Note was repaid on June 27, 2007.

On June 22, 2007, we placed 15,789,473 shares of our common stock with foreign institutional investors at a price of £0.95 per share. The gross proceeds from the placement were approximately £15.0 million, or \$29.9 million, while net proceeds from the offering, after deducting commissions and expenses, were approximately £13.0 million, or \$25.9 million. The placement of these shares is the primary contributor to the \$22.2 million of cash generated from financing activities during the year ended December 31, 2007.

We generated \$6.9 million in cash from financing activities for the year ended December 31, 2006, primarily from the loans from Toucan Capital and the sale of approximately 2.6 million shares of our common stock (and the issuance of warrants to purchase an additional 1.3 million shares of common stock at \$2.10 per share) to a group of accredited investors at a price of \$2.10 per share. We generated \$4.2 million in cash from financing activities during the year ended December 31, 2005 consisting of (i) the January 26, 2005 sale of our Series A Preferred Stock to Toucan Capital at a purchase price of \$0.04 per share, for a net purchase price of \$1.276 million, net of issue related costs of approximately \$24,000, (ii) loans in the aggregate amount of \$2.4 million from Toucan Capital, and (iii) loans in the aggregate amount of \$650,000 from Toucan Partners.

License Fees

On July 1, 2003, we entered into a license agreement with DakoCytomation California, Inc., under which we received a one-time \$25,000 license fee and are entitled to receive minimum annual royalty payments of \$10,000. Annual royalty payments of \$10,000 per year were recognized as revenue in both 2006 and 2007. During 2006, we also sold certain license rights for a one-time fee of \$70,000.

Uses of Cash

We used \$14.6 million in cash for operating activities during the year ended December 31, 2007, compared to \$6.9 million for the year ended December 31, 2006. The increase in cash used in operating activities was a result of the significant increase development activities, including increased staffing and consulting support related to manufacturing start-up, initiating the Phase II study for DCVax®-Brain, exploration and implementation of commercialization in Switzerland, exploration of compassionate use/named patient programs outside of the United States, and a decrease in accounts payable and accrued liability balances at December 31, 2007 due to our improved funding.

We generated \$17,000 in cash from investing activities during the year ended December 31, 2006 compared to \$24,000 used in investing activities during the year ended December 31, 2007. The cash provided during the year ended December 31, 2006 consisted of net proceeds from the sale of property and equipment and the cash used during the year ended December 31, 2007 consisted of purchases of property and equipment.

We used \$4.2 million in cash for operating activities during the year ended December 31, 2005, compared to \$6.9 million for the year ended December 31, 2006. The increase of approximately 65.7% reflects the increased level of expenditures and business activity associated with identifying future clinical trial sites, research and development expenditures related to preclinical activities, and gradual re-implementation of the contract manufacturing process for our two DCVax® clinical trial vaccines.

Contractual Obligations

On November 4, 2005, we entered into a sublease agreement with The International Union of Operating Engineers Local 302 for 2,325 square feet of administrative space in a building located in Bothell, Washington. The

initial sublease was for a term of 12 months commencing January 1, 2006. This sublease has been extended through June 30, 2008.

The following table reflects our contractual obligations as of December 31, 2007:

<u>Contractual Obligation(1)</u>	<u>Total</u>	<u>Payments Due by Period</u>			
		<u>Less Than 1 Year</u>	<u>1-3 Years</u>	<u>3-5 Years</u>	<u>More than 5 Years</u>
Contract Manufacturing by Related Party(2)	\$ 9,900,000	\$6,600,000	\$3,300,000	\$—	\$—
Purchase Obligations	327,857	327,857	—	—	—
Operating Lease Obligations	18,600	18,600	—	—	—
Total	<u>\$10,246,457</u>	<u>\$6,946,457</u>	<u>\$3,300,000</u>	<u>\$—</u>	<u>\$—</u>

- (1) We have also entered into other collaborative arrangements under which we may be obligated to pay royalties or milestone payments if product development is successful. We do not anticipate that the aggregate amount of any royalty or milestone obligations under these arrangements will be material.
- (2) The agreement has an initial two year period and is subject to quarterly true-ups. The Company may terminate this contract manufacturing agreement with 180 days notice and payment of all reasonable wind-up costs and Cognate may terminate the contract in the event that the brain cancer clinical trial fails to complete enrollment by July 1, 2009. However, if such termination by the Company occurs at any time prior to the earlier of the submission of an FDA biological license application/new drug application on the Company's brain cancer clinical trial or July 1, 2010 or, such termination by Cognate results from failure of the brain cancer clinical trial to complete patient enrollment by July 1, 2009, we are obligated to make an additional termination fee payment to Cognate equal to \$2 million.

Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board, or ("FASB") issued SFAS 157, *Fair Value Measurements* ("SFAS 157"). SFAS 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements but does not require any new fair value measurements. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The adoption of this standard is not expected to have a significant impact on the Company's consolidated financial position or results of operations.

In February 2007, the FASB issued SFAS 159, *The Fair Value Option for Financial Assets and Financial Liabilities* ("SFAS 159"). SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. SFAS 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007. The Company is currently evaluating the impact of adopting SFAS 159 on the Company's financial position.

In December 2007, the FASB issued SFAS 141(R), *Business Combinations — a Replacement of FASB Statement No. 141* ("SFAS 141(R)"). The statement is to be applied prospectively for fiscal years beginning on or after December 15, 2008; therefore, it applies to future business combinations. The statement requires more assets acquired and liabilities assumed in future business combinations to be measured at fair value as of the acquisition date. In addition, expenses incurred for all acquisition-related costs are to be expensed and liabilities related to contingent consideration are to be remeasured to fair value each subsequent reporting period. We will adopt SFAS 141(R) effective January 1, 2009. We are currently evaluating the impact this statement may have on our consolidated financial position or results of operations.

In December 2007, the FASB issued SFAS 160, *Noncontrolling Interests in Consolidated Financial Statements — an amendment of ARB No. 51* ("SFAS 160"). The statement changes how noncontrolling interests in subsidiaries are measured to initially be measured at fair value and classified as a separate component of equity.

SFAS 160 establishes a single method of accounting for changes in a parent's ownership interest in a subsidiary that do not result in deconsolidation. No gains or losses will be recognized on partial disposals of a subsidiary where control is retained. In addition, in partial acquisitions, where control is obtained, the acquiring company will recognize and measure at fair value all of the assets and liabilities, including goodwill, as if the entire target company had been acquired. The statement is to be applied prospectively for fiscal years beginning on or after December 15, 2008. We will adopt the statement on January 1, 2009. We are currently evaluating the impact this statement will have, if any, on our consolidated financial position or results of operations.

In June 2007, the EITF issued EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities* ("EITF 07-3"), which is effective for fiscal years beginning after December 15, 2007. EITF 07-3 requires that nonrefundable advance payments for future research and development activities be deferred and capitalized. Such amounts will be recognized as an expense as the goods are delivered or the related services are performed. The Company does not expect the adoption of EITF 07-3 to have a material impact on the financial results of the Company.

Item 7A. *Quantitative and Qualitative Disclosures about Market Risk*

Market Interest Rate Risk

Our exposure to market risk is presently limited to the interest rate sensitivity of our cash which is affected by changes in the general level of U.S. interest rates. We are exposed to interest rate changes primarily as a result of our investment activities. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive without significantly increasing risk. To minimize risk, we maintain our cash in interest-bearing instruments, primarily money market funds. Due to the short-term nature of our cash, we believe that our exposure to market interest rate fluctuations is minimal. A hypothetical 10% change in short-term interest rates from those in effect at December 31, 2007 would not have a significant impact on our financial position or our expected results of operations. Our interest rate risk management objective with respect to our borrowings is to limit the impact of interest rate changes on earnings and cash flows. Except for our loans from management, our debt is carried at a fixed 10% rate of interest. We do not have any foreign currency or other derivative financial instruments.

Foreign Currency Exchange Rate Risk

As a corporation with contractual arrangements overseas, we are exposed to changes in foreign exchange rates. These exposures may change over time and could have a material adverse impact on our financial results. At this time we do not have a program to hedge this exposure.

Item 8. *Financial Statements and Supplementary Data*

Financial Statements

Our financial statements required by this item are submitted as a separate section of this Annual Report on Form 10-K. See Item 15(a)(1) for a listing of financial statements provided in the section titled "Financial Statements."

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

Not applicable.

Item 9A. *Controls and Procedures*

Attached as exhibits to this Annual Report on Form 10-K are certifications of our President and Chief Executive Officer ("CEO") and Senior Vice President of Finance and Chief Financial Officer ("CFO"), which are required pursuant to Rule 13a-14 of the Exchange Act. This "Controls and Procedures" section of this Annual Report on Form 10-K includes information concerning the controls and controls evaluation referenced in the certifications. This section of the Annual Report on Form 10-K should be read in conjunction with the certifications for a more complete understanding of the matters presented.

Evaluation of disclosure controls and procedures

We evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. Disclosure controls and procedures are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act, such as this Annual Report on Form 10-K are recorded, processed, summarized and reported within the time periods specified by the SEC. Disclosure controls are also designed to ensure that such information is accumulated and communicated to our management, including the CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Based on the evaluation, our President and Chief Executive Officer and our Senior Vice President of Finance and Chief Financial Officer, after evaluating the effectiveness of our “disclosure controls and procedures” (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), have concluded that, subject to the inherent limitations noted in this Part II, Item 9A, as of December 31, 2007, our disclosure controls and procedures were not effective due to the existence of several material weaknesses in our internal control over financial reporting, as discussed below.

Management’s annual report on internal control over financial reporting

Management is responsible for establishing and maintaining internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our management evaluated, under the supervision and with the participation of our President and Chief Executive Officer and our Senior Vice President of Finance and Chief Financial Officer, the effectiveness of our internal control over financial reporting as of December 31, 2007.

Based on its evaluation under the framework in *Internal Control — Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission, our management concluded that our internal control over financial reporting was not effective as of December 31, 2007, due to the existence of significant deficiencies constituting material weaknesses, as described in greater detail below. A material weakness is a control deficiency, or combination of control deficiencies, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

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

Limitations on Effectiveness of Controls

Our management, including our President and Chief Executive Officer and Senior Vice President of Finance and Chief Financial Officer, does not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additional controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Material Weaknesses Identified

In connection with the preparation of our financial statements for the year ended December 31, 2007, certain significant deficiencies in internal control became evident to management that, in the aggregate, represent material weaknesses, including,

(i) Lack of a sufficient number of independent directors for our board and audit committee. We currently only have one independent director on our board, which is comprised of four directors, and on our audit committee, which is comprised of two directors. Although we are considered a controlled company, whereby a group holds more than 50% of the voting power, and as such are not required to have a majority of our board of directors be independent. It is our intention to have an majority of independent directors in due course.

(ii) Lack of an audit committee financial expert on our audit committee. We currently do not have an audit committee financial expert, as defined by SEC regulations on our audit committee as defined by the SEC.

(iii) Insufficient segregation of duties in our finance and accounting functions due to limited personnel. During the year ended December 31, 2007, we had one person on staff that performed nearly all aspects of our financial reporting process, including, but not limited to, access to the underlying accounting records and systems, the ability to post and record journal entries and responsibility for the preparation of the financial statements. This creates certain incompatible duties and a lack of review over the financial reporting process that would likely result in a failure to detect errors in spreadsheets, calculations, or assumptions used to compile the financial statements and related disclosures as filed with the SEC. These control deficiencies could result in a material misstatement to our interim or annual consolidated financial statements that would not be prevented or detected.

(iv) Insufficient corporate governance policies. Although we have a code of ethics which provides broad guidelines for corporate governance, our corporate governance activities and processes are not always formally documented. Specifically, decisions made by the board to be carried out by management should be documented and communicated on a timely basis to reduce the likelihood of any misunderstandings regarding key decisions affecting our operations and management.

(v) Inadequate approval and control over transactions and commitments made on our behalf by related parties. Specifically, during the year certain related party transactions were not effectively communicated to all internal personnel who needed to be involved to account for and report the transaction in a timely manner. This resulted in material adjustments during the quarterly reviews and annual audit, respectively, that otherwise would have been avoided if effective communication and approval processes had been maintained.

As part of the communications by Peterson Sullivan, PLLC, ("Peterson Sullivan"), with our Audit Committee with respect to Peterson Sullivan's audit procedures for fiscal 2007, Peterson Sullivan informed the audit committee that these deficiencies constituted material weaknesses, as defined by Auditing Standard No. 5, "An Audit of Internal Control Over Financial Reporting that is Integrated with an Audit of Financial Statements and Related Independence Rule and Conforming Amendments," established by the Public Company Accounting Oversight Board ("PCAOB").

Plan for Remediation of Material Weaknesses

We intend to take appropriate and reasonable steps to make the necessary improvements to remediate these deficiencies. We intend to consider the results of our remediation efforts and related testing as part of our year-end 2008 assessment of the effectiveness of our internal control over financial reporting.

We have implemented certain remediation measures and are in the process of designing and implementing additional remediation measures for the material weaknesses described in this Annual Report on Form 10-K. Such remediation activities include the following:

- We plan to recruit one or more additional independent board members to join our board of directors in due course. Such recruitment will include at least one person who qualifies as an audit committee financial expert to join as an independent board member and as an audit committee member.

- We have hired additional qualified and experienced accounting personnel to perform the month-end review and closing processes as well as provide additional oversight and supervision within the accounting department. On March 1, 2007, we hired a part-time chief financial officer and on October 1, 2007, we hired a full-time chief financial officer. In February 2008, we hired a full-time controller who has assisted us in documenting the majority of our processes. We are in the process of establishing more rigorous review procedures. In addition, we have changed our accounting system to make it simpler and more appropriate for a company our size.
- We are initiating a formal commitment review process to establish and document the accounting events and methodology at the time the transactions are entered into, so that there is a clear understanding of what events will trigger an accounting event and establish the amounts to be recognized for each event.
- We are initiating a formal monthly reporting and approval process with our related parties to ensure timely provision of information affecting our quarterly and annual consolidated financial statements.

In addition to the foregoing remediation efforts, we will continue to update the documentation of our internal control processes, including formal risk assessment of our financial reporting processes.

Changes in Internal Controls over Financial Reporting

There were no significant changes in internal control over financial reporting during the fourth quarter of 2007 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Our directors and their ages and positions, as of March 20, 2008, are as follows. Mr. Harris' and Ms. Powers' biographies follow the table. Dr. Boynton and Mr. Deasey's biographies are included under "Executive Officers of Northwest Biotherapeutics, Inc." in Part I of this report.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Alton L. Boynton, Ph.D.	63	President, Chief Executive Officer, Secretary and Director
Anthony P. Deasey	58	Senior Vice President of Finance, Chief Financial Officer and Director
R. Steve Harris	64	Director
Linda F. Powers	52	Director, Chairperson

R. Steve Harris. Mr. Harris has served as our director since June 2007. Mr. Harris is currently the non-executive Chairman of Proteome Sciences plc, and Sinclair Pharma plc. He is also a non-executive director of SkyePharma plc, Advanced Medical Solutions plc and Premier Research plc. Mr. Harris holds a Bachelor of Pharmacy Degree (University of London) and was elected a Fellow of the Royal Pharmaceutical Society in 2000. Mr. Harris is also a member of the Audit Committee, Compensation Committee and Nominations Committee.

Linda F. Powers. Ms. Powers has served as the Chairperson of our Board of Directors since her appointment on May 17, 2007. Ms. Powers has served as managing director of Toucan Capital Corporation, a provider of venture capital since 2001. She has over 15 years' experience in corporate finance and restructurings, mergers and acquisitions joint ventures and intellectual property licensing. Ms. Powers is a board member of Moffitt Technology Corporation, a for-profit arm of Moffitt Cancer Center (the third largest cancer center in U.S.), a board member of the Trudeau Institute, well known for its specialization in immunology, and the Chair of the Maryland Stem Cell Research Commission, administering the state's stem cell funding program. Ms. Powers has been appointed to three

Governors' commissions created to determine how to build the respective states' biotech and other high-tech industries. She served as the Deputy Assistant Secretary of Commerce in the George H. W. Bush, Sr. administration. She was co-lead negotiator for the U.S. on the North American Free Trade Agreement financial sector agreement, which opened banking, securities, insurance, pension fund and related opportunities in Canada and Mexico. Ms. Powers serves on the steering committee of the National Academy of Sciences evaluating Federal grant programs, and on the Advisory Board of the US Department of Commerce NIST Advanced Technology Program. Ms. Powers also serves on the boards of directors of six private biotechnology companies. Ms. Powers holds a B.A. from Princeton University, where she graduated magna cum laude and Phi Beta Kappa. She also earned a JD, magna cum laude, from Harvard Law School. Ms. Powers is also a member of the Audit Committee, Compensation Committee and Nominations Committee.

For information pertaining to our executive officers, refer to "Executive Officers of Northwest Biotherapeutics, Inc." included in Part I, Item 1 of this Annual Report on Form 10-K.

Board of Directors

Our Board of Directors consists of two non-employee directors and two directors who are currently employed by us. The Board has established the following committees:

Audit Committee

The Audit Committee has responsibility for recommending the appointment of our independent accountants, supervising our finance function (which includes, among other matters, our investment activities), reviewing our internal accounting control policies and procedures, and providing the Board such additional information and materials as it may deem necessary to make the Board aware of significant financial matters which require the attention of the Board. The Audit Committee provides the opportunity for direct contact between our independent registered public accounting firm and the Board. The Board has adopted a written charter for the Audit Committee and its current members, R. Steve Harris and Linda F. Powers, are non-employee directors. The Audit Committee Chairman is R. Steve Harris.

Compensation Committee

The Compensation Committee is responsible for determining the overall compensation levels of our executive officers and administering our stock option plans. The Board has adopted a written charter for the Compensation Committee and its current members are two non-employee directors R. Steve Harris and Linda F. Powers. The Compensation Committee Chairman is R. Steve Harris

Nominations Committee

The Nominations Committee is responsible for identifying and nominating members of the Board, recommending directors to be appointed to each committee of the Board and the chair of such committees, and overseeing the evaluation of the Board. The Board has adopted a written charter for the Nominations Committee and its current members are two non-employee directors R. Steve Harris and Linda F. Powers. The Nominations Committee will consider nominees recommended by stockholders pursuant to the procedures outlined in the Company's Bylaws and as set forth herein. No Nominations Committee meetings were held during the year ended December 31, 2007.

It is the Board's intention to appoint additional independent non-executive directors to these committees in due course.

We have adopted a code of ethics meeting the definition of "Code of Ethics" as defined in Item 406 of Regulation S-K. Our Code of Ethics is applicable to the chief executive officer, the chief financial officer, the principal accounting officer or persons performing similar functions. Our code of ethics is posted on our website and may be accessed at www.nwbio.com/about_code.php. We will post to our website any amendments to our code of ethics and any waivers granted under the code to any of our directors or executive officers.

One of our directors, R. Steve Harris, is an "independent director" as defined by the NASDAQ Stock Market and none of our directors meets the definition of an "audit committee financial expert" as defined by the SEC. We intend to

recruit one or more additional non-executive directors in due course, including one person who qualifies as an audit committee financial expert but may not be able to do so. The nomination Committee Chairman is Linda F. Powers

Item 11. *Executive Compensation*

Compensation Discussion and Analysis

Our Process

Typically, our executive compensation is comprehensively assessed and analyzed annually; however, given our limited funding since 2002, our executives have received infrequent increases in their compensation. During 2006, our executives did not receive an increase in their base salaries. During 2007, our Chief Technical Officer received an increase in base salary based on performance and in order to take steps to be more competitive in the market. During 2007, our executives also received equity based incentives. Normally, the review process includes, but is not limited to, the following steps:

- The Compensation Committee reviews the performance of the Chief Executive Officer and other senior executives;
- The current annual compensation of senior management and long-term compensation grants made over the past few years are reviewed;
- The appropriate performance metrics and attributes of annual and long-term programs for the next year are considered and discussed;
- The entirety of our compensation program is considered;
- For our top officers, if peer group compensation is available for their position, we use a blend of survey and peer compensation for comparison, as we compete not only in our own market, but nationally and across industries, for talent;
- The compensation practices of our peer companies are reviewed, including their practices with respect to equity and other grants, benefits and perquisites;
- The compensation of our management team from the standpoint of internal equity, complexity of the job, scope of responsibility and other factors is assessed; and
- Management's stock ownership is reviewed.

Management has the following involvement with the executive compensation process:

- The Chief Executive Officer reviews recommendations from the Chief Financial Officer regarding salaries, annual and long-term incentive targets, and plan amendments and design before recommendations are submitted to the Compensation Committee for approval; and
- The Chief Executive Officer and Chief Financial Officer are both involved in establishing and recommending to the Compensation Committee financial goals for the incentive programs based on management's operational goals and strategic plans.

Compensation Goals

Our philosophy regarding executive compensation is to attract and retain highly qualified people by paying competitive salaries, and to link the financial interests of our senior management to those of our stockholders by tying compensation to the achievement of operational and financial objectives. Our compensation package for our officers includes both short-term and long-term features in the forms of base salary and equity-based incentives in the form of stock options, which are granted periodically at the discretion of the Compensation Committee.

Elements of Executive Compensation

Base Salaries

Base salaries for all executive officers are reviewed annually. The Compensation Committee reviews the compensation of the President and Chief Executive Officer. The President and Chief Executive Officer reviews the compensation of the other executive officers. The Compensation Committee also consults with the President and Chief Executive Officer with respect to the compensation package for all other executive officers. In evaluating salaries, each officer's individual performance during the prior year, as well as salary levels in the biotechnology industry for comparable positions, are considered. In determining how the respective officer contributes to the Company, current corporate performance, as well as the potential for future performance gains, are considered. No specific weight is attributed to the foregoing for purposes of determining base salaries.

Equity-Based Incentives

We provide our executive officers with long-term incentives through our 1998 Plan, 1999 Plan, 2001 Plan, Employee Plan and beginning in 2007, our 2007 Stock Option Plan (each, as defined under “— Equity Plans” below), all described in more detail below. On June 22, 2007, we amended the 1998 Plan, 1999 Plan, 2001 Plan and Employee Plan such that no further stock option grants may be made under any of such plans. The primary objective of these plans is to provide an incentive for employees, including our executive officers, to make decisions and take actions that maximize long-term stockholder value. The plans are designed to promote this long-term focus by using discretionary grants and long-term vesting periods. Subject to the terms of the plans, the Compensation Committee determines the terms and conditions of options granted under the plans, including the exercise price, which is based on fair value of our stock on the date of grant. For various motivation and retention considerations, option awards granted subsequent to our initial public offering in December 2001 generally vest over four years. The Compensation Committee believes that stock options provide an incentive for employees, allowing us to attract and retain high quality management and staff. Although, we did not issue any stock options to our executives during the year ended December 31, 2006, we did issue stock options to our executives in 2007.

Employee and Executive Benefits

Our executives participate in many of the same employee benefit programs as our other employees. The core employee benefit programs include a tax-qualified retirement plan, medical coverage, dental coverage, life insurance, disability coverage, and vacation. The tax qualified retirement plan is a 401(k) plan. We made matching contributions to each employee's 401(k) plan account of \$0.50 for each dollar contributed on the first \$3,000 of compensation contributed to the plan. Our matching contribution policy was terminated effective March 2006. All of these matching contribution amounts to our Named Executive Officers are shown in the *All Other Compensation* footnote to the Summary Compensation Table following this section.

Perquisites

Historically, we have offered only a very limited number of perquisites to our executives as an incremental benefit to recognize their position within the Company. No perquisites of any kind were offered to executives in 2007.

Compensation of the President and Chief Executive Officer

In assembling the compensation package for our President and Chief Executive Officer, the Compensation Committee considers our annual and long-term performance, the performance of the President and Chief Executive Officer, and our cash resources and needs. Although the Committee's overall goal is to set the President and Chief Executive Officer's salary at the median level for competitors that are similar in industry size and performance, the actual level approved by the Committee may be higher or lower based upon the Committee's subjective evaluation of the foregoing. Consistent with the foregoing, the Compensation Committee set the base salary for the President and Chief Executive Officer at \$331,250 for fiscal 2007. The President and Chief Executive Officer did not receive a bonus for 2007. In connection with our initial public offering on AIM, the Board of Directors committed to award

the President and Chief Executive Officer an option to purchase shares of our common stock. This stock option award, which is shown in the “Grants of Plan-Based Awards” table below, was granted in December 2007.

Accounting for Stock-based Compensation

Effective January 1, 2006, we measure and recognize compensation expense in accordance with SFAS 123(R), which requires that compensations expense relating to share-based payment transactions be recognized in the financial statements based on the fair value of the equity or liability instruments issued.

Prior to January 1, 2006, we accounted for our stock-based compensation plans under the measurement and recognition provision of APB 25, and related interpretations. Under this method, stock option awards generally did not result in compensation expense, since their exercise price was typically equal to the market price of our common stock on the date of grant.

The Compensation Committee considers the accounting treatment of equity and performance based compensation when approving awards.

REPORT OF THE COMPENSATION COMMITTEE¹

We, the Compensation Committee of the Board of Directors, have reviewed and discussed the Compensation Discussion and Analysis (“CD&A”) within the Executive Compensation section of this Annual Report on Form 10-K with the management of the Company. Based on such review and discussion, we have recommended to the Board of Directors that the CD&A be included in the Company’s Annual Report on Form 10-K for the year ending December 31, 2007.

Submitted by the Compensation Committee of the Board of Directors:

Linda F. Powers
R. Steve Harris, Chairman

Summary Compensation

We did not issue any option or stock awards to our executives in the year ended December 31, 2006. The Company granted options to its newly appointed Chief Financial Officer in October 2007, and granted options to its executive officers and management in December 2007.

¹ The material in this report is not “soliciting material,” is not deemed “filed” with the SEC, and is not to be incorporated by reference into any of our filings under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language contained in such filing.

Summary Compensation Table

The following table sets forth certain information concerning compensation paid or accrued to our named executive officers (the “Named Executive Officers”) during the years ended December 31, 2007 and 2006.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u>	<u>Bonus</u>	<u>Option Awards(3)</u>	<u>All Other Compensation(1)</u>	<u>Total</u>
Alton L. Boynton, Ph.D.	2007	\$331,250	—	\$2,011,680	\$1,828	\$2,344,758
President, Chief Executive Officer, Chief Scientific Officer and Secretary(2)	2006	\$330,802	—	—	\$2,993	\$ 333,795
Anthony P. Deasey	2007	\$ 63,462	—	\$ 115,268	—	\$ 178,730
Senior Vice President and Chief Financial Officer	2006	—	—	—	—	—
Jim Johnston(4).	2007	\$ 96,718	—	—	—	\$ 96,718
Chief Financial Officer and General Counsel	2006	—	—	—	—	—
Marnix L. Bosch, Ph.D., M.B.A.	2007	\$224,980	—	\$ 471,661	\$ 482	\$ 697,123
Chief Technical Officer	2006	\$167,021	—	\$ 1,344	\$ 982	\$ 169,347

(1) All Other Compensation for the years ended December 31, 2007 and 2006 consisted of Company-paid premiums on term life insurance coverage up to 1.5 times the employee’s annual salary and earned but unpaid accrued vacation payments. Additionally in 2006, we provided matching contributions to the employee’s 401(k) plan accounts up to a maximum of \$3,000.

(2) Dr. Boynton was appointed as our Chief Executive Officer in June 2007. Dr. Boynton served as our Chief Operating Officer and our principal executive officer during 2006.

(3) Represents the amount recognized for financial statement reporting purposes for 2007 and 2006 in respect of outstanding option awards in accordance with SFAS 123(R), excluding any impact of assumed forfeiture rates. The assumptions made in valuing option awards reported in this column are discussed in Note 3, Stock-Based Compensation Plans to our consolidated financial statements for the year ended December 31, 2006, included elsewhere in this Annual Report on Form 10-K.

(4) Effective March 1, 2007, we named Jim Johnston as our Chief Financial Officer and General Counsel. Mr. Johnston resigned from these positions effective August 28, 2007.

Given our financial status, there are no regularly scheduled increases in compensation.

Grants of Plan-Based Awards in 2007

The following table provides information about equity awards granted to the Named Executive Officers during the year ended December 31, 2007. We did not grant any stock appreciation rights or restricted stock to Named Executive Officers during the fiscal year ended December 31, 2007. Grants of stock options were made under the 2007 Stock Option Plan.

<u>Name</u>	<u>Grant Date</u>	<u>All Other Option Awards: Number of Securities Underlying Options</u>	<u>Exercise or Base Price of Option Awards(5)</u>	<u>Grant Date Closing Price of Common Stock</u>	<u>Grant Date Value of Option Awards(6)</u>
Dr. Alton Boynton	12/31/2007	2,807,048(1)	\$0.60	\$2.54	\$7,016,782
Anthony P. Deasey	10/1/2007	769,208(2)	\$2.40	\$2.40	\$1,884,285
Jim Johnston	—	—(3)	—	—	—
Dr. Marnix Bosch	12/31/2007	1,081,539(4)	\$0.60	\$2.54	\$2,703,524

(1) This option was granted under the 2007 Stock Option Plan. This option grant vests over a three and one-half year period. Approximately 29% the option grant was vested immediately upon grant with respect to prior

service performed. Approximately 17% vests on the first anniversary of the AIM offering (June 22, 2008) and the remaining portion vests in equal monthly installments over the remaining three year vesting period.

- (2) Mr. Deasey's options were granted under the 2007 Stock Option Plan. Mr. Deasey's option grant vests over a four year period. One-fourth of the option grant vests on the first anniversary of the grant date and the remaining three-fourths of the grant vests in equal monthly installments over the remaining three year vesting period.
- (3) Mr. Johnston's stock option award for 2007 has not yet been determined and is subject to continuing discussion and consideration from the Compensation Committee of the Board of Directors.
- (4) This option was granted under the 2007 Stock Option Plan. This option grant vests over a three and one-half year period. Approximately 19% of the option grant was vested immediately upon grant with respect to prior service performed. Approximately 21% vests on the first anniversary of the AIM offering (June 22, 2008) and the remaining portion vests in equal monthly installments over the remaining three year vesting period.
- (5) This column shows the exercise price of stock option awards. The exercise price of the options granted to Mr. Deasey is equal to the closing price of the Company's common stock on the grant date. The exercise prices of the options granted to Messrs. Boynton and Bosch are equal to the conversion price of warrants issued to Toucan Partners under the Conversion Agreement.
- (6) This column shows the full grant date fair value of stock options under SFAS 123(R) granted to the Named Executive Officers in 2007. Generally, the grant date fair value is the amount that the Company would record as compensation expense in its financial statements over the award's vesting schedule, excluding the impact of forfeiture assumptions.

Outstanding Equity Awards at Fiscal Year-End

The following table shows outstanding stock option awards classified as exercisable and unexercisable as of December 31, 2007.

(a) Name	(b) Number of Securities Underlying Unexercised Options (#) Exercisable	(c) Number of Securities Underlying Unexercised Options (#) Unexercisable	(d) Option Exercise Price (\$)	(e) Option Expiration Date
Alton L. Boynton	11,014(1)	0	\$12.85	11/16/09
	5,286(1)	0	18.75	04/18/11
	6,666(1)	0	1.35	2/18/13
	804,768(2)	2,002,280	0.60	12/31/11
Anthony P. Deasey(3)	—	769,208	2.40	10/1/17
Jim Johnston(6)	1,667	0	3.15	3/18/15
Marnix L. Bosch	1,000(4)	0	12.75	5/16/10
	333(4)	0	18.75	11/14/10
	333(4)	0	18.75	09/20/11
	833(4)	0	75.00	01/10/12
	3,194(4)	139	1.35	2/18/13
	4,000(4)	1,333	1.80	12/01/13
	188,687(5)	892,852	0.60	12/31/11

- (1) These options were granted under the 1999 Plan, the 2001 Plan and under Dr. Boynton's previous employment agreement. Each of these option grants vests over a four year period. One-fourth of each option grant vests on the first anniversary of the grant date and the remaining three-fourths of each grant vests in equal monthly installments over the remaining three year vesting period.
- (2) This option was granted under the 2007 Stock Option Plan. This option grant vests over a three and one-half year period. Approximately 29% the option grant was vested immediately upon grant with respect to prior service performed. Approximately 17% vests on the first anniversary of the AIM offering (June 22, 2008) and the remaining portion vests in equal monthly installments over the remaining three year vesting period. These options

were granted in recognition of past service to the Company and have an exercise price of \$0.60 per share, which is equal to the conversion price of warrants issued to Toucan Partners under the Conversion Agreement.

- (3) Mr. Deasey's options were granted under the 2007 Stock Option Plan, at the closing price on the date of grant. Mr. Deasey's option grant vests over a four year period. One-fourth of the option grant vests on the first anniversary of the grant date and the remaining three-fourths of the grant vests in equal monthly installments over the remaining three year vesting period.
- (4) These options were granted under the 1999 Plan and the 2001 Plan. Each of these option grants vests over a four year period. One-fourth of each option grant vests on the first anniversary of the grant date and the remaining three-fourths of each grant vests in equal monthly installments over the remaining three year vesting period.
- (5) This option was granted under the 2007 Stock Option Plan. This option grant vests over a three and one-half year period. Approximately 19% of the option grant was vested immediately upon grant with respect to prior service performed. Approximately 21% vests on the first anniversary of the AIM offering (June 22, 2008) and the remaining portion vests in equal monthly installments over the remaining three year vesting period. These options were granted in recognition of past service to the Company and have an exercise price of \$0.60 per share, which is equal to the conversion price of warrants issued to Toucan Partners under the Conversion Agreement.
- (6) These options were granted prior to Mr. Johnston's employment with us and are fully vested.

Option Exercises and Stock Vested

No options were exercised by and no stock awards vested for the Named Executive Officers during 2007.

Pension Plans, Deferred Compensation and Severance Agreements

We do not currently offer any such plans or compensation or have any such agreements in place.

Director Compensation

The following table sets forth certain information concerning compensation paid or accrued to our non-executive directors during the year ended December 31, 2007.

<u>Name</u>	<u>Year</u>	<u>Fees Earned or Paid in Cash</u>	<u>All Other Compensation(1)</u>	<u>Total</u>
Linda F. Powers	2007	\$60,970	\$—	\$60,970
R. Steve Harris	2007	\$35,707	\$—	\$35,707

Only non-employee directors receive director fees. Effective June 22, 2007, we are required to pay Linda F. Powers, as Chairperson and a non-executive member of the Board of Directors, £50,000 (approximately \$100,000) per annum for her services. Also effective June 22, 2007, we are required to pay R. Steve Harris, as a non-executive member of the Board of Directors, £30,000 (approximately \$60,000) per annum for his services.

Compensation Committee Interlocks and Insider Participation

From January 1, 2007 to June 22, 2007, Dr. Boynton was the sole member of our Compensation Committee and served as our President, Chief Operating Officer and Chief Scientific Officer. In addition, as discussed further under "Transactions with Related Persons" below, in 2006, Dr. Boynton exercised warrants and convertible loans covering 126,365 and 146,385 shares of our common stock, respectively. In June 2007, Dr. Boynton was replaced by Linda F. Powers and R. Steve Harris as members of the Compensation Committee. During 2007, none of our executive officers served as a member of the compensation committee (or other committee serving an equivalent function) of any other entity, one of whose executive officers served as a director on our Board or as a member of our Compensation Committee. None of our executive officers served during 2007 as a director of any other entity, one of whose executive officers served as a director on our Board or as a member of our Compensation Committee.

Equity Plans

The Company maintains several plans under which our directors and employees may be granted equity awards, generally in the form of stock options. A brief description of these plans follows. The Company amended its then existing equity plans effective June 22, 2007 such that no further option grants may be made under those plans.

1998 Stock Plan

The 1998 Stock Plan (the “1998 Plan”) was adopted by our Board of Directors in July 1998 and approved by our stockholders in February 1999. This plan provided for the grant to our employees, including officers and employee directors, of “incentive stock options” within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the “Code”), and for the grant of non-statutory stock options to our employees, officers, directors, including non-employee directors, and consultants. To the extent an optionee would have the right in any calendar year to exercise for the first time one or more incentive stock options for shares having an aggregate fair market value, under all of our plans and determined as of the grant date, in excess of \$100,000, any such excess options will be treated as non-statutory options. A total of 27,535 shares of our common stock have been reserved for issuance under this plan and, as of December 31, 2007, net of forfeitures, a total of 23,783 of such shares remained available for additional option grants.

The Compensation Committee of our Board of Directors serves as the administrator of our 1998 Stock Plan. Subject to the terms of this plan, the administrator determines the terms of options granted, including the number of shares subject to the option, exercise price, term and exercisability. The exercise price of all incentive stock options granted under this plan must be at least equal to the fair market value of our common stock on the date of grant. The exercise price of any incentive stock option granted to an optionee who owns stock representing more than 10% of the total combined voting power of our outstanding capital stock, or a 10% Stockholder, must be at least equal to 110% of the fair market value of our common stock on the date of grant. The exercise price of all non-statutory stock options cannot be less than 85% of the fair market value of our common stock on the date of grant, and in the case of 10% Stockholders, the exercise price cannot be less than 110% of the fair market value of our common stock. The term of options granted under this plan may not exceed 10 years, and the term of an incentive stock option granted to a 10% Stockholder may not exceed five years. An option may not be transferred by the optionee other than by will or the laws of descent or distribution. Each option may be exercised during the lifetime of the optionee only by such optionee. Generally, each option granted under this plan becomes exercisable as to 25% of the total number of shares subject to the option after the first anniversary following the date of grant, with subsequent equal monthly vesting over three years, subject to the optionee’s continued relationship with us as an employee, director or consultant, as the case may be.

Our Board of Directors has the authority to amend or terminate this plan, but such action will not adversely affect any outstanding option without the optionee’s consent. If not terminated earlier, this plan will terminate in July 2008.

1999 Executive Stock Plan

The 1999 Executive Stock Plan (the “1999 Plan”) was adopted by our Board of Directors in November 1999. This plan provided for the grant of non-statutory stock options to our employees, officers, directors, including non-employee directors, and consultants. A total of 39,078 shares of our common stock have been reserved for issuance under this plan, and, as of December 31, 2007, net of forfeitures, a total of 28,064 shares remained available for granting under this plan.

The Compensation Committee of our Board of Directors serves as the administrator of this plan. Subject to the terms of this plan, the administrator determines the terms of options granted, including the number of shares subject to the option, exercise price, term and exercisability. The exercise price of options under this plan cannot be less than 85% of the fair market value of our common stock on the date of grant and, in the case of 10% Stockholders, the exercise price cannot be less than 110% of the fair market value of our common stock on the date of grant. The term of options granted under this plan may not exceed 10 years. An option may not be transferred by the optionee other than by will or the laws of descent or distribution. Each option may be exercised during the lifetime of the optionee only by such optionee. Each option granted under this plan becomes exercisable as to 25% of the total number of

shares subject to the option on the first anniversary following the date of grant, with subsequent equal monthly vesting over three years, subject to the optionee's continued relationship with us as an employee or consultant.

Our Board of Directors has the authority to amend or terminate this plan, but such action will not adversely affect any outstanding option without the optionee's consent. If not terminated earlier, this plan will terminate in November 2009.

2001 Stock Plan

The 2001 Stock Plan (the "2001 Plan") was both adopted by our Board of Directors and approved by our stockholders in June 2001. A total of 120,000 shares of our common stock have been initially reserved for issuance under this plan. This plan was intended to provide for the grant to our employees, including officers and employee directors, of "incentive stock options" within the meaning of Section 422 of the Code and for the grant of non-statutory stock options to our employees and consultants. The number of shares available for grant under this plan is subject to an automatic annual increase in an amount equal to the lesser of (i) 15% of the aggregate number of shares available for granting for the immediately preceding year; or (ii) 20,000 shares. As of December 31, 2007, net of forfeitures, a total of 162,603 shares remained available under this plan.

The Compensation Committee of our Board of Directors serves as the administrator of this plan. Subject to the terms of this plan, the administrator determines the terms of options granted, including the number of shares subject to the option, exercise price, term and exercisability. The exercise price of all incentive stock options granted under this plan must be at least equal to the fair market value of our common stock on the date of grant. The term of incentive stock options granted under this plan generally may not exceed 10 years.

Our Board of Directors has the authority to amend or terminate this plan, but such action may not adversely affect any outstanding option previously granted under the plan. If this plan is not terminated earlier, no incentive stock options can be granted under the plan on or after the later of June 2011 or the 10th anniversary of the date when our Board of Directors adopted, subject to approval by our stockholders, the most recent increase in the number of shares available for grant under the plan.

2001 Non-employee Director Stock Incentive Plan

The 2001 Non-employee Director Stock Incentive Plan (the "Directors Plan") was adopted by our Board of Directors in June 2001. This plan provided for the automatic grant to each of our non-employee directors of a nonstatutory stock option to purchase 333 shares of our common stock on the third business day following each annual meeting of our stockholders. A total of 13,333 shares of common stock have been reserved for issuance under this plan and, as of December 31, 2007, net of forfeitures, a total of 10,500 shares remained available under this plan.

This plan is administered by the Compensation Committee of our Board of Directors. The exercise price of each option granted pursuant to this plan is the fair market value of the underlying shares of our common stock on the date of grant. Each option granted pursuant to this plan generally becomes exercisable upon six months after the date of grant, subject to certain limitations. Our Board of Directors has the authority to amend or terminate this plan, but such action may not adversely affect any outstanding option without the optionee's consent.

Employee Stock Purchase Plan

Our Employee Stock Purchase Plan (the "Employees' Plan") was adopted by our Board of Directors and approved by our stockholders in June 2001. A total of 33,333 shares of common stock have been reserved for issuance under this plan and, as of December 31, 2007, 958 shares have been issued under this plan.

This plan is administered by the Compensation Committee of our Board of Directors and provides a mechanism for eligible employees to purchase shares of our common stock. To facilitate these purchases, eligible participants are assigned plan accounts, to which they may contribute funds via payroll deduction. The purchases are accomplished through the use of six-month offering periods. Purchases pursuant to this plan are made at a price equal to the lower of (i) 85% of the fair market value of our common stock on the last trading day in the offering period; or (ii) 85% of the fair market value of our common stock on the last trading day before the commencement

of such offering period. No participant may purchase more than 67 shares of our common stock during any offering period. Additionally, purchases under the plan are limited such that no participant may purchase under the plan, in any offering period that commenced in that calendar year, shares with a fair market value in excess of \$25,000 minus the fair market value of any shares that the participant previously purchased in that calendar year. In the case of shares purchased during an offering period that commenced in the preceding calendar year, the limitation is \$50,000 minus the fair market value of any shares that the participant purchased during the calendar year of the purchase and the calendar year immediately preceding such purchase.

Our Board of Directors has the authority to amend or terminate this plan at any time. Amendments to the plan are subject to approval by our stockholders to the extent required by applicable law.

2007 Stock Option Plan

We established a stock option plan, which became effective on June 15, 2007 (the “2007 Stock Option Plan”). In connection with the Board’s adoption of the 2007 Stock Option Plan, we reserved a total of 5,480,868 shares of common stock for issuance in respect of options granted under the plan. The plan provides for the grant to our employees, as well as parent company, if any, and subsidiaries, including officers and employee directors, of “incentive stock options” within the meaning of Section 422 of the Code and for the grant of non-statutory stock options to our employees, officers, directors, including non-employee directors, and consultants, as well as parent company, if any, and subsidiaries. To the extent an optionee would have the right in any calendar year to exercise for the first time one or more incentive stock options for shares having an aggregate fair market value, under all of our plans and determined as of the grant date, in excess of \$100,000, any such excess options will be treated as non-statutory options. As of December 31, 2007, net of forfeitures, a total of 756,406 shares remained available for issuance under this plan.

Employment Agreements

On October 1, 2007, an employment agreement between us and Anthony P. Deasey became effective. Under the terms of the agreement, Mr. Deasey is employed as the Chief Financial Officer and Senior Vice President of Finance of the Company for four years of service. Pursuant to the terms of the agreement, Mr. Deasey is paid annual compensation of \$275,000 for his services. The agreement provides for standard benefits, including coverage under the Company’s medical, dental, vision, life and disability policies. Mr. Deasey is eligible to participate in the Company’s 401(k) plan and to receive a bonus at the discretion of the Board. In connection with his employment with us, Mr. Deasey is subject to a noncompetition obligation for one year following the termination of his employment with the Company.

Except as relates to the vesting of Mr. Deasey’s stock options, Mr. Deasey is not entitled to any benefits upon the termination of his employment or a change-in-control of the Company under his employment agreement. With respect to Mr. Deasey’s stock options,

- if his employment with us is terminated for Cause (as defined below), Mr. Deasey’s unvested stock options as of the date of termination will be forfeited, and Mr. Deasey’s stock options that have vested as of the date of termination will expire 24 hours after such termination date. “Cause” is defined under Mr. Deasey’s employment agreement as, but is not limited to, malfeasance, material non-performance or materially inadequate performance by Mr. Deasey of his duties to us following written notice or other communication from the Board of such inadequate performance and a one-time reasonable cure period.
- if his employment with us is terminated without Cause, Mr. Deasey’s unvested stock options will continue to vest in accordance with their respective vesting schedules until the last day of employment and will be exercisable for up to 120 days following termination.
- if Mr. Deasey resigns from his employment with us for any reason, Mr. Deasey’s unvested stock options as of the last date of employment will be forfeited. If Mr. Deasey resigns upon (i) at least 60 days advance notice if his resignation is prior to October 1, 2009 and (ii) at least 30 days advance notice if his resignation is subsequent to October 1, 2009, and during the period between the giving of his resignation notice and the effective date of his resignation, devotes his best efforts, in good faith, to our business and any personnel

transition, then his stock options which have vested as of the effective date of his resignation will be exercisable for 60 days following the last day of his employment with us. If Mr. Deasey's resignation does not comply with the notice, best efforts and good faith requirements described above, then his stock options which have vested as of the effective date of his resignation will be exercisable for one business day following the last day of his employment with us.

On June 22, 2007, an employment agreement between us and Alton L. Boynton, Ph.D. became effective. Under the terms of the agreement, Dr. Boynton is employed as President and Chief Executive Officer of the Company. Pursuant to the terms of the agreement, Dr. Boynton is paid annual compensation of \$331,250 for his services. The agreement provides for standard benefits, including coverage under our medical, dental, vision, life and disability policies. Dr. Boynton is eligible to participate in our 401(k) plan and to receive a bonus at the discretion of the Board. In connection with his employment with us, Mr. Boynton is subject to a noncompetition obligation for one year following the termination of his employment with us.

Except as relates to the vesting of Dr. Boynton's stock options, Dr. Boynton is not entitled to any benefits upon the termination of his employment or a change-in-control of the Company under his employment agreement. With respect to Dr. Boynton's stock options,

- if his employment with us is terminated for Cause (as defined below), Dr. Boynton's unvested stock options as of the date of termination will be forfeited, and Dr. Boynton's stock options that have vested as of the date of termination will expire 24 hours after such termination date. "Cause" is defined under Dr. Boynton's employment agreement as, but is not limited to, malfeasance, material non-performance or materially inadequate performance by Dr. Boynton of his duties to us following written notice or other communication from the Board of such inadequate performance and a one-time reasonable cure period.
- if his employment with us is terminated without Cause, Dr. Boynton's unvested stock options will continue to vest in accordance with their respective vesting schedules and will be exercisable during their full exercise period, *if* Dr. Boynton (a) executes a separation and release agreement reasonably acceptable to the Company and (b) agrees not to do not work for or with a company that is developing immunotherapies for cancer in any capacity (including as an employee, director, adviser or collaborator) while any vesting period is continuing.
- if Dr. Boynton resigns from his employment with us for any reason, Dr. Boynton's unvested stock options as of the date of resignation will be forfeited. If Dr. Boynton resigns upon at least 90 days advance notice, and during the period between the giving of his resignation notice and the effective date of his resignation, devotes his best efforts, in good faith, to our business and any personnel transition, then his stock options which have vested as of the effective date of his resignation will be exercisable for 90 days following the last day of his employment with us. If Dr. Boynton's resignation does not comply with the notice, best efforts and good faith requirements described above, then his stock options which have vested as of the effective date of his resignation will be exercisable for 15 days following the last day of his employment with the Company.

On June 22, 2007, the employment agreement between us and James D. Johnston, our former CFO, became effective. Under the terms of the agreement, Mr. Johnston was employed as Chief Financial Officer and General Counsel of the Company. Pursuant to the terms of the agreement, Mr. Johnston was to be paid annual compensation of \$180,000 for his services. Mr. Johnston was required to devote 60 percent of his time to our business. The agreement provided for standard benefits, including coverage under our medical, dental, vision, life and disability policies. Mr. Johnston was eligible to participate in our 401(k) plan and to receive a bonus at the discretion of the Board. On August 23, 2007, Mr. Johnston resigned from his positions of Chief Financial Officer and General Counsel of the Company, and as a member of the Board of Directors and all committees thereof, each effective on August 28, 2007. Mr. Johnston is not subject to a noncompetition obligation following the termination of his employment with us.

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

The following table presents information regarding the beneficial ownership of our common stock as of March 20, 2008 by:

- each person, or group of affiliated persons, who is known by us to own beneficially 5% or more of any class of our equity securities;
- our directors;
- each of our named executive officers, as defined in Item 402(a)(3) of Regulation S-K; and
- our directors and executive officers as a group.

The applicable percentages of ownership are based on an aggregate of 42,346,085 shares of common stock issued and outstanding on March 20, 2008. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed shares of common stock subject to options, warrants, convertible preferred stock or convertible notes held by that person that are currently exercisable or exercisable within 60 days of March 20, 2008.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and the entities named in the table have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

Except as otherwise noted, the address of the individuals in the following table below is c/o Northwest Biotherapeutics, Inc., 7600 Wisconsin Avenue, Suite 750, Bethesda, MD 20814.

<u>Name of Beneficial Owner</u>	<u>Number of Shares Beneficially Owned</u>	<u>Percentage(1)</u>
Officers and Directors		
Alton L. Boynton, Ph.D.(2)	1,007,835	2.3
Anthony P. Deasey	—	—
Jim Johnston(8)	1,667	—
Marnix L. Bosch, Ph.D., M.B.A.(3)	265,284	0.6
Linda F. Powers(4)	52,739,826	72.0
R. Steve Harris	—	—
All executive officers and directors as a group (5 persons)(5) . . .	1,274,786	2.9
5% Security Holders		
Toucan Capital Fund II, L.P.(6)	41,334,575	64.2
7600 Wisconsin Avenue, Suite 700, Bethesda, MD 20814		
Toucan Partners, LLC(7)	11,405,251	22.3
7600 Wisconsin Avenue, Suite 700, Bethesda, MD 20814		
Al Rajhi Holdings	4,500,000	10.6
Rue Maurice 3 1204 Geneve Switzerland		
IS Partners Investment Solutions		
AG Helium Special Situations Fund	2,302,632	5.4
Limmatquai 2		
8001 Zurich PO Box 463 8024 Zurich Switzerland		

(1) Percentage represents beneficial ownership percentage of common stock calculated in accordance with SEC rules and does not equate to voting percentages.

(2) Includes 827,736 shares of common stock issuable upon exercise of options that are exercisable within 60 days of March 20, 2008.

- (3) Includes 199,857 shares of common stock issuable upon exercise of options that are exercisable within 60 days of March 20, 2008.
- (4) Includes (i) 19,299,486 shares of common stock held by Toucan Capital; (ii) 22,035,089 shares of common stock currently issuable upon exercise of warrants that are exercisable within 60 days of March 20, 2008 held by Toucan Capital; (iii) 8,832,541 shares of common stock currently issuable upon exercise of warrants that are exercisable within 60 days of March 20, 2008 held by Toucan Partners, and (iv) 2,572,710 shares of common stock held by Toucan Partners. Ms. Powers is a managing member of Toucan Management, LLC, which is the manager of Toucan Capital, and is a managing member of Toucan Partners. Ms. Powers disclaims beneficial ownership as to all such shares of common stock.
- (5) Includes 1,029,260 shares issuable to officers and directors upon exercise of options that are exercisable within 60 days of March 20, 2008. Excludes 52,739,826 shares of common stock as to which Ms. Powers disclaims beneficial ownership. See Note 4 above.
- (6) Includes 22,035,089 shares of common stock currently issuable upon exercise of warrants that are exercisable within 60 days of March 20, 2008 held by Toucan Capital.
- (7) Includes 8,832,541 shares of common stock currently issuable upon exercise of warrants that are exercisable within 60 days of March 20, 2008 held by Toucan Partners.
- (8) Includes 1,667 shares of common stock currently issuable upon exercise of options that are exercisable within 60 days of March 20, 2008.

Equity Compensation Plan Information

The following table sets out information regarding our common stock that may be issued upon the exercise of options, warrants and other rights granted to employees, consultants or directors under all of our existing equity compensation plans, as of December 31, 2007:

<u>Plan category</u>	<u>Number of Shares to be Issued Upon Exercise of Outstanding Options and Warrants</u>	<u>Weighted-Average Exercise Price of Outstanding Options and Warrants</u>	<u>Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans</u>
Equity compensation plans approved by security holders	50,906	\$7.97	—
Equity compensation plans not approved by security holders	<u>4,724,462</u>	\$0.89	<u>756,406</u>
Total	<u>4,775,368</u>		<u>756,406</u>

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

Since 2004, we have undergone a significant recapitalization pursuant to which Toucan Capital loaned us an aggregate of \$6.75 million, which loans were converted into shares of our Series A-1 Preferred Stock in April 2006, and Toucan Partners loaned us an aggregate of \$4.825 million (excluding \$225,000 in proceeds from a demand note that was received on June 13, 2007 and repaid on June 27, 2007). Our Chairperson, Linda Powers, is a managing director of Toucan Capital and a managing member of Toucan Partners.

Toucan Partners loaned us \$4.825 million in a series of transactions. From November 14, 2005 through March 9, 2006, we issued three promissory notes to Toucan Partners, pursuant to which Toucan Partners loaned us an aggregate of \$950,000. In addition to the \$950,000 of promissory notes, Toucan Partners provided \$3.15 million in cash advances from October 2006 through April 2007, which were converted into the 2007 Convertible Notes and 2007 Warrants in April 2007. In April 2007, the three promissory notes were amended and restated to conform to the 2007 Convertible Notes. Payment was due under the notes upon written demand on or after June 30, 2007. Interest accrued at 10% per annum, compounded annually, on a 365-day year basis. The principal amount of, and accrued interest on, these notes, as amended, was convertible at Toucan Partners' election into common stock on the same terms as the 2007 Convertible Notes.

Toucan Partners also entered into two promissory notes with us to fix the terms of two additional cash advances provided by Toucan Partners to us on May 14, 2007 and May 25, 2007 in the aggregate amount of \$725,000, and we issued warrants to purchase shares of our common stock to Toucan Partners in connection with each such note. These notes and warrants are on the same terms as the 2007 Convertible Notes and 2007 Warrants and the proceeds of these notes enabled us to continue to operate and advance programs while raising additional equity financing.

During the fourth quarter of 2007, we repaid the entire \$5.3 million in principal and related accrued interest due to Toucan Partners pursuant to the convertible notes.

Conversion of Preferred Stock and Related Matters

On June 1, 2007, we issued to Toucan Capital a new warrant to purchase our Series A-1 Preferred Stock (“Toucan Capital Series A-1 Warrant”) in exchange for the cancellation of all previously issued warrants to purchase Series A-1 Preferred Stock (or, at the election of Toucan Capital, any other equity or debt security of the Company) held by Toucan Capital. The new Toucan Capital Series A-1 Warrant is exercisable for 6,471,333 shares of Series A-1 Preferred Stock plus shares of Series A-1 Preferred Stock attributable to accrued dividends on the shares of Series A-1 Preferred Stock held by Toucan Capital (with each such Series A-1 Preferred Share convertible into 2.67 shares of common stock at \$0.60 per share), compared to the 3,062,500 shares of Series A-1 Preferred Stock (with each such Series A-1 Preferred Share convertible into 2.67 shares of common stock at \$0.60 per share) that were previously issuable to Toucan Capital upon exercise of the warrants being cancelled.

Also on June 1, 2007, we and Toucan Capital amended Toucan Capital’s warrant to purchase Series A Preferred Stock (the “Toucan Capital Series A Warrant”) to increase the number of shares of Series A Preferred Stock that are issuable upon exercise of the warrant to 32,500,000 shares of Series A Preferred Stock (plus shares of Series A Preferred Stock attributable to accrued dividends on the shares of Series A Preferred Stock held by Toucan Capital) from 13,000,000 shares of Series A Preferred Stock.

In connection with the modifications of the Series A and Series A-1 Preferred Stock warrants, we recognized reductions in earnings applicable to common stockholders in June 2007 of \$2.3 million and \$16.4 million, respectively. The fair value of the warrant modifications were determined using the Black-Scholes option pricing model with the following assumptions: expected dividend yield of 0%, risk-free interest rate of 5.0% volatility of 398%, and a contractual life of seven years.

On June 15, 2007, we, Toucan Capital, and Toucan Partners entered into a conversion agreement (“Conversion Agreement”) which became effective on June 22, 2007 upon the admission of the Company’s common stock to trade on AIM (“Admission”).

Pursuant to the terms of the Conversion Agreement (i) Toucan Capital agreed to convert and has converted all of its shares of the Company’s Series A Preferred Stock and Series A-1 Preferred Stock (in each case, excluding any accrued and unpaid dividends) into common stock and agreed to eliminate a number of rights, preferences and protections associated with the Series A Preferred Stock and Series A-1 Preferred Stock, including the liquidation preference entitling Toucan Capital to certain substantial cash payments and (ii) Toucan Partners agreed to eliminate all of its existing rights to receive Series A-1 Preferred Stock under certain notes and warrants (and thereafter to receive shares of common stock rather than shares of Series A-1 Preferred Stock), and the rights, preferences and protections associated with the Series A-1 Preferred Stock, including the liquidation preference that would entitle Toucan Partners to certain substantial cash payments. In return for these agreements, the Company issued to Toucan Capital and Toucan Partners 4,287,851 and 2,572,710 shares of common stock, respectively. In connection with the issuance of these shares, we recognized a further reduction of earnings applicable to common stockholders of \$12.3 million in June 2007.

Under the terms of the Conversion Agreement (i) the Toucan Capital Series A Warrant is exercisable for 2,166,667 shares of common stock rather than shares of Series A Preferred Stock (plus shares of common stock, rather than shares of Series A Preferred Stock, attributable to accrued dividends on the shares of Series A Preferred Stock previously held by Toucan Capital that were converted into common stock upon Admission, subject to the further provisions of the Conversion Agreement as described below) and (ii) the Toucan Capital Series A-1 Warrant became exercisable for an aggregate of 17,256,888 shares of common stock rather than shares of Series A-1

Preferred Stock (plus shares of common stock, rather than shares of Series A-1 Preferred Stock, attributable to accrued dividends on the shares of Series A-1 Preferred Stock previously held by Toucan Capital that were converted into common stock upon Admission), subject to further provisions of the Conversion Agreement as described below.

As noted above, the 32,500,000 shares of Series A Preferred Stock held by Toucan Capital converted, in accordance with their terms, into 2,166,667 shares of common stock and the 4,816,863 shares of Series A-1 Preferred Stock held by Toucan Capital converted, in accordance with their terms, into 12,844,968 shares of common stock.

Under the terms of the Conversion Agreement, Toucan Capital also agreed to temporarily defer receipt of the accrued and unpaid dividends on its shares of Series A Preferred Stock and Series A-1 Preferred Stock of an amount equal to \$334,340 and \$917,451, respectively, until not later than September 30, 2007. In September 2007, we paid these dividends in full to Toucan Capital.

As a result of the financings described above, as of March 20, 2008, Toucan Capital held:

- an aggregate of 19,299,486 shares of common stock;
- warrants to purchase 14,150,732 shares of common stock at an exercise price of \$0.60 per share; and
- warrants to purchase 7,884,357 shares of common stock at an exercise price of \$0.15 per share.

As a result of the financings described above, as of March 20, 2008, Toucan Partners held:

- an aggregate of 2,572,710 shares of common stock; and
- warrants to purchase 8,832,541 shares of common stock at an exercise price of \$0.60 per share.

The investments made by Toucan Capital and Toucan Partners were made pursuant to the terms and conditions of a Recapitalization Agreement originally entered into on April 26, 2004 with Toucan Capital. The Recapitalization Agreement, as amended, originally contemplated the investment of up to \$40 million through the issuance of new securities to Toucan Capital and a syndicate of other investors to be determined.

We and Toucan Capital amended the Recapitalization Agreement in conjunction with each successive loan agreement. The amendments generally (i) updated certain representations and warranties of the parties made in the Recapitalization Agreement, and (ii) made certain technical changes in the Recapitalization Agreement in order to facilitate the bridge loans described therein.

Through June 22, 2007, the Company accrued and paid certain legal and other administrative costs on Toucan Capital's behalf pursuant to the Recapitalization Agreement. Subsequent to June 22, 2007, Toucan Capital has incurred further costs on behalf of the Company, primarily related to travel expenses and fees incurred in connection with efforts to investigate and establish DCVax® businesses in other locations overseas. In addition, effective July 1, 2007, the Company commenced accruing rent expense related to the sublease for its Bethesda, Maryland office space from Toucan Capital Corporation. During the year ended December 31, 2007, the Company recognized approximately \$1.0 million of general and administrative costs related to the Recapitalization Agreement, rent expense and costs incurred by Toucan Capital on the Company's behalf. Approximately \$175,000 of these costs relate to activities which took place prior to 2007. During the year ended December 31, 2006, the Company recognized approximately \$1.3 million of general and administrative costs related to the Recapitalization Agreement. Pursuant to the terms of the Conversion Agreement, the Recapitalization Agreement was terminated on June 22, 2007.

As of March 20, 2008, Toucan Capital, including the holdings of Toucan Partners, beneficially owned of 21,872,196 shares of our capital stock, representing approximately 51.7% of our outstanding common stock.

Cognate

On July 30, 2004, we entered into a service agreement with Cognate, a contract manufacturing and services organization in which Toucan Capital has a majority interest. In addition, two of the principals of Toucan Capital are members of Cognate's board of directors and, on May 17, 2007, the managing director of Toucan Capital, Linda

Powers, was appointed to serve as our director and to serve as the non-executive Chairperson of our Board of Directors. Under the service agreement, we agreed to utilize Cognate's services for an initial two-year period, related primarily to manufacturing DCVax® product candidates, regulatory advice, research and development preclinical activities and managing clinical trials. The agreement expired on July 30, 2006; however, the Company continued to utilize Cognate's services under the same terms as set forth in the expired agreement. On May 17, 2007, the Company entered into a new services agreement with Cognate pursuant to which Cognate will provide certain consulting and, when needed, manufacturing services to the Company for its DCVax®-Brain Phase II clinical trial. Under the terms of the new contract, the Company paid a non-refundable contract initiation fee of \$250,000 and committed to pay budgeted monthly service fees of \$400,000, subject to quarterly true-ups, and monthly facility fees of \$150,000. We may terminate this agreement with 180 days notice and payment of all reasonable wind-up costs and Cognate may terminate the contract in the event that the brain cancer clinical trial fails to complete enrollment by July 1, 2009. However, if such termination by the Company occurs at any time prior to the earlier of the submission of an FDA biological license application/new drug application on the Company's brain cancer clinical trial or July 1, 2010 or, such termination by Cognate results from failure of the brain cancer clinical trial to complete patient enrollment by July 1, 2009, the Company is obligated to make an additional termination fee payment to Cognate equal to \$2 million.

During the years ending December 31, 2005, 2006 and 2007, respectively, we recognized approximately \$3.5 million, \$2.4 million and \$5.8 million of research and development costs related to this service agreement. As of December 31, 2006 and 2007, the Company owed Cognate approximately \$2.2 million and \$0, respectively.

Director Independence

One of our directors is an "independent director" as defined by rules of the NASDAQ Stock Market, but does not meet the definition of an "audit committee financial expert" as defined by the SEC. We intend to recruit one or more additional non-executive directors in due course but may not be able to do so. See further discussion under Item 10. in this Annual Report on Form 10-K.

Ms. Powers, who is a member of our Audit Committee, Compensation Committee and Nominations Committee, is not an "independent director" under the rules of the NASDAQ Stock Market.

Item 14. *Principal Accountant Fees and Services*

The following table represents aggregate fees billed to us for the fiscal years ended December 31, 2007 and 2006 by Peterson Sullivan, our principal independent registered public accounting firm.

<u>Fiscal Year Ended December 31:</u>	<u>2007</u>	<u>2006</u>
Audit Fees	\$80,456	\$78,196
Audit-Related Fees	12,000	—
Tax Fees.	3,225	5,000
All Other Fees	—	—
Total	<u>\$95,681</u>	<u>\$83,196</u>

Audit fees primarily include services for auditing our financial statements along with reviews of our interim financial information included in our Forms 10-K and 10-Q. Peterson Sullivan's work on these two audits was performed by full time, regular employees and partners of Peterson Sullivan. Audit-related fees comprise professional services rendered in connection with the filing of SEC registration statements. Tax fees, which includes tax consulting and tax compliance fees, in both the current year and prior year relate to the preparation of our Federal income tax return. All fees described above were approved by our Audit Committee, and the Audit Committee considers the provision of the services rendered in respect of those fees compatible with maintaining the auditor's independence.

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Index to Consolidated Financial Statements and Independent Auditors Report.

The financial statements required by this item are submitted in a separate section as indicated below.

	<u>Page</u>
Report of Peterson Sullivan, PLLC, Independent Registered Public Accounting Firm	69
Consolidated Balance Sheets	70
Consolidated Statements of Operations	71
Consolidated Statements of Stockholders' Equity (Deficit) and Comprehensive Loss	72
Consolidated Statements of Cash Flows	75
Notes to Financial Statements.	77

(2) Index to Financial Statement Schedules

All financial statement schedules are omitted since the required information is not applicable, not required or the required information is included in the financial statements or notes thereto.

(3) Exhibits

See Exhibit Index on page 102.



PETERSON SULLIVAN PLLC

CERTIFIED PUBLIC ACCOUNTANTS
601 UNION STREET, SUITE 2300
SEATTLE, WASHINGTON 98101

Tel 206.382.7777 • Fax 206.382.7700
<http://www.pscpa.com>

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors
Northwest Biotherapeutics, Inc.
Bethesda, Maryland

We have audited the accompanying consolidated balance sheets of Northwest Biotherapeutics, Inc. (a development stage company) as of December 31, 2007 and 2006, and the related consolidated statements of operations, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2007, and for the period from March 18, 1996 (date of inception) to December 31, 2007. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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. The Company has determined that it is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated 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, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Northwest Biotherapeutics, Inc. (a development stage company) as of December 31, 2007 and 2006, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2007, and for the period from March 18, 1996 (date of inception) to December 31, 2007, in conformity with accounting principles generally accepted in the United States.

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has experienced recurring losses from operations since inception, net operating cash flow deficits, and has a deficit accumulated during the development stage. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans regarding these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PETERSON SULLIVAN PLLC

Peterson Sullivan PLLC

April 7, 2008
Seattle, Washington

NORTHWEST BIOTHERAPEUTICS, INC.
(A Development Stage Company)
CONSOLIDATED BALANCE SHEETS

	December 31, 2006	December 31, 2007
	(In thousands)	
ASSETS		
Current assets:		
Cash	\$ 307	\$ 7,861
Accounts receivable	3	—
Prepaid expenses and other current assets	145	823
Total current assets	<u>455</u>	<u>8,684</u>
Property and equipment:		
Laboratory equipment	14	29
Office furniture and other equipment	71	94
	85	123
Less accumulated depreciation and amortization	<u>(70)</u>	<u>(104)</u>
Property and equipment, net	15	19
Restricted cash	31	—
Deposit and other non-current assets	3	3
Total assets	<u><u>\$ 504</u></u>	<u><u>\$ 8,706</u></u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Note payable to related parties, net	\$ 2,505	\$ —
Current portion of capital lease obligations	2	—
Accounts payable	493	846
Accounts payable, related party	2,852	161
Accrued expenses	301	1,006
Accrued expense, related party	300	886
Total current liabilities	6,453	2,899
Stockholders' equity (deficit):		
Preferred stock, \$0.001 par value; 300,000,000 and 20,000,000 shares authorized at December 31, 2006 and 2007, respectively		
Series A preferred stock, 50,000,000 and zero designated at December 31, 2006 and 2007, respectively and 32,500,000 and zero shares issued and outstanding at December 31, 2006 and 2007, respectively	33	—
Series A-1 preferred stock, 10,000,000 and zero designated at December 31, 2006 and 2007 respectively and 4,816,863 and zero shares issued and outstanding at December 31, 2006 and 2007, respectively	5	—
Common stock, \$0.001 par value; 800,000,000 and 100,000,000 shares authorized at December 31, 2006 and 2007, respectively and 4,349,419 and 42,346,085 shares issued and outstanding at December 31, 2006 and 2007, respectively	65	42
Additional paid-in capital	78,033	148,064
Deficit accumulated during the development stage	(84,085)	(142,295)
Cumulative translation adjustment	—	(4)
Total stockholders' (deficit) equity	<u>(5,949)</u>	<u>5,807</u>
Total liabilities and stockholders' equity	<u><u>\$ 504</u></u>	<u><u>\$ 8,706</u></u>

See accompanying notes to the consolidated financial statements.

NORTHWEST BIOTHERAPEUTICS, INC.
(A Development Stage Company)
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,			Period from March 18, 1996 (Inception) to December 31, 2007
	2005	2006	2007	
	(In thousands, except per share data)			
Revenues:				
Research materials sales	\$ 38	\$ 80	\$ 10	\$ 540
Contract research and development from related parties . .	—	—	—	1,128
Research grants and other	86	—	—	1,061
Total revenues	<u>124</u>	<u>80</u>	<u>10</u>	<u>2,729</u>
Operating costs and expenses:				
Cost of research material sales	12	—	—	382
Research and development	4,469	3,777	8,778	44,622
General and administrative	2,005	2,273	7,171	40,138
Depreciation and amortization	63	37	19	2,322
Loss on facility sublease	—	—	—	895
Asset impairment loss and (gain) loss on disposal of equipment	—	(10)	—	2,056
Total operating costs and expenses	<u>6,549</u>	<u>6,077</u>	<u>15,968</u>	<u>90,415</u>
Loss from operations	(6,425)	(5,997)	(15,958)	(87,686)
Other income (expense):				
Warrant valuation	—	7,127	—	6,759
Gain on sale of intellectual property to Medarex	—	—	—	3,656
Interest expense	(3,517)	(2,564)	(5,629)	(21,330)
Interest income	5	39	340	1,115
Net loss	(9,937)	(1,395)	(21,247)	(97,486)
Issuance of common stock in connection with elimination of Series A and Series A-1 preferred stock preferences	—	—	(12,349)	(12,349)
Modification of Series A preferred stock warrants	—	—	(2,306)	(2,306)
Modification of Series A-1 preferred stock warrants	—	—	(16,393)	(16,393)
Series A preferred stock dividends	—	—	(334)	(334)
Series A-1 preferred stock dividends	—	—	(917)	(917)
Warrants issued on Series A and Series A-1 preferred stock dividends	—	—	(4,664)	(4,664)
Accretion of Series A preferred stock mandatory redemption obligation	—	—	—	(1,872)
Series A preferred stock redemption fee	—	—	—	(1,700)
Beneficial conversion feature of Series D preferred stock . . .	—	—	—	(4,274)
Net loss applicable to common stockholders	<u>\$(9,937)</u>	<u>\$(1,395)</u>	<u>\$(58,210)</u>	<u>\$(142,295)</u>
Net loss per share applicable to common stockholders — basic and diluted	<u>\$ (7.82)</u>	<u>\$ (0.39)</u>	<u>\$ (2.38)</u>	
Weighted average shares used in computing basic and diluted loss per Share	<u>1,271</u>	<u>3,562</u>	<u>24,420</u>	

See accompanying notes to the consolidated financial statements.

NORTHWEST BIOTHERAPEUTICS, INC.
(A Development Stage Company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) AND COMPREHENSIVE LOSS

	Common Stock		Preferred Stock		Preferred Stock		Additional Paid-In Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Cumulative Translation Adjustment	Total Stockholders' Equity (Deficit)
	Shares	Amount	Series A Shares	Amount	Series A-1 Shares	Amount					
							(In thousands)				
Balances at March 18, 1996	—	\$ —	—	\$ —	—	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Accretion of membership units mandatory redemption obligation	—	—	—	—	—	—	—	—	(106)	—	(106)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(1,233)	—	(1,233)
Balances at December 31, 1996	—	—	—	—	—	—	—	—	(1,339)	—	(1,339)
Accretion of membership units mandatory redemption obligation	—	—	—	—	—	—	—	—	(275)	—	(275)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(2,560)	—	(2,560)
Balances at December 31, 1997	—	—	—	—	—	—	—	—	(4,174)	—	(4,174)
Conversion of membership units to common stock	2,203	2	—	—	—	—	—	—	(2)	—	—
Accretion of Series A preferred stock mandatory redemption obligation	—	—	—	—	—	—	—	—	(329)	—	(329)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(4,719)	—	(4,719)
Balances at December 31, 1998	2,203	2	—	—	—	—	—	—	(9,224)	—	(9,222)
Issuance of Series C preferred stock warrants for services related to sale of Series C preferred shares	—	—	—	—	—	—	394	—	—	—	394
Accretion of Series A preferred stock mandatory redemption obligation	—	—	—	—	—	—	—	—	(354)	—	(354)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(5,609)	—	(5,609)
Balances at December 31, 1999	2,203	2	—	—	—	—	394	—	(15,187)	—	(14,791)
Issuance of Series C preferred stock warrants in connection with lease agreement	—	—	—	—	—	—	43	—	—	—	43
Exercise of stock options for cash	2	—	—	—	—	—	1	—	—	—	1
Issuance of common stock at \$0.85 per share for license rights	5	—	—	—	—	—	4	—	—	—	4
Issuance of Series D preferred stock warrants in convertible promissory note offering	—	—	—	—	—	—	4,039	—	—	—	4,039
Beneficial conversion feature of convertible promissory notes	—	—	—	—	—	—	1,026	—	—	—	1,026
Issuance of Series D preferred stock warrants for services related to sale of Series D preferred shares	—	—	—	—	—	—	368	—	—	—	368
Issuance of common stock warrants in conjunction with issuance of promissory note	—	—	—	—	—	—	3	—	—	—	3
Cancellation of common stock	(275)	—	—	—	—	—	—	—	—	—	—
Accretion of Series A preferred stock mandatory redemption obligation	—	—	—	—	—	—	—	—	(430)	—	(430)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(12,779)	—	(12,779)
Balances at December 31, 2000	1,935	2	—	—	—	—	5,878	—	(28,396)	—	(22,516)
Issuance of Series D preferred stock warrants in conjunction with refinancing of note payable to stockholder	—	—	—	—	—	—	225	—	—	—	225
Beneficial conversion feature of convertible promissory note	—	—	—	—	—	—	456	—	—	—	456
Beneficial conversion feature of Series D preferred stock	—	—	—	—	—	—	4,274	—	(4,274)	—	—
Issuance of Series D preferred stock warrants for services related to the sale of Series D preferred shares	—	—	—	—	—	—	2,287	—	—	—	2,287
Exercises of stock options and warrants for cash	1,158	1	—	—	—	—	407	—	—	—	408
Issuance of common stock in initial public offering for cash, net of offering costs of \$2,845	4,000	4	—	—	—	—	17,151	—	—	—	17,155
Conversion of preferred stock into common stock	9,776	10	—	—	—	—	31,569	—	—	—	31,579
Series A preferred stock redemption fee	—	—	—	—	—	—	—	—	(1,700)	—	(1,700)
Issuance of stock options to nonemployees for services	—	—	—	—	—	—	45	—	—	—	45
Deferred compensation related to employee stock options	—	—	—	—	—	—	1,330	(1,330)	—	—	—
Amortization of deferred compensation	—	—	—	—	—	—	—	314	—	—	314
Accretion of Series A preferred stock mandatory redemption obligation	—	—	—	—	—	—	—	—	(379)	—	(379)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(10,940)	—	(10,940)
Balances at December 31, 2001	16,869	17	—	—	—	—	63,622	(1,016)	(45,689)	—	16,934

	Common Stock		Preferred Stock		Preferred Stock		Additional Paid-In Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Cumulative Translation Adjustment	Total Stockholders' Equity (Deficit)
	Shares	Amount	Series A Shares	Amount	Series A-1 Shares	Amount					
	(In thousands)										
Issuance of unregistered common stock . . .	1,000	1	—	—	—	—	199	—	—	—	200
Issuance of common stock, Employee Stock Purchase Plan	9	—	—	—	—	—	6	—	—	—	6
Issuance of common stock warrants to Medarex	—	—	—	—	—	—	80	—	—	—	80
Issuance of restricted stock to nonemployees	8	—	—	—	—	—	34	—	—	—	34
Issuance of stock options to nonemployees for service	—	—	—	—	—	—	57	—	—	—	57
Issuance of stock options to employees . . .	—	—	—	—	—	—	22	(22)	—	—	—
Cancellation of employee stock options . . .	—	—	—	—	—	—	(301)	301	—	—	—
Exercise of stock options and warrants for cash	32	—	—	—	—	—	18	—	—	—	18
Deferred compensation related to employee restricted stock option	99	—	—	—	—	—	449	(449)	—	—	—
Cancellation of employee restricted stock grants	(87)	—	—	—	—	—	(392)	392	—	—	—
Amortization of deferred compensation, net	—	—	—	—	—	—	—	350	—	—	350
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(12,804)	—	(12,804)
Balances at December 31, 2002	17,930	18	—	—	—	—	63,794	(444)	(58,493)	—	4,875
Issuance of unregistered common stock to Medarex	1,000	1	—	—	—	—	199	—	—	—	200
Issuance of unregistered common stock to Nexus	90	—	—	—	—	—	35	—	—	—	35
Issuance of common stock warrants to Medarex	—	—	—	—	—	—	80	—	—	—	80
Issuance of warrants with convertible promissory note	—	—	—	—	—	—	221	—	—	—	221
Beneficial conversion feature of convertible promissory note	—	—	—	—	—	—	114	—	—	—	114
Issuance of common stock, Employee Stock Purchase Plan	4	—	—	—	—	—	—	—	—	—	—
Exercise of stock options and warrants for cash	8	—	—	—	—	—	—	—	—	—	—
Cancellation of employee restricted stock grants	(4)	—	—	—	—	—	(20)	20	—	—	—
Cancellation of employee stock options . . .	—	—	—	—	—	—	(131)	131	—	—	—
Amortization of deferred compensation, net	—	—	—	—	—	—	—	240	—	—	240
Non-employee stock compensation	—	—	—	—	—	—	2	—	—	—	2
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(5,752)	—	(5,752)
Balances at December 31, 2003	19,028	19	—	—	—	—	64,294	(53)	(64,245)	—	15
Issuance of warrants with convertible promissory note	—	—	—	—	—	—	1,711	—	—	—	1,711
Beneficial conversion feature of convertible promissory note	—	—	—	—	—	—	1,156	—	—	—	1,156
Issuance of common stock, Employee Stock Purchase Plan	1	—	—	—	—	—	—	—	—	—	—
Cancellation of employee stock options . . .	—	—	—	—	—	—	(5)	5	—	—	—
Amortization of deferred compensation, net	—	—	—	—	—	—	—	41	—	—	41
Warrant valuation	—	—	—	—	—	—	368	—	—	—	368
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(8,508)	—	(8,508)
Balances at December 31, 2004	19,029	19	—	—	—	—	67,524	(7)	(72,753)	—	(5,217)
Issuance of unregistered common stock and preferred stock to Toucan Capital . . .	—	—	32,500	33	—	—	1,243	—	—	—	1,276
Issuance of stock options to non- employees for services	—	—	—	—	—	—	3	—	—	—	3
Issuance of warrants with convertible promissory note	—	—	—	—	—	—	1,878	—	—	—	1,878
Exercise of stock options and warrants for cash	49	—	—	—	—	—	4	—	—	—	4
Amortization of deferred compensation, net	—	—	—	—	—	—	—	7	—	—	7
Beneficial conversion feature of convertible promissory note	—	—	—	—	—	—	1,172	—	—	—	1,172
Common Stock warrant liability	—	—	—	—	—	—	(604)	—	—	—	(604)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(9,937)	—	(9,937)
Balances at December 31, 2005	19,078	19	32,500	33	—	—	71,220	—	(82,690)	—	(11,418)

	Common Stock		Preferred Stock		Preferred Stock		Additional Paid-In Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Cumulative Translation Adjustment	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount					
(In thousands)											
Issuance of common stock to PIPE											
Investors for cash, net of cash and non-cash offering costs of \$837	39,468	39	—	—	—	—	4,649	—	—	—	4,688
Issuance of warrants to PIPE investment bankers	—	—	—	—	—	—	395	—	—	—	395
Conversion of notes payable due to Toucan Capital to Series A-1 preferred stock	—	—	—	—	4,817	5	7,702	—	—	—	7,707
Conversion of notes payable due to management to common stock	2,688	3	—	—	—	—	266	—	—	—	269
Issuance of warrants with convertible promissory notes	—	—	—	—	—	—	236	—	—	—	236
Exercise of stock options and warrants for cash	66	—	—	—	—	—	9	—	—	—	9
Exercise of stock options and warrants — cashless	3,942	4	—	—	—	—	(4)	—	—	—	—
Stock compensation expense	—	—	—	—	—	—	19	—	—	—	19
Beneficial conversion feature of convertible promissory note	—	—	—	—	—	—	64	—	—	—	64
Common Stock warrant liability	—	—	—	—	—	—	(6,523)	—	—	—	(6,523)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(1,395)	—	(1,395)
Balances at December 31, 2006	65,241	\$ 65	32,500	\$ 33	4,817	\$ 5	\$ 78,033	\$ —	\$ (84,085)	\$—	\$ (5,949)
Conversion of common stock at par related to the reverse stock split	(60,892)	(61)	—	—	—	—	61	—	—	—	—
Conversion of Series A and A-1 preferred stock into common stock	15,012	15	(32,500)	(33)	(4,817)	(5)	23	—	—	—	—
Issuance of common stock in connection with elimination of Series A and Series A-1 preferred stock preferences	6,861	7	—	—	—	—	12,342	—	(12,349)	—	—
Modification of preferred stock Series A and Series A-1 warrants	—	—	—	—	—	—	18,699	—	(18,699)	—	—
Series A and Series A-1 preferred stock dividend payment	—	—	—	—	—	—	—	—	(1,251)	—	(1,251)
Warrants issued on Series A and Series A-1 preferred stock dividends	—	—	—	—	—	—	4,664	—	(4,664)	—	—
Issuance of common stock in initial public offering on the AIM London market for cash, net of offering costs of \$3,965	15,789	16	—	—	—	—	25,870	—	—	—	25,886
Remeasurement of warrants issued in connection with convertible promissory notes	—	—	—	—	—	—	4,495	—	—	—	4,495
Remeasurement of beneficial conversion feature related to convertible promissory notes	—	—	—	—	—	—	1,198	—	—	—	1,198
Exercise of warrants — cashless	335	—	—	—	—	—	—	—	—	—	—
Stock compensation expense	—	—	—	—	—	—	2,679	—	—	—	2,679
Cumulative translation adjustment	—	—	—	—	—	—	—	—	—	(4)	(4)
Comprehensive loss — net loss	—	—	—	—	—	—	—	—	(21,247)	—	(21,247)
Total other comprehensive loss	—	—	—	—	—	—	—	—	—	—	(21,251)
Balances at December 31, 2007	42,346	\$ 42	—	\$ —	—	\$—	\$148,064	\$ —	\$ (142,295)	\$ (4)	\$ (5,807)

See accompanying notes to the consolidated financial statements.

NORTHWEST BIOTHERAPEUTICS, INC.
(A Development Stage Company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,			Period from March 18, 1996 (Inception) to December 31, 2007
	2005	2006	2007	
	(In thousands)			
Cash Flows from Operating Activities:				
Net Loss	\$(9,937)	\$(1,395)	\$(21,247)	\$(97,486)
Reconciliation of net loss to net cash used in operating activities:				
Depreciation and amortization	63	37	19	2,322
Amortization of deferred financing costs	—	—	—	320
Amortization of debt discount	2,908	1,988	5,750	17,996
Accrued interest converted to preferred stock	—	—	—	260
Accreted interest on convertible promissory note	603	324	363	1,484
Stock-based compensation costs	10	19	2,679	3,791
Loss (gain) on sale and disposal of property and equipment	(56)	(10)	—	273
Gain (loss) on sale of intellectual property and royalty rights	—	—	—	(3,656)
Warrant valuation	—	(7,127)	—	(6,759)
Asset impairment loss	—	—	—	2,066
Loss on facility sublease	—	—	—	895
Increase (decrease) in cash resulting from changes in assets and liabilities:				
Accounts receivable	(64)	72	3	—
Prepaid expenses and other current assets	34	(28)	(646)	(325)
Accounts payable and accrued expenses	2,289	(810)	582	1,774
Related party accounts payable and accrued expenses	—	—	(2,104)	1,047
Accrued loss on sublease	1	—	—	(265)
Deferred grant revenue	(35)	—	—	—
Deferred rent	—	—	—	410
Net Cash used in Operating Activities	<u>(4,184)</u>	<u>(6,930)</u>	<u>(14,601)</u>	<u>(75,853)</u>
Cash Flows from Investing Activities:				
Purchase of property and equipment, net	(43)	—	(24)	(4,604)
Proceeds from sale of property and equipment	97	17	—	250
Proceeds from sale of intellectual property	—	—	—	1,816
Proceeds from sale of marketable securities	—	—	—	2,000
Refund of security deposit	(3)	—	—	(3)
Transfer of restricted cash	(1)	—	—	(1,035)
Net Cash (used in) provided by Investing Activities	<u>50</u>	<u>17</u>	<u>(24)</u>	<u>(1,576)</u>
Cash Flows from Financing Activities:				
Proceeds from issuance of note payable to stockholder	—	1,500	2,600	5,750
Repayment of note payable to stockholder	—	—	(5,050)	(6,700)
Proceeds from issuance of convertible promissory note and warrants, net of issuance costs	3,050	300	—	13,099
Repayment of convertible promissory note	(54)	(13)	—	(119)
Borrowing under line of credit, Northwest Hospital	—	—	—	2,834
Repayment of line of credit to Northwest Hospital	—	—	—	(2,834)
Payment on capital lease obligations	(38)	(10)	(2)	(323)
Payment on note payable	—	—	—	(420)
Proceeds from issuance of preferred stock, net	1,276	—	—	28,708
Proceeds from exercise of stock options and warrants	4	8	—	227
Proceeds from issuance of common stock, net	—	5,083	25,886	48,343
Payment of preferred stock dividends	—	—	(1,251)	(1,251)
Series A preferred stock redemption fee	—	—	—	(1,700)
Deferred financing costs	—	—	—	(320)
Net Cash provided by Financing Activities	<u>4,238</u>	<u>6,868</u>	<u>22,183</u>	<u>85,294</u>
Effect of exchange rates on cash	—	—	(4)	(4)
Net increase (decrease) in cash	104	(45)	7,554	7,861
Cash at beginning of period	248	352	307	—
Cash at end of period	<u>\$ 352</u>	<u>\$ 307</u>	<u>\$ 7,861</u>	<u>\$ 7,861</u>

	Year Ended December 31,			Period from March 18, 1996 (Inception) to December 31,
	2005	2006	2007	2007
	(In thousands)			
Supplemental disclosure of cash flow information				
Cash paid during the period for interest	\$ 7	\$ —	\$ 475	\$ 1,871
Supplemental schedule of non-cash financing activities				
Equipment acquired through capital leases	\$ —	\$ —	\$ —	\$ 285
Issuance of common stock in connection with elimination of Series A and Series A-1 preferred stock preferences	—	—	12,349	12,349
Modification of Series A preferred stock warrants	—	—	2,306	2,306
Modification of Series A-1 preferred stock warrants	—	—	16,393	16,393
Warrants issued on Series A and Series A-1 preferred stock dividends	—	—	4,664	4,664
Common stock warrant liability	604	6,523	—	11,841
Accretion of Series A preferred stock mandatory redemption obligation	—	—	—	1,872
Beneficial conversion feature of convertible promissory notes	3,050	300	—	7,242
Conversion of convertible promissory notes and accrued interest to Series D preferred stock	—	—	—	5,324
Conversion of convertible promissory notes and accrued interest to Series A-1 preferred stock	—	7,707	—	7,707
Conversion of convertible promissory notes and accrued interest to common stock	—	269	—	269
Issuance of Series C preferred stock warrants in connection with lease agreement	—	—	—	43
Issuance of common stock for license rights	—	—	—	4
Liability for and issuance of common stock and warrants to Medarex	—	—	—	840
Issuance of common stock to landlord	—	—	—	35
Deferred compensation on issuance of stock options and restricted stock grants	7	—	—	759
Cancellation of options and restricted stock grant	—	—	—	849
Financing of prepaid insurance through note payable	71	—	—	491
Stock subscription receivable	—	—	—	480

See accompanying notes to the consolidated financial statements.

NORTHWEST BIOTHERAPEUTICS, INC.
(A Development Stage Company)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2005, 2006 and 2007

(1) Organization and Description of Business

Northwest Biotherapeutics, Inc. and its majority owned subsidiary (collectively, the “Company”) was organized to discover and develop innovative diagnostics and immunotherapies for prostate and brain cancer. During 1998, the Company incorporated as a Delaware corporation. Prior to 1998, the Company was a limited liability company, which was formed on March 18, 1996. The Company is a development stage company, has yet to generate significant revenues from its intended business purpose and has no assurance of future revenues. While in the development stage, the Company’s principal activities have included defining and conducting research programs, conducting clinical trials, raising capital and recruiting scientific and management personnel.

(2) Operations and Financing

Liquidity

The Company has experienced recurring losses from operations, has working capital of \$5.8 million and has a deficit accumulated during the development stage of \$142.3 million at December 31, 2007.

Since 2004, the Company has undergone a significant recapitalization pursuant to which Toucan Capital Fund II, L.P. (“Toucan Capital”) loaned the Company an aggregate of \$6.75 million and Toucan Partners loaned the Company an aggregate of \$4.825 million (excluding \$225,000 in proceeds from a demand note that was received on June 13, 2007 and repaid on June 27, 2007). The Company’s Chairperson is the managing director of Toucan Capital and the managing member of Toucan Partners. During this period of time, the Company also borrowed funds from certain members of management. In addition, the Company raised capital in March 2006 through a PIPE Financing and in June 2007 sold shares of common stock to foreign institutional investors.

Management Loans

On November 13, 2003, the Company borrowed an aggregate of \$335,000 from certain members of its management and issued warrants to acquire an aggregate of approximately 247,000 shares of the Company’s common stock at an exercise price of \$0.60 per share, which enabled the Company to continue operating into the first quarter of 2004. As of December 31, 2005, \$111,000 of outstanding principal balance and the related accrued interest was repaid to certain prior members of management. On April 17, 2006, the final \$224,000 of outstanding principal balance on these notes, and the related accrued interest, was converted into 146,385 and 32,796 shares, respectively, of our common stock, and in conjunction with the PIPE Financing, members of management exercised their warrants (200% warrant coverage) on a net exercise basis for 126,365 and 28,311 shares of our common stock, respectively. Accordingly, as of December 31, 2006, all of these loans were either repaid or converted into common stock.

During March and April 2006, warrants for the purchase of an aggregate of approximately 247,000 shares of common stock were exercised on a net exercise basis resulting in the issuance of approximately 227,000 shares of common stock to current and prior members of management.

Two former members of the Company’s management, who had participated as lenders in the Company’s management loans have claimed that they are entitled to receive, for no additional cash consideration, an aggregate of up to approximately 630,000 additional shares of the Company’s common stock due to the alleged triggering of an anti-dilution provision in the warrant agreements. The Company does not believe that these claims have merit, and intends to vigorously defend such claims.

Toucan Capital and Toucan Partners

Toucan Capital loaned the Company an aggregate of \$6.75 million during 2004 and 2005. On January 26, 2005, the Company entered into a securities purchase agreement with Toucan Capital pursuant to which it purchased 32.5 million shares of the Company's Series A cumulative convertible preferred stock (the "Series A Preferred Stock") at a purchase price of \$0.04 per share, for a net purchase price of \$1.276 million, net of offering related costs of approximately \$24,000. In April 2006, the \$6.75 million of notes payable plus all accrued interest due to Toucan Capital were converted into shares of the Company's Series A-1 cumulative convertible Preferred Stock (the "Series A-1 Preferred Stock").

Toucan Partners loaned the Company \$4.825 million in a series of transactions. From November 14, 2005 through March 9, 2006, the Company issued three promissory notes to Toucan Partners, pursuant to which Toucan Partners loaned the Company an aggregate of \$950,000. In addition to the \$950,000 of promissory notes, Toucan Partners provided \$3.15 million in cash advances from October 2006 through April 2007, which were converted into convertible notes (the "2007 Convertible Notes") and related warrants (the "2007 Warrants") in April 2007. In April 2007, the three promissory notes were amended and restated to conform to the 2007 Convertible Notes. Payment was due under the notes upon written demand on or after June 30, 2007. Interest accrued at 10% per annum, compounded annually, on a 365-day year basis. The principal amount of, and accrued interest on, these notes, as amended, was convertible at Toucan Partners' election into common stock on the same terms as the 2007 Convertible Notes.

The Company and Toucan Partners also entered into two promissory notes to fix the terms of two additional cash advances provided by Toucan Partners to the Company on May 14, 2007 and May 25, 2007 in the aggregate amount of \$725,000, and issued warrants to purchase shares of the Company's capital stock to Toucan Partners in connection with each such note. These notes and warrants are on the same terms as the 2007 Convertible Notes and 2007 Warrants and the proceeds of these notes enabled the Company to continue to operate and advance programs while raising additional equity financing.

During the fourth quarter of 2007, the Company repaid \$5.3 million of principal and related accrued interest due to Toucan Partners pursuant to the convertible notes.

Conversion of Preferred Stock and Related Matters

On June 1, 2007, the Company issued to Toucan Capital a new warrant to purchase the Company's Series A-1 Preferred Stock ("Toucan Capital Series A-1 Warrant") in exchange for the cancellation of all previously issued warrants to purchase Series A-1 Preferred Stock (or, at the election of Toucan Capital, any other equity or debt security of the Company) held by Toucan Capital. The new Toucan Capital Series A-1 Warrant is exercisable for 6,471,333 shares of Series A-1 Preferred Stock plus shares of Series A-1 Preferred Stock attributable to accrued dividends on the shares of Series A-1 Preferred Stock held by Toucan Capital (with each such Series A-1 Preferred Share convertible into 2.67 shares of common stock at \$0.60 per share), compared to the 3,062,500 shares of Series A-1 Preferred Stock (with each such Series A-1 Preferred Share convertible into 2.67 shares of common stock at \$0.60 per share) that were previously issuable to Toucan Capital upon exercise of the warrants being cancelled.

Also on June 1, 2007, the Company and Toucan Capital amended Toucan Capital's warrant to purchase Series A Preferred Stock (the "Toucan Capital Series A Warrant") to increase the number of shares of Series A Preferred Stock that are issuable upon exercise of the warrant to 32,500,000 shares of Series A Preferred Stock (plus shares of Series A Preferred Stock attributable to accrued dividends on the shares of Series A Preferred Stock held by Toucan Capital) from 13,000,000 shares of Series A Preferred Stock.

In connection with the modifications of the Series A and Series A-1 Preferred Stock warrants, the Company recognized reductions in earnings applicable to common stockholders in June 2007 of \$2.3 million and \$16.4 million, respectively. The fair value of the warrant modifications were determined using the Black-Scholes option pricing model with the following assumptions: expected dividend yield of 0%, risk-free interest rate of 5.0% volatility of 398%, and a contractual life of seven years.

On June 15, 2007, the Company, Toucan Capital, and Toucan Partners entered into a conversion agreement (“Conversion Agreement”) which became effective on June 22, 2007 upon the admission of the Company’s common stock to trade on Alternative Investment Market (“AIM”) (“Admission”).

Pursuant to the terms of the Conversion Agreement (i) Toucan Capital agreed to convert and has converted all of its shares of the Company’s Series A Preferred Stock and Series A-1 Preferred Stock (in each case, excluding any accrued and unpaid dividends) into common stock and agreed to eliminate a number of rights, preferences and protections associated with the Series A Preferred Stock and Series A-1 Preferred Stock, including the liquidation preference entitling Toucan Capital to certain substantial cash payments and (ii) Toucan Partners agreed to eliminate all of its existing rights to receive Series A-1 Preferred Stock under certain notes and warrants (and thereafter to receive shares of common stock rather than shares of Series A-1 Preferred Stock), and the rights, preferences and protections associated with the Series A-1 Preferred Stock, including the liquidation preference that would entitle Toucan Partners to certain substantial cash payments. In return for these agreements, the Company issued to Toucan Capital and Toucan Partners 4,287,851 and 2,572,710 shares of common stock, respectively. In connection with the issuance of these shares, the Company recognized a further reduction of earnings applicable to common stockholders of \$12.3 million in June 2007.

Under the terms of the Conversion Agreement (i) the Toucan Capital Series A Warrant is exercisable for 2,166,667 shares of common stock rather than shares of Series A Preferred Stock (plus shares of common stock, rather than shares of Series A Preferred Stock, attributable to accrued dividends on the shares of Series A Preferred Stock previously held by Toucan Capital that were converted into common stock upon Admission, subject to the further provisions of the Conversion Agreement as described below) and (ii) the Toucan Capital Series A-1 Warrant became exercisable for an aggregate of 17,256,888 shares of common stock rather than shares of Series A-1 Preferred Stock (plus shares of common stock, rather than shares of Series A-1 Preferred Stock, attributable to accrued dividends on the shares of Series A-1 Preferred Stock previously held by Toucan Capital that were converted into common stock upon Admission), subject to further provisions of the Conversion Agreement as described below.

As noted above, the 32,500,000 shares of Series A Preferred Stock held by Toucan Capital converted, in accordance with their terms, into 2,166,667 shares of common stock and the 4,816,863 shares of Series A-1 Preferred Stock held by Toucan Capital converted, in accordance with their terms, into 12,844,968 shares of common stock

Under the terms of the Conversion Agreement, Toucan Capital also agreed to temporarily defer receipt of the accrued and unpaid dividends on its shares of Series A Preferred Stock and Series A-1 Preferred Stock of an amount equal to \$334,340 and \$917,451, respectively, until not later than September 30, 2007. In September 2007, we paid these dividends in full to Toucan Capital.

As a result of the financings described above, as of December 31, 2007, Toucan Capital held:

- an aggregate of 19,299,486 shares of common stock;
- warrants to purchase 14,150,732 shares of common stock at an exercise price of \$0.60 per share; and
- warrants to purchase 7,884,357 shares of common stock at an exercise price of \$0.15 per share.

As a result of the financings described above, as of December 31, 2007, Toucan Partners held:

- an aggregate of 2,572,710 shares of common stock; and
- warrants to purchase 8,832,541 shares of common stock at an exercise price of \$0.60 per share.

The investments made by Toucan Capital and Toucan Partners were made pursuant to the terms and conditions of a Recapitalization Agreement originally entered into on April 26, 2004 with Toucan Capital. The Recapitalization Agreement, as amended, originally contemplated the investment of up to \$40 million through the issuance of new securities to Toucan Capital and a syndicate of other investors to be determined.

We and Toucan Capital amended the Recapitalization Agreement in conjunction with each successive loan agreement. The amendments generally (i) updated certain representations and warranties of the parties made in the

Recapitalization Agreement, and (ii) made certain technical changes in the Recapitalization Agreement in order to facilitate the bridge loans described therein.

Through June 22, 2007, the Company accrued and reimbursed certain legal and other administrative costs on Toucan Capital's behalf pursuant to the Recapitalization Agreement. Subsequent to June 22, 2007, Toucan Capital has incurred costs on behalf of the Company, primarily related to travel expenses and fees incurred in connection with efforts to investigate and establish DCVax® businesses in other locations overseas. In addition, effective July 1, 2007, the Company commenced accruing rent expense related to the sublease for its Bethesda, Maryland office space from Toucan Capital. During the year ended December 31, 2007, the Company recognized approximately \$1.0 million of general and administrative costs related to this Recapitalization Agreement, rent expense and other costs incurred by Toucan Capital on the Company's behalf. Approximately \$175,000 of these costs relate to activities which took place prior to 2007. During the year ended December 31, 2006 the Company recognized \$1.3 million of general and administrative costs related to the Recapitalization Agreement. Pursuant to the terms of the Conversion Agreement, the Recapitalization Agreement was terminated on June 22, 2007.

As of December 31, 2007, Toucan Capital, including the holdings of Toucan Partners, beneficially owned of 21,872,196 shares of our capital stock, representing approximately 51.7% of our outstanding common stock.

Private Placement

On March 30, 2006, the Company entered into a securities purchase agreement (the "Purchase Agreement") with a group of accredited investors pursuant to which the Company agreed to sell an aggregate of approximately 2.6 million shares of its common stock, at a price of \$2.10 per share, and to issue, for no additional consideration, warrants to purchase up to an aggregate of approximately 1.3 million shares of the Company's common stock. The PIPE Financing closed and stock was issued to the new investors in early April and the Company received gross proceeds of approximately \$5.5 million, before cash offering expenses of approximately \$442,000. The total cost of the offering recorded, including both cash and non-cash costs, was approximately \$837,000. The relative fair value of the common stock was estimated to be approximately \$3.7 million and the relative fair value of the warrants was estimated to be \$1.8 million as determined based on the relative fair value allocation of the proceeds received. The warrants were valued using the Black-Scholes option pricing model.

In connection with the securities purchase agreement, the Company issued approximately 67,000 warrants to its investment banker valued at approximately \$395,000. The fair value of the warrants issued to the investment banker was determined using the Black-Scholes option pricing model based on the following assumptions: risk free interest rate of 4.8%, contractual life of five years, expected volatility of 382% and a dividend yield of 0%.

The warrants expire five years after issuance, and are initially exercisable at a price of \$2.10 per share, subject to adjustments under certain circumstances.

Under the Purchase Agreement, the Company agreed to register for resale under the Securities Act of 1933, as amended (the "Securities Act") both the shares of common stock and the shares of common stock underlying the warrants. Under the terms of the Purchase Agreement, the Company was required to file a registration statement with the Securities and Exchange Commission ("SEC") within 45 days of the transaction closing date. The Company also agreed to other customary obligations regarding registration, including matters relating to indemnification, maintenance of the registration statement, payment of expenses, and compliance with state "blue sky" laws. The registration statement was filed on May 19, 2006 and amendments to the registration statement were filed on July 17 and September 29, 2006. The registration statement was declared effective by the SEC on October 11, 2006. Because the registration statement was not declared effective by the SEC on or prior to September 1, 2006, the Company paid liquidated damages to the investors, in the aggregate of one percent (1%) of the aggregate purchase price of the shares per month, or \$74,000. The registration statement became ineffective on April 30, 2007 and remained ineffective until Post-Effective Amendment No. 2 became effective on February 8, 2008. As the Company is obligated to keep the registration statement continually effective until March 30, 2012. Between April 30, 2007 and February 8, 2008, the Company accrued liquidated damages payable to the investors of \$164,000.

Placement of Common Stock with Foreign Institutional Investors

On June 22, 2007, we placed 15,789,473 shares of our common stock with foreign institutional investors at a price of £0.95 per share. The gross proceeds from the placement were approximately £15.0 million, or \$29.9 million, while net proceeds from the offering, after deducting commissions and expenses, were approximately £13.0 million, or \$25.9 million. The net proceeds from the placement are being used to fund clinical trials, product and process development, working capital needs and repayment of certain existing debt.

Liability For Potentially Dilutive Securities in Excess of Authorized Number of Common Shares

In accordance with EITF 00-19, the Company accounts for potential shares that can be converted to common stock, that are in excess of authorized shares, as a liability that is recorded at fair value. Total potential outstanding common stock exceeded the Company's authorized shares as of December 31, 2005 when the Company entered into another convertible promissory note and warrant agreement with Toucan Partners on December 30, 2005. The fair value of the warrants in excess of the authorized shares at December 31, 2005 totaling approximately \$604,000 was recognized as a liability on December 31, 2005. This liability was required to be remeasured at each reporting date with any change in value included in other income/expense until such time as enough shares were authorized to cover all potentially convertible instruments. Accordingly, during the first quarter of 2006, the Company recognized a loss totaling \$2.1 million with respect to the revaluation of this warrant liability. Further, during March 2006, the Company issued an additional warrant to Toucan Partners, along with a convertible promissory note. The fair value of the warrants in excess of the authorized shares was approximately \$6.7 million and was recognized as an additional liability as of March 31, 2006. During April 2006, the Company sold common stock to outside investors in the Pipe Financing. In addition, members of management and Toucan Capital elected to convert their promissory notes and related accrued interest into common stock and Series A-1 Preferred Stock, respectively. As a result, the fair value of the potential common stock in excess of the authorized shares was \$24.4 million and was recognized as an additional liability during April 2006.

Effective May 25, 2006, the number of authorized common shares was increased to 800 million. The liability for potential shares in excess of total authorized shares was revalued at that date. This valuation resulted in a gain of approximately \$7.1 million during 2006, due to the net decreases in the net fair value of the related warrants on the date the authorized shares were increased. This gain is included in the 2006 consolidated statement of operations as a warrant valuation.

Cost Recovery

We submitted an application to the FDA for cost recovery for our Phase II trial in brain cancer. Approval of this application would permit us to charge patients or their insurers for the direct costs of manufacturing DCVax®-Brain during this clinical trial. However because we have changed the study design to include a placebo control arm we have no ability to charge patients for DCVax®-Brain without unblinding the study and as a result, have ceased pursuing this application.

Going Concern

We estimate that our available cash is sufficient to enable us to proceed with our continuing activities under our pivotal DCVax®-Brain trial and begin treating patients with the DCVax®-Brain vaccine pursuant to the BAG Authorisation. Although we believe that we have funding available to pursue the activities described above, its adequacy will depend on many factors, including the speed with which we are able to identify and hire people to fill key positions, the speed of patient enrollment in our pivotal brain cancer trial, and the potential adoption of DCVax®-Brain in the selected hospitals in Switzerland, and unanticipated developments, including adverse developments in pending litigation matters. However, without additional capital, we will not be able to complete our DCVax®-Brain clinical trial or move forward with any of our other product candidates for which investigational new drug applications have been cleared by the FDA. We will also be constrained in developing our second generation manufacturing processes, which offer substantial product cost reductions.

We expect to require additional funding before we achieve profitability and there can be no assurance that our efforts to seek such funding will be successful. If our capital raising efforts are unsuccessful, our inability to obtain

additional cash as needed could have a material adverse effect on our financial position, results of operations and our ability to continue our existence. Our independent registered public accounting firm has indicated in its report on our consolidated financial statements included in the Annual Report on Form 10-K for the year ended December 31, 2007 that there is substantial doubt about our ability to continue as a going concern.

(3) Summary of Significant Accounting Policies

(a) Principles of Consolidation and Basis of Presentation

The accompanying consolidated financial statements of the Company were prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and include the assets, liabilities, revenues and expenses of the Company's majority-owned subsidiary over which the Company exercises control. Intercompany transactions and balances are eliminated in consolidation. The subsidiary was established in Switzerland during third quarter 2007. The Company contributed 95% of the initial share capital in this new subsidiary and Cognate, a related party to the Company, contributed the remaining 5%.

Certain reclassifications of prior years' amounts have been made to conform to the presentation adopted for 2007.

(b) Foreign Currency Translation

For operations outside the U.S. that prepare financial statements in currencies other than U.S. dollars, we translate the financial statements into U.S. dollars. Results of operations and cash flows are translated at average exchange rates during the period, and assets and liabilities are translated at end of period exchange rates, except for equity transactions and advances not expected to be repaid in the foreseeable future, which are translated at historical cost. The effects of exchange rate fluctuations on translating foreign currency assets and liabilities into U.S. dollars are accumulated as a separate component in other comprehensive income (loss).

(c) Use of Estimates in Preparation of Financial Statements

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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 could differ from those estimates.

(d) Cash

Cash consists of checking and money market accounts. While cash held by financial institutions may at times exceed federally insured limits, management believes that no material credit or market risk exposure exists due to the high quality of the institutions. The Company has not experienced any losses on such accounts.

(e) Fair Value of Financial Instruments and Concentrations of Risk

Financial instruments, consisting of cash, accounts receivable, restricted cash, accounts payable, accrued expenses, and capital lease obligations, are recorded at cost, which approximates fair value based on the short term maturities of these instruments.

Credit is extended based on an evaluation of a customer's financial condition and collateral is generally not required. Accounts receivable are generally derived from revenue earned from entities located in the United States. The Company records an allowance for potential credit losses based upon the expected collectibility of the accounts receivable. To date, the Company has not experienced any material credit losses.

In January 2003, research materials sales were made to multiple customers, primarily in the United States of America, with whom there were no other contractual relationships. Effective December 31, 2005, the Company no longer actively sells research materials.

(f) Property and Equipment

During 2003 and 2004, the Company determined that the carrying value of a significant part of its fixed assets was not recoverable, and recorded an impairment charge to reduce the carrying value of its long-lived assets to their estimated fair values. Property and equipment are stated at cost, as adjusted for any prior impairments. Property and equipment are depreciated or amortized over the following estimated useful lives using the straight-line method:

Laboratory equipment.	5-7 years
Office furniture and other equipment.	3-5 years

Expenditures for maintenance and repairs are expensed as incurred. Gains and losses from disposal representing the difference between any proceeds received from the sale of property and equipment and the recorded values of the asset disposed are recorded in total operating costs and expenses.

(g) Impairment of long-lived assets

In accordance with the provisions of Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS 144), long-lived assets including property and equipment are reviewed for possible impairment whenever significant events or changes in circumstances, including changes in our business strategy and plans, indicate that an impairment may have occurred. An impairment is indicated when the sum of the expected future undiscounted net cash flows identifiable to that asset or asset group is less than its carrying value. Long-lived assets to be held and used, including assets to be disposed of other than by sale, for which the carrying amount is not recoverable are adjusted to their estimated fair value at the date an impairment is indicated, which establishes a new basis for the assets for depreciation purposes. Long-lived assets to be disposed of by sale are reported at the lower of carrying amount or fair value less cost to sell. Impairment losses are determined from actual or estimated fair values, which are based on market values, net realizable values or projections of discounted net cash flows, as appropriate.

(h) Restricted Cash

Restricted cash of \$31,000 as of December 31, 2006 represents a deposit to secure the Company's credit limit on its corporate credit cards. No remaining restricted cash balance exists at December 31, 2007.

(i) Operating Leases

The Company recognizes lease expense on a straight-line basis over the initial lease term. The Company has an operating lease on real property expiring June 2008. For leases that contain rent holidays or escalation clauses, the Company recognizes rent expense on a straight-line basis and records the difference between the rent expense and rental amount payable as deferred rent. As of December 31, 2007 and 2006, we did not have any deferred rent.

(j) Revenue Recognition

The Company has earned revenues through sale of research materials, providing research services to third parties and through research grants in the past. Revenues from sale of research materials are to multiple customers with whom there is no other contractual relationship and are recognized when shipped to the customer and title has passed.

Research contracts and grants require the Company to perform research activities as specified in each respective contract or grant on a best efforts basis, and the Company is paid based on the fees stipulated in the respective contracts and grants which approximate the costs incurred by the Company in performing such activities. The Company recognizes revenue under the research contracts and grants based on completion of performance under the respective contracts and grants where no ongoing obligation on the part of the Company exists. Direct costs related to these contracts and grants are reported as research and development expenses.

(k) Research and Development Expenses

Research and development costs are expensed as incurred. These costs include, but are not limited to, contract manufacturing costs, personnel costs, lab supplies, depreciation, amortization and other indirect costs directly related to the Company's research and development activities.

(l) Income Taxes

Deferred income taxes are provided utilizing the liability method whereby the estimated future tax effects of carry forwards and temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis in accordance with Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes* ("SFAS 109"). Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those carry forwards and temporary differences are expected to be recovered or settled. The effect on the deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. A valuation allowance is recorded on deferred tax assets if it is more likely than not that such deferred tax assets will not be realized. Effective January 1, 2007, the Company adopted FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes, an Interpretation of SFAS No. 109, Accounting for Income Taxes* ("FIN 48"). The adoption of FIN 48 does not have a material effect on the Company's results of operations. Prior to 1998, the Company was a limited liability company and the Company's tax losses and credits generally flowed directly to the members.

(m) Stock-Based Compensation

On January 1, 2006, the Company adopted the provisions of Statement of Financial Accounting Standards ("SFAS") No. 123 (revised 2004), *Share-Based Payment*. SFAS 123(R) requires the measurement and recognition of compensation for all stock-based awards including stock options and employee stock purchases under a stock purchase plan, to be accounted for under the fair value method and requires the use of an option pricing model for estimating fair value. Accordingly, share-based compensation is measured at the grant date, based on the fair value of the award. In prior years, we accounted for awards granted under our equity incentive plans under the intrinsic value method prescribed by Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock Issued to Employees* ("APB No. 25"), and related interpretations, and provided the required pro forma disclosures prescribed by SFAS 123, *Accounting for Stock-Based Compensation* ("SFAS 123"), as amended.

The Company adopted SFAS 123(R) using the modified prospective transition method, which requires the application of the accounting standard as of January 1, 2006. The Company's consolidated financial statements as of and for the years ended December 31, 2007 and 2006 reflect the impact of SFAS 123R. In accordance with the modified prospective transition method, the Company's financial statements for periods prior to 2006 have not been restated to reflect this change. Stock-based compensation recognized during the period is based on the value of the portion of the stock-based award that will vest during the period, adjusted for expected forfeitures. Stock-based compensation recognized in the Company's financial statements for 2006 includes compensation cost for stock-based awards granted prior to, but not fully vested as of December 31, 2005 and stock-based awards granted subsequent to December 31, 2005. Stock-based compensation expense related to employee stock options and employee stock purchase plans recognized under SFAS 123R for the fiscal years ended December 31, 2007 and 2006 amounted to approximately \$2.7 million and \$19,000 on a pre-tax basis, respectively.

Stock compensation costs related to fixed employee awards with pro rata vesting are recognized on a straight-line basis over the period of benefit, generally the vesting period of the options. For options and warrants issued to non-employees, the Company recognizes stock compensation costs utilizing the fair value methodology prescribed in SFAS 123 over the related period of benefit.

As stock-based compensation expense recognized in the Company's consolidated statements of operations for the years ended December 31, 2007 and 2006 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. SFAS 123R 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 Company estimates forfeitures in the same manner under SFAS 123R as it did prior to its adoption.

Stock-based compensation expense related to stock options recognized as a result of the adoption of SFAS 123R was comprised as follows (\$ in thousands, except for per share data):

<u>Fiscal Years</u>	<u>2006</u>	<u>2007</u>
Research and development	\$19	\$ 475
General and administrative expenses	—	2,204
Total stock-based compensation expense, before taxes	19	2,679
Related income tax benefits	—	—
Stock-based compensation expense, net of taxes	<u>\$19</u>	<u>\$2,679</u>
Earnings per share effect:		
Basic	\$—	\$ (0.11)
Diluted	\$—	\$ (0.11)

• *Pro Forma Information Under SFAS 123 and APB Opinion No. 25*

Prior to January 1, 2006, stock-based compensation plans were accounted for using the intrinsic value method prescribed in APB No. 25 and related interpretations. Had compensation cost for the plans been determined based on the fair value at the grant dates for awards under those plans consistent with the method of SFAS 123, net loss and basic and diluted net loss per share would have been changed to the pro forma amounts indicated below (in thousands, except for per share data):

	<u>Year Ended December 31, 2005</u>
Net loss applicable to common stockholders:	
As reported	\$(9,937)
Add: Stock-based employee compensation expense included in reported net loss	7
Deduct: Stock-based employee compensation determined under fair value based method for all awards	<u>(13)</u>
Pro forma	<u>\$(9,943)</u>
Net loss per share-basic and diluted:	
As reported	\$ (7.82)
Pro forma	\$ (7.82)

The fair value of stock options granted during 2005 was estimated using the Black-Scholes option pricing model based on the following assumptions:

	<u>2005</u>
Risk-free interest rate	3.53%
Expected life	5 years
Expected volatility	403%
Dividend yield	0%

See Note 4, "Stock-Based Compensation," for additional information concerning the Company's stock-based compensation plans.

(n) Loss Per Share

Basic loss per share is computed on the basis of the weighted average number of shares outstanding for the reporting period. Diluted loss per share is computed on the basis of the weighted average number of common shares plus dilutive potential common shares outstanding using the treasury stock method. Any potentially dilutive securities are antidilutive due to the Company's net losses. For the periods presented, there is no difference between the basic and diluted net loss per share.

Effective June 19, 2007, all shares of the Company's common stock issued and outstanding were combined and reclassified on a one-for-fifteen basis. The effect of this reverse stock split has been retroactively applied to all periods presented.

(o) Operating Segments

The Company is principally engaged in the discovery and development of innovative immunotherapies for cancer and has a single operating segment as management reviews all financial information together for the purposes of making decisions and assessing the financial performance of the Company.

Operating costs:

Operating costs and expenses consist primarily of research and development expenses, including clinical trial expenses which arise when we are actively participating in clinical trials, and general and administrative expenses.

Research and development:

Discovery and preclinical research and development expenses include scientific personnel related salary and benefit expenses, costs of laboratory supplies used in our internal research and development projects, travel, regulatory compliance, and expenditures for preclinical and clinical trial operation and management when we are actively engaged in clinical trials.

Because the Company is a development stage company, it does not allocate research and development costs on a project basis. The Company adopted this policy, in part, due to the unreasonable cost burden associated with accounting at such a level of detail and its limited number of financial and personnel resources. The Company's business judgment continues to be that there is little value associated with evaluating expenditures at the project level since the Company is focusing primarily on its lead clinical trial programs as most of the Company's expenditures relate to those programs.

For the year ended December 31, 2007, of the Company's operating expenses of approximately \$16.0 million, approximately 54% of its expended resources were apportioned to the re-activation of its two DCVax® clinical trial programs. From its inception through December 31, 2007, the Company incurred costs of approximately \$44.6 million associated with its research and development activities. Because its technologies are novel and unproven, the Company is unable to estimate with any certainty the costs it will incur in the continued development of its product candidates for commercialization.

General and administrative:

General and administrative expenses include administrative personnel related salary and benefit expenses, cost of facilities, insurance, travel, legal support, property and equipment depreciation, amortization of stock options and warrants, and amortization of debt discounts and beneficial conversion costs associated with the Company's debt financing.

(p) Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board, or FASB, issued SFAS 157, *Fair Value Measurements* ("SFAS 157"). SFAS 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements but does not require any new fair value measurements. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The adoption of this standard is not expected to have a significant impact on the Company's consolidated financial position or results of operations.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* ("SFAS 159"). SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. SFAS 159 is effective for financial statements issued for fiscal years

beginning after November 15, 2007. The Company is currently evaluating the impact of adopting SFAS 159 on the Company's financial position.

In December 2007, the FASB issued SFAS 141(R), *Business Combinations — a Replacement of FASB Statement No. 141* ("SFAS 141(R)"). The statement is to be applied prospectively for fiscal years beginning on or after December 15, 2008; therefore, it applies to future business combinations. The statement requires more assets acquired and liabilities assumed in future business combinations to be measured at fair value as of the acquisition date. In addition, expenses incurred for all acquisition-related costs are to be expensed and liabilities related to contingent consideration are to be remeasured to fair value each subsequent reporting period. We will adopt SFAS 141(R) effective January 1, 2009. We are currently evaluating the impact this statement may have on our consolidated financial position or results of operations.

In December 2007, the FASB issued SFAS 160, *Noncontrolling Interests in Consolidated Financial Statements — an amendment of ARB No. 51* ("SFAS 160"). The statement changes how noncontrolling interests in subsidiaries are measured to initially be measured at fair value and classified as a separate component of equity. SFAS 160 establishes a single method of accounting for changes in a parent's ownership interest in a subsidiary that do not result in deconsolidation. No gains or losses will be recognized on partial disposals of a subsidiary where control is retained. In addition, in partial acquisitions, where control is obtained, the acquiring company will recognize and measure at fair value all of the assets and liabilities, including goodwill, as if the entire target company had been acquired. The statement is to be applied prospectively for fiscal years beginning on or after December 15, 2008. We will adopt the statement on January 1, 2009. We are currently evaluating the impact this statement will have, if any, on our consolidated financial position or results of operations.

In June 2007, the EITF issued EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities* ("EITF 07-3"), which is effective for fiscal years beginning after December 15, 2007. EITF 07-3 requires that nonrefundable advance payments for future research and development activities be deferred and capitalized. Such amounts will be recognized as an expense as the goods are delivered or the related services are performed. The Company does not expect the adoption of EITF 07-3 to have a material impact on the financial results of the Company.

4. Share-Based Compensation Plans

Effective January 1, 2006, the Company adopted SFAS 123(R), which establishes accounting for stock-based awards exchanged for goods or services, using the modified prospective transition method. Accordingly, stock-based compensation cost is measured at grant date, based on the fair value of the award, recognized over the requisite service period. Previously, the Company applied APB No. 25 and related interpretations, as permitted by SFAS 123.

For options and warrants issued to non-employees, the Company recognizes stock compensation costs utilizing the fair value methodology prescribed in SFAS 123(R) over the related period of benefit.

Determining Fair Value Under SFAS 123(R)

Valuation and Amortization Method. The Company estimates the fair value of stock-based awards granted using the Black-Scholes option valuation model. The Company amortizes the fair value of all awards on a straight-line basis over the requisite service periods, which are generally the vesting periods.

Expected Life. The expected life of awards granted represents the period of time that they are expected to be outstanding. The Company determines the expected life based on historical experience with similar awards, giving consideration to the contractual terms, vesting schedules and pre-vesting and post-vesting forfeitures.

Expected Volatility. The Company estimates the volatility of its common stock at the date of grant based on the historical volatility of its common stock. The volatility factor used in the Black-Scholes option valuation model is based on the Company's historical stock prices over the most recent period commensurate with the estimated expected life of the award.

Risk-Free Interest Rate. The Company bases the risk-free interest rate used in the Black-Scholes option valuation model on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent remaining term equal to the expected life of the award.

Expected Dividend Yield. The Company has never paid any cash dividends on common stock and does not anticipate paying any cash dividends in the foreseeable future. Consequently, the Company uses an expected dividend yield of zero in the Black-Scholes option valuation model.

Expected Forfeitures. The Company uses historical data to estimate pre-vesting option forfeitures. The Company records stock-based compensation only for those awards that are expected to vest.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model. There were no shares purchased under the Company's employee stock purchase plan during 2007 and 2006.

The stock-based compensation expense recognized in the financial statements relate to stock-based awards under SFAS 123(R) totaled approximately \$19,000 for 2006 which increased the loss from operations and net loss by the same amount. This expense had no effect on the Company's net loss per share for the year ended December 31, 2006. As of December 31, 2007, the Company had approximately \$9.0 million of total unrecognized compensation cost related to non-vested stock-based awards granted under all equity compensation plans. Total unrecognized compensation cost will be adjusted for any future changes in estimated forfeitures. The Company expects to recognize this cost from 2008 through 2011. Total intrinsic value of options exercised was \$18,000 for 2006. There were no options exercised in 2007. Weighted average fair value of options granted during 2007 and 2006 was \$2.48 and \$1.65 per share, respectively.

Stock Option Activity

A summary of activity relating to our stock options is as follows (options in thousands):

	<u>Options</u>	<u>Weighted-Average Exercise Price</u>	<u>Weighted-Average Remaining Contractual Term (Years)</u>	<u>Aggregate Intrinsic Value</u>
Outstanding as of December 31, 2006	51	\$7.95		
Granted	4,724	\$0.89		
Exercised	—	—		
Expired	—	—		
Forfeited	—	—		
Outstanding as of December 31, 2007	<u>4,775</u>	\$0.97	4.9	\$7,804,432
Vested at December 31, 2007	<u>1,078</u>	\$0.95	4.0	\$2,015,519
Exercisable as of December 31, 2007	<u>1,078</u>	\$0.95	4.0	\$2,015,519

Additional information regarding stock options outstanding and exercisable at December 31, 2007 is as follows, in thousands, except option price and weighted average exercise price.

<u>Range of Exercise Prices</u>	<u>Options Outstanding</u>			<u>Options Exercisable</u>	
	<u>Number Outstanding</u>	<u>Weighted-Average Remaining Contractual Life (Years)</u>	<u>Weighted-Average Exercise Price</u>	<u>Number Exercisable</u>	<u>Weighted-Average Exercise Price</u>
		(In thousands except weighted average)			
\$0.00 - 0.60	3,955	4.0	\$ 0.60	1,027	\$ 0.60
\$0.61 - 2.40	<u>799</u>	9.6	2.38	<u>30</u>	1.76
\$2.41 - 75.00	<u>21</u>	2.9	\$17.01	<u>21</u>	\$17.01
\$0.00 - 75.00	<u>4,775</u>	4.9	\$ 0.97	<u>1,078</u>	\$ 0.95

Options exercisable as of December 31, 2005, 2006 and 2007 totaled 40,000, 42,000 and 1,078,000, respectively.

Stock Option Plans

The Company's stock option plans are administered by the Board of Directors, which determines the terms and conditions of the options granted, including exercise price, number of options granted and vesting period of such options. A brief description of these plans follows. The Company amended its then existing equity plans effective June 22, 2007 such that no further option grants may be made under those plans.

Options granted under the plans are generally priced at or above the estimated fair market value of the Company's common stock on the date of grant and generally vest over four years. Compensation expense, if any, is charged over the period of vesting. All options, if not previously exercised or canceled, expire ten years from the date of grant, or the expiration date specified in the individual option agreement, if earlier.

During the year ended December 31, 2005, the Company granted non-qualified options to purchase an aggregate of 1,667 shares of common stock to a non-employee consultant with a weighted average exercise price of \$3.15. The fair value of the underlying common stock is evaluated monthly for specific performance compliance with \$510 of compensation expense recognized for the year ended December 31, 2005.

During the year ended December 31, 2006, the Company granted options to purchase an aggregate of 11,667 shares of common stock to employees with a weighted average exercise price of \$2.10. Stock compensation expense totaling \$19,000 was recorded as of December 31, 2006.

During the year ended December 31, 2007, the Company granted options to purchase an aggregate of 4,724,000 shares of common stock to employees with a weighted average exercise price of \$0.89. Stock compensation expense totaling \$2.7 million was recorded as of December 31, 2007.

(a) 1998 Stock Option Plan

The Company's 1998 Stock Option Plan (the "1998 Plan") has reserved 27,535 shares of common stock for stock option grants to employees, directors and consultants of the Company. As of December 31, 2007, net of forfeitures, a total of 23,783 shares remain available for granting under this plan; however, no further grants may be made under this plan. Our Board of Directors has the authority to amend or terminate this plan, but such action will not adversely affect any outstanding option without the optionee's consent. If not terminated earlier, this plan will terminate in July 2008.

(b) 1999 Executive Stock Option Plan

The Company's 1999 Executive Stock Option Plan (the "1999 Plan") has reserved 39,078 shares of common stock for issuance. As of December 31, 2006, net of forfeiture, a total of 28,064 shares remain available for granting under this plan; however, no further grants may be made under this plan. Our Board of Directors has the authority to amend or terminate this plan, but such action will not adversely affect any outstanding option without the optionee's consent. If not terminated earlier, this plan will terminate in November 2009.

(c) 2001 Stock Option Plan

Under the 2001 Stock Option Plan (the "2001 Plan"), 120,000 shares of the Company's common stock have been reserved for grant of stock options to employees and consultants. Additionally, on January 1 of each year, commencing January 1, 2002, the number of shares reserved for grant under the 2001 Plan will increase by the lesser of (i) 15% of the aggregate number of shares available for grant under the 2001 Plan or (ii) 20,000 shares. As of December 31, 2007, net of forfeitures, a total of 162,603 shares remain available under this plan; however, no further grants may be made under this plan. Our Board of Directors has the authority to amend or terminate this plan, but such action may not adversely affect any outstanding option previously granted under the plan. If this plan is not terminated earlier, no incentive stock options can be granted under the plan on or after the later of June 2011 or the 10th anniversary of the date when our Board of Directors adopted, subject to approval by our stockholders, the most recent increase in the number of shares available for grant under the plan.

(d) 2001 Non-employee Director Stock Incentive Plan

Under the 2001 Non-employee Director Stock Incentive Plan (the “2001 Director Plan”), 13,333 shares of the Company’s common stock have been reserved for grant of stock options to non-employee directors of the Company. As of December 31, 2007, net of forfeitures, a total of 10,500 shares remain available under this plan; however, no further grants may be made under this plan.

(e) 2007 Stock Option Plan

The Company established a stock option plan, which became effective on June 15, 2007 (the “2007 Stock Option Plan”). The Company has reserved a total of 5,480,868 shares of common stock for issuance in respect of options granted under the plan. The plan provides for the grant to employees of the Company, its parents and subsidiaries, including officers and employee directors, of “incentive stock options” within the meaning of Section 422 of the Code and for the grant of non-statutory stock options to the employees, officers, directors, including non-employee directors, and consultants of the Company, its parents and subsidiaries. To the extent an optionee would have the right in any calendar year to exercise for the first time one or more incentive stock options for shares having an aggregate fair market value, under all of the Company’s plans and determined as of the grant date, in excess of \$100,000, any such excess options will be treated as non-statutory options. As of December 31, 2007, net of forfeitures, a total of 756,406 shares remain available for issuance under this plan.

Employee Stock Purchase Plan

Our Employee Stock Purchase Plan (the “Employees’ Plan”) was adopted by our Board of Directors and approved by our stockholders in June 2001. A total of 33,333 shares of common stock have been reserved for issuance under this plan and, as of December 31, 2007, 958 shares have been issued under this plan.

This plan is administered by the Compensation Committee of our Board of Directors and provides a mechanism for eligible employees to purchase shares of our common stock. To facilitate these purchases, eligible participants are assigned plan accounts, to which they may contribute funds via payroll deduction. The purchases are accomplished through the use of six-month offering periods. Purchases pursuant to this plan are made at a price equal to the lower of (i) 85% of the fair market value of our common stock on the last trading day in the offering period; or (ii) 85% of the fair market value of our common stock on the last trading day before the commencement of such offering period. No participant may purchase more than 67 shares of our common stock during any offering period. Additionally, purchases under the plan are limited such that no participant may purchase under the plan, in any offering period that commenced in that calendar year, shares with a fair market value in excess of \$25,000 minus the fair market value of any shares that the participant previously purchased in that calendar year. In the case of shares purchased during an offering period that commenced in the preceding calendar year, the limitation is \$50,000 minus the fair market value of any shares that the participant purchased during the calendar year of the purchase and the calendar year immediately preceding such purchase.

Our Board of Directors has the authority to amend or terminate this plan at any time. Amendments to the plan are subject to approval by our stockholders to the extent required by applicable law.

5) Stockholders’ Equity (Deficit)

(a) Issuance of Common Stock and Warrants

In April 2006, the Company received gross proceeds of \$5.5 million and issued approximately 2.6 million shares of its common stock, at a price of \$2.10 per share, and, for no additional consideration, warrants to purchase up to an aggregate of approximately 1.3 million shares of the Company’s common stock pursuant to a securities purchase agreement entered into with a group of accredited investors. The Company initially registered both the shares of common stock and the shares of common stock underlying the warrants for resale under the Securities Act of 1933, as amended, effective October 2006.

In connection with the securities purchase agreement, the Company issued approximately 67,000 warrants to its investment banker, valued at approximately \$395,000.

This transaction is more fully described in note (2) Operations and Financing.

(b) Stock Purchase Warrants

Medarex

On December 9, 2002, the Company entered into an assignment and license agreement with Medarex wherein the Company sold certain intellectual property to Medarex in exchange for certain of its intellectual property and received \$3.0 million, consisting of \$1.0 million in cash and two payments of \$1.0 million each payable in common stock. The Company realized a total of \$3.0 million in cash as all of the foregoing shares were sold within 30 days of their issuance in 2003. Additionally, a \$400,000 payable of ours to Medarex was forgiven by Medarex. Pursuant to this agreement, the Company issued to Medarex approximately 133,000 unregistered shares of its common stock. The 133,000 shares of unregistered common stock were issued in 2002 and 2003. Also in conjunction with the December 9, 2002 agreement with Medarex, the Company issued warrants to purchase 53,333 shares of unregistered common stock in 2002 and 2003 at exercise prices ranging from \$1.53 to \$3.24 per share. The warrants may be exercised at any time after six-months following their issue date and prior to the tenth anniversary of the issue date, or by various dates between December 25, 2012 through February 9, 2013.

The fair value of the 53,333 warrant shares was \$159,678 on the date of grant, which was determined using the Black-Scholes option pricing model with the following assumptions: expected dividend yield 0%, risk-free interest rate of 4.17%, volatility of 191%, and an expected life of 10-years. As of December 31, 2002, one-half of the warrant value, \$79,839, was recognized as an increase to additional paid in capital and \$79,839 was recognized as a long-term liability, for the 400,000 warrant shares to be issued in 2003.

The net gain recognized on this sale of intellectual property was \$2.8 million, made up of the receipt of \$3.0 million of cash and stock from Medarex and forgiveness of the \$400,000 payable to Medarex, offset by the issuance of 133,000 shares of unregistered common stock and warrants to purchase 53,333 shares of common stock valued at approximately \$560,000.

Management Loan Warrants

On November 13, 2003, the Company borrowed an aggregate of \$335,000 from certain members of its current and former management. As part of the November 13, 2003 loans from management, the lenders received warrants initially exercisable to acquire an aggregate of approximately 247,000 shares of the Company's common stock.

During March and April 2006, warrants for the purchase an aggregate of 247,000 million shares of common stock were exercised on a net exercise basis resulting in the issuance of approximately 227,000 shares of common stock to current and prior members of management.

Toucan Capital and Toucan Partners Warrants

From February 1, 2004 through December 31, 2006, the Company issued warrants for 8.2 million shares of Company capital stock to Toucan Capital pursuant to which Toucan Capital had loaned the Company an aggregate of \$6.75 million in loan financing, as more fully described in note (2) Operations and Financing.

On January 26, 2005, we issued Toucan Capital a warrant, with a contractual life of 7 years, to purchase 13.0 million shares of Series A Preferred Stock in connection with a securities purchase agreement pursuant to which Toucan Capital purchased 32.5 million shares of our newly designated Series A Preferred Stock at a purchase price of \$0.04 per share, for an aggregate purchase price of \$1.3 million. The number of shares issuable pursuant to the exercise of the warrant and the exercise price thereof is subject to adjustment in the event of stock splits, reverse stock splits, stock dividends and the like, as more fully described in note (2) Operations and Financing.

From November 14, 2006 through June 1, 2007, the Company issued warrants for 8.8 million shares of Company capital stock to Toucan Partners pursuant to which Toucan Partners loaned the Company \$4.825 million in loan financing. These loans and related warrants were amended and restated in April 2007 and in June 2007 as more fully described in note (2) Operations and Financing. During the fourth quarter of 2007, the Company repaid

the entire \$5.3 million in principal and related accrued interest due to Toucan Partners pursuant to the convertible notes.

Private Placement Warrants

On April 4, 2006, the Company closed an offering with a group of accredited investors pursuant to which the Company sold an aggregate of approximately 2.6 million shares of its common stock, at a price of \$2.10 per share, and issued, for no additional consideration, warrants to purchase up to an aggregate of approximately 1.3 million shares of the Company's common stock at an exercise price of \$2.10 per share. As of December 31, 2007, approximately 677,000 of these warrants remained outstanding.

A summary of the warrants outstanding at December 31, 2007 is as follows (in thousands):

<u>Type of Warrant</u>	<u>Number Outstanding (In thousands)</u>	<u>Weighted- Average Exercise Price</u>
Common stock warrant	797	\$ 2.15
Common stock warrants issued in connection with Series A preferred stock	4,778	\$ 0.48
Series C Preferred Stock warrants(1)	16	\$37.50
Series D Preferred Stock warrants(1)	22	\$75.00
Warrants issued in connection with convertible promissory notes	26,089	\$ 0.49

(1) The exercise of Series C and Series D Preferred Stock warrants will result in the issuance of an equal number of shares of the Company's common stock with no issuance of preferred stock.

The exercise of Series A Preferred Stock warrants will result in the issuance of an equal number of shares of the Company's Series A Preferred Stock.

(d) Common Stock Equivalents

The following common stock equivalents on an as-converted basis were excluded from the calculation of diluted net loss per share, as the effect would be antidilutive.

	<u>Years Ended December 31</u>		
	<u>2005</u>	<u>2006</u>	<u>2007</u>
	<u>(In thousands)</u>		
Preferred stock	2,167	2,167	—
Common stock options	50	51	51
Common stock warrants	54	1,388	797
Convertible preferred stock warrants	906	906	4,778
Convertible promissory note	12,420	1,743	—
Convertible promissory note stock warrants	8,848	8,800	26,089

(e) Employee Stock Purchase Plan

In June 2001, the Company adopted an employee stock purchase plan which became effective upon consummation of the Company's initial public offering and reserved 500,000 shares of common stock for issuance under this plan. Under this plan, employees may purchase up to 1,000 shares of the Company's common stock during each six-month offering period commencing on April 1 and October 1 of each year. The purchase price of the common stock is equal to the lower of 85% of the market price on the first and last day of each offering period. As of December 31, 2007, a total of 14,374 shares have been issued under the plan.

(f) Employee 401(k) Plan

On August 19, 1999, the Company adopted a 401(k) Plan for certain eligible employees. Under the plan, an eligible employee may elect to contribute up to 60% of his or her pre-tax total compensation, not to exceed the annual limits established by the Internal Revenue Service. The Company matched an employee's contribution at the rate of \$0.50 for every employee contributed dollar with a maximum Company match of \$3,000 annually. Effective March 1, 2006, the Company no longer matches employee contributions. For the years ended December 31, 2005 and 2006, the Company made matching contributions of approximately \$15,000 and \$6,000, respectively.

(g) Stockholder Rights Agreement

On March 6, 2002, the Company adopted a Stockholder Rights Agreement, under which each common stockholder of record at the close of business on March 4, 2002 received a dividend of one right per share of common stock held. Each right entitles the holder to purchase one share of common stock from the Company at a price equal to \$19.25 per share, subject to certain anti-dilution provisions. The rights become exercisable only in the event that a third party acquires beneficial ownership of, or announces a tender or exchange offer for, at least 15% of the then outstanding shares of the Company's common stock and such acquisition or offer is determined by the Board of Directors to not be in the best interests of the stockholders. If the acquisition or offer were determined by the Board of Directors to be in the best interests of the stockholders, the rights may be redeemed by the Company for \$0.0001 per right. The rights will expire on February 25, 2012, unless earlier redeemed, exchanged or terminated in accordance with the rights agreement.

In connection with the Recapitalization Agreement, the Board of Directors and Mellon Investor Services LLC, its Rights Agent, on April 26, 2004, amended the Stockholder Rights Agreement. The definition of an "Acquiring Person" was amended to exclude Toucan Capital Fund II, L.P. and other investors selected by Toucan from the definition of "Acquiring Person" for those shares of the Company's capital stock they acquire, or are deemed to beneficially own, in connection with the Recapitalization Agreement.

(6) Related Party Transactions

(a) Notes Payable to Related Parties

Convertible promissory notes have been issued to Toucan Capital and Toucan Partners, an affiliate of Toucan Capital, the Company's controlling shareholder. As of December 31, 2007, all of the issued notes have either been converted or repaid.

Notes payable to related parties are more fully described in note (2) Operations and Financing and note (10) Notes Payable.

(b) Cognate Agreement

On July 30, 2004, the Company entered into a service agreement with Cognate Therapeutics, Inc. (now known as Cognate BioServices, Inc., or Cognate), a contract manufacturing and services organization in which Toucan Capital has a majority interest. In addition, two of the principals of Toucan Capital are members of Cognate's board of directors and, on May 17, 2007, the managing director of Toucan Capital was appointed to serve as a director of the Company and to serve as the non-executive Chairperson of the Company's Board of Directors. Under the service agreement, the Company agreed to utilize Cognate's services for an initial two-year period, related primarily to manufacturing DCVax® product candidates, regulatory advice, research and development preclinical activities and managing clinical trials. The agreement expired on July 30, 2006; however, the Company continued to utilize Cognate's services under the same terms as set forth in the expired agreement. On May 17, 2007, the Company entered into a new service agreement with Cognate pursuant to which Cognate will provide certain consulting and, when needed, manufacturing services to the Company for its DCVax®-Brain Phase II clinical trial. Under the terms of the new contract, the Company paid a non-refundable contract initiation fee of \$250,000 and committed to pay budgeted monthly service fees of \$400,000, subject to quarterly true-ups, and monthly facility fees of \$150,000. The Company may terminate this agreement with 180 days notice and payment of all reasonable wind-up costs and Cognate may terminate the contract in the event that the brain cancer clinical trial fails to complete enrollment by

July 1, 2009. However, if such termination by the Company occurs at any time prior to the earlier of the submission of an FDA biological license application/new drug application on the Company's brain cancer clinical trial or July 1, 2010 or, such termination by Cognate results from failure of the brain cancer clinical trial to complete patient enrollment by July 1, 2009, the Company is obligated to make an additional termination fee payment to Cognate equal to \$2 million.

During the years ending December 31, 2005, 2006 and 2007, respectively, the Company recognized approximately \$3.5 million, \$2.4 million and \$5.8 million of research and development costs related to these service agreements. As of December 31, 2007 and 2006, the Company owed Cognate approximately \$0 and \$2.2 million, respectively.

(c) Toucan Capital Management

In accordance with a recapitalization agreement dated April 26, 2004 between the Company and Toucan Capital, as amended and restated on July 30, 2004 and further amended ten times between October 22, 2004 and November 14, 2005, pursuant to which Toucan Capital agreed to recapitalize the Company by making loans to the Company, the Company accrued and paid certain legal and other administrative costs on Toucan Capital's behalf. Pursuant to the terms of the Conversion Agreement discussed above, the recapitalization agreement was terminated on June 22, 2007. Subsequent to the termination of the recapitalization agreement, Toucan Capital continues to incur costs on behalf of the Company. These costs primarily relate to consulting costs and travel expenses incurred in support of the Company's international expansion efforts. In addition, since July 1, 2007 the Company has accrued and recorded rent expense due to Toucan Capital Corp. an affiliate of Toucan Capital for its office space in Bethesda, Maryland.

During the years ending December 31, 2007 and 2006, respectively, the Company recognized approximately \$1.0 million and \$1.4 million of general and administrative costs related to this recapitalization agreement, rent expense, as well as legal, travel and other costs incurred by Toucan Capital on the Company's behalf. Approximately \$175,000 of the costs recorded in 2007 relate to activities which took place prior to January 1, 2007. At December 31, 2007 and 2006, accrued expense payable to Toucan Capital management amounted to \$0.9 million and \$0.3 million, respectively, and are included in the accompanying consolidated balance sheets.

(7) Income Taxes

There was no income tax benefit attributable to net losses for 2005, 2006 and 2007. The difference between taxes computed by applying the U.S. federal corporate rate of 34% and the actual income tax provisions in 2005, 2006 and 2007 is primarily the result of establishing a valuation allowance on the Company's deferred tax assets arising primarily from tax loss carry forwards.

The tax effects of temporary differences and tax loss and credit carry forwards that give rise to significant portions of deferred tax assets at December 31 are comprised of the following (in thousands):

	<u>2005</u>	<u>2006</u>	<u>2007</u>
Net operating loss carry forwards	\$ 20,450	\$ 22,354	\$ 25,327
Research and development credit carry forwards	1,525	1,533	2,011
Depreciation and amortization	927	1,134	—
Other	<u>325</u>	<u>357</u>	<u>397</u>
Gross deferred tax assets	23,227	25,378	27,735
Less valuation allowance	<u>(23,227)</u>	<u>(25,378)</u>	<u>(27,735)</u>
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The increase in the valuation allowance for deferred tax assets for 2005, 2006 and 2007 of \$3.5 million, \$2.2 million and \$2.4 million, respectively, was due to the inability to utilize net operating losses and research and development credits.

At December 31, 2007, the Company had net operating loss carry forwards for income tax purposes of approximately \$74.5 million and unused research and development tax credits of approximately \$2.0 million available to offset future taxable income and income taxes, respectively, expiring beginning 2018 through 2024. The Company's ability to utilize net operating loss and credit carry forwards is limited pursuant to the Tax Reform Act of 1986, due to cumulative changes in stock ownership in excess of 50% such that some net operating losses may never be utilized.

(8) Scientific Collaboration Arrangements

The Company has also entered into certain collaborative arrangements under which it may be obligated to pay royalties or milestone payments if product development is successful. It is not anticipated that the aggregate amount of any royalty or milestone obligations under these other arrangements will be material to the Company's operations.

(9) Commitments and Contingencies

(a) Lease Obligations

The Company leases its facilities. As of December 31, 2007, the Company does not have any remaining capital leases. Commitments for minimum rentals under non-cancelable leases in effect as of December 31, 2007 are as follows (in thousands):

	<u>Operating Leases</u>
Rent agreements	\$19

Rent expense was approximately \$96,000, \$37,000 and \$260,000 in 2005, 2006 and 2007, respectively.

(b) Purchase Commitments

As of December 31, 2007, the Company has entered into the following contractual obligations:

<u>Contractual Obligation(1)</u>	<u>Total</u>	<u>Payments Due by Period</u>			
		<u>Less Than 1 Year</u>	<u>1-3 Years</u>	<u>3-5 Years</u>	<u>More than 5 Years</u>
Contract Manufacturing by Related Party(2)	\$ 9,900,000	\$6,600,000	\$3,300,000	\$—	\$—
Purchase Obligations	<u>327,857</u>	<u>327,857</u>	<u>—</u>	<u>—</u>	<u>—</u>
Total	<u><u>\$10,227,857</u></u>	<u><u>\$6,927,857</u></u>	<u><u>\$3,300,000</u></u>	<u><u>\$—</u></u>	<u><u>\$—</u></u>

(1) The Company has also entered into other collaborative arrangements under which it may be obligated to pay royalties or milestone payments if product development is successful. We do not anticipate that the aggregate amount of any royalty or milestone obligations under these arrangements will be material.

(2) The agreement has been entered for an initial two year period and is subject to quarterly true-ups. The Company may terminate this contract manufacturing agreement with 180 days notice and payment of all reasonable wind-up costs and Cognate may terminate the contract in the event that the brain cancer clinical trial fails to complete enrollment by July 1, 2009. However, if such termination by the Company occurs at any time prior to the earlier of the submission of an FDA biological license application/new drug application on the Company's brain cancer clinical trial or July 1, 2010 or, such termination by Cognate results from failure of the brain cancer clinical trial to complete patient enrollment by July 1, 2009, the Company is obligated to make an additional termination fee payment to Cognate equal to \$2 million.

(c) Legal Matters

Soma Arbitration

The Company signed an engagement letter, dated October 15, 2003, with Soma Partners, LLC, or Soma, a New Jersey-based investment bank, pursuant to which the Company engaged them to locate potential investors. Pursuant to the terms of the engagement letter, any disputes arising between the parties would be submitted to arbitration in the New York metropolitan area. A dispute arose between the parties. Soma filed an arbitration claim against us with the American Arbitration Association in New York, NY claiming unpaid commission fees of \$186,000 and seeking declaratory relief regarding potential fees for future transactions that may be undertaken by us with Toucan Capital. We vigorously disputed Soma's claims on multiple grounds. We contended that we only owed Soma approximately \$6,000.

Soma subsequently filed an amended arbitration claim, claiming unpaid commission fees of \$339,000 and warrants to purchase 6% of the aggregate securities issued to date, and seeking declaratory relief regarding potential fees for future financing transactions which may be undertaken by us with Toucan Capital and others, which could potentially be in excess of \$4 million. Soma also requested the arbitrator award its attorneys' fees and costs related to the proceedings. We strongly disputed Soma's claims and defended ourselves.

The arbitration proceedings occurred from March 8-10, 2005 and on May 24, 2005, the arbitrator ruled in our favor and denied all claims of Soma. In particular, the arbitrator decided that we did not owe Soma the fees and warrants sought by Soma, that we would not owe Soma fees in connection with future financings, if any, and that we had no obligation to pay any of Soma's attorneys' fees or expenses. The arbitrator agreed with us that the only amount we owed Soma was \$6,702.87, which payment we made on May 27, 2005.

On August 29, 2005, Soma filed a notice of petition to vacate the May 24, 2005 arbitration award with the Supreme Court of the State of New York. On December 30, 2005, the Supreme Court of the State of New York dismissed Soma's petition.

On February 3, 2006, Soma filed another notice of appeal with the Supreme Court of the State of New York. On December 6, 2006, we filed our brief for this appeal and on December 12, 2006, Soma filed its reply brief. On June 19, 2007, the Appellate Division, First Department of the Supreme Court of the State of New York, reversed the December 30, 2005 decision and ordered a new arbitration proceeding. On July 26, 2007, we filed a Motion for Leave to Appeal with the Court of Appeals of the State of New York and on August 3, 2007 Soma filed its reply brief. On October 16, 2007, the Court of Appeals of the State of New York denied our motion to appeal. We intend to continue to vigorously defend ourselves against the claims of Soma.

Lonza Patent Infringement Claim

On July 27, 2007, Lonza Group AG ("Lonza") filed a complaint against us in the United States District Court for the District of Delaware alleging patent infringement relating to recombinant DNA methods, sequences, vectors, cell lines and host cells. The complaint sought temporary and permanent injunctions enjoining us from infringing Lonza's patents and unspecified damages. On November 27, 2007, the complaint was dismissed from the United States District Court for the District of Delaware. Also on November 27, 2007, a new complaint was filed by Lonza in the United States District Court for the District of Maryland. The new complaint alleged the same patent infringement relating to recombinant DNA methods, sequences, vectors, cell lines and host cells by the Company's DCVax[®]. We believe that Lonza's remaining claims are meritless and intend to vigorously defend this action. On December 13, 2007 Lonza in two new claims relating to all of our products other than DCVax[®] Prostate.

Stockholder Class Action Lawsuits

On August 13, 2007, a complaint was filed in the U.S. District Court for the Western District of Washington naming the Company, the Chairperson of its Board of Directors, Linda F. Powers, and its Chief Executive Officer, Alton L. Boynton, as defendants in a class action for violation of federal securities laws. After this complaint was filed, five additional complaints were filed in other jurisdictions alleging similar claims. The complaints were filed on behalf of purchasers of the Company's common stock between July 9, 2007 and July 18, 2007 and allege violations of Section 10(b) of the Exchange Act and Rule 10b-5 thereunder. The complaints seek unspecified compensatory damages, costs and expenses. We dispute these claims and intend to vigorously defend these actions.

On December 18, 2007, a consolidated complaint was filed in the U.S. District Court for the Western District of Washington consolidating the Shareholder actions previously filed.

SEC Inquiry

On August 13, 2007, we were notified that the SEC had initiated a non-public informal inquiry regarding the events surrounding our application for Swiss regulatory approval and related press releases dated July 9, 2007 and July 16, 2007. On March 3, 2008 the Company was notified that the SEC had initiated a formal investigation regarding this matter. We have been co-operating with the SEC in connection with the inquiry, and will continue to do so.

Management Warrants

On November 13, 2003, we borrowed an aggregate of \$335,000 from certain members of our management. As part of the consideration for this loan, the lenders received warrants exercisable to acquire an aggregate of 0.25 million shares of our common stock. From March 2006 through May 2006, all of these warrants were exercised for common stock on a net exercise basis, pursuant to the terms of the warrants.

Two former members of management who had participated as lenders in our management loans have claimed that they are entitled to receive, for no additional cash consideration, an aggregate of up to approximately 630,000 additional shares of our common stock due to the alleged triggering of an anti-dilution provision in the warrant agreements. We do not believe that these claims have merit and, in the event such claims are pursued, we intend to vigorously defend against them.

We have no other legal proceedings pending at this time.

(d) Sales Tax Assessment

The Company received a tax assessment of \$492,000 on October 21, 2003 related to the abandonment of tenant improvements at a facility it had previously leased on which use tax payments to the State of Washington had been deferred, including the disposal and impairment of previously qualified tax deferred equipment. The Company appealed this assessment and was granted a partial reduction in the assessment on July 8, 2005. The Company filed an addendum to its appeal petition on December 2, 2005. The net assessment, through December 31, 2005, of approximately \$336,000, inclusive of accrued interest, was being carried as an estimated liability on the Company's balance sheet and included in general and administrative expense. On August 10, 2006, the Company's appeal was denied. In September 2006, the Company entered into an agreement with the State of Washington to pay an aggregate of approximately \$336,000, plus interest at a rate of 4% per year over a four month period commencing on September 11, 2006. As of December 31, 2006, the Company has repaid the outstanding balance.

In February 2004, the Company filed a refund request of approximately \$175,000 related to certain other state taxes previously paid to the State of Washington's Department of Revenue. As of December 31, 2006, we have received correspondence from the Department of Revenue setting forth a refund of approximately \$36,000. The refund was received and recorded in general and administrative during the year ended December 31, 2007. We do not plan to pursue this matter any further.

(10) Notes Payable

(a) Notes Payable to Related Parties.

Commencing in November 2003, the Company issued promissory notes to finance its operations. This debt financing is comprised of convertible management loans, senior convertible promissory notes issued to Toucan Capital and Toucan Partners, as well as further cash advances from Toucan Partners. In April 2007, these cash advances were converted into a new series of convertible promissory notes (and associated warrants). In addition, the convertible promissory notes previously issued to Toucan Partners with an aggregate value of \$950,000 were amended and restated to conform to the terms of the new notes and warrants. Although these notes are convertible the conversion terms will not be fixed until a future date upon further negotiation between the Company and Toucan Partners. As of December 31, 2007, all notes payable to related parties have been repaid.

The related party notes payable transactions are more fully described in note (2) Operations and Financing.

Management Loans

In November 2003, the Company issued convertible promissory notes totaling \$335,000 to certain members of management as more fully described in note (2) Operations and Financing.

Toucan Capital Loans

From February 1, 2004 through September 7, 2005, the Company issued thirteen promissory notes to Toucan Capital pursuant to which Toucan Capital loaned the Company an aggregate of \$6.75 million in bridge loan financing as more fully described in note (2) Operations and Financing.

Toucan Partners Loans

From November 14, 2005 through December 31, 2007, the Company issued 15 promissory notes to Toucan Partners pursuant to which Toucan Partners loaned the Company an aggregate of \$4,825,000 in loan financing. These notes were fully repaid as of December 31, 2007. These transactions are more fully described in note (2) Operations and Financing.

From November 14, 2005 through March 9, 2006, the Company issued three promissory notes and associated warrants to Toucan Partners pursuant to which Toucan Partners loaned the Company an aggregate of \$950,000. In April 2007, these notes were amended and restated to conform to the 2007 Convertible Notes and 2007 Warrants described below. Payment was due under the notes upon written demand on or after June 30, 2007. Interest accrued at 10% per annum, compounded annually, on a 365-day year basis. The principal amount of, and accrued interest on, these notes, as amended, is convertible into common stock on the same terms as the 2007 Convertible Notes.

Proceeds from the issuance of \$950,000 senior convertible promissory notes and warrants between November 14, 2005 and March 9, 2006 were allocated between the notes and warrants on a relative fair value basis. The value allocated to the warrants on the date of the grant was approximately \$587,000. The fair value of the warrants was determined using the Black-Scholes option pricing model with the following assumptions: expected dividend yield of 0%, risk-free interest rate ranging from 4.1% to 4.4%, volatility ranging between 398% and 408%, and a contractual life of 7 years. The value of the warrants was recorded as a deferred debt discount against the \$950,000 proceeds of the notes. In addition, a beneficial conversion feature related to the notes was determined to be approximately \$363,000. As a result, the total discount on the notes equaled \$950,000 which was amortized over the original twelve-month term of the respective notes.

From October 2006 through April 2007, the Company received a series of cash advances from Toucan Partners in an aggregate principal amount of \$3.15 million. In April 2007, these cash advances were converted into a new series of convertible promissory notes (and associated warrants), the 2007 Convertible Notes and 2007 Warrants, respectively, that accrue interest at 10% per annum from their respective original cash advance dates; however, the conversion terms of these notes and the exercise price of these warrants were not fixed. On June 1, 2007, the Company and Toucan Partners amended the 2007 Convertible Notes and 2007 Warrants to specify and fix the conversion and exercise prices thereof. The Company and Toucan Partners also entered into two new promissory notes to fix the terms of the two additional cash advances provided by Toucan Partners to the Company on May 14, 2007 and May 25, 2007 in the aggregate amount of \$725,000, and issued warrants to purchase shares of the Company's capital stock to Toucan Partners in connection with each such note. These notes and warrants have the same terms as the 2007 Convertible Notes and 2007 Warrants. As amended, the 2007 Convertible Notes provided that the principal and interest thereon was convertible into shares of the Company's Series A-1 Preferred Stock at the conversion price of \$1.60 per share, (with each such share of Series A-1 Preferred Stock convertible into 2.67 shares of Common Stock at \$0.60 per share) or, at the election of Toucan Partners, any other equity security of the Company (at a conversion price of \$0.60 per share). As amended, the 2007 Warrants provided that they were exercisable for shares of Series A-1 Preferred Stock at the exercise price of \$1.60 per share (with each such share of Series A-1 Preferred Stock convertible into 2.67 shares of Common stock at \$0.60 per share) or, at the election of Toucan Partners, any other equity security of the Company (at an exercise price of \$0.60 per share). Each of the 2007 Warrants is exercisable for the same number of shares that the corresponding 2007 Convertible Note is

convertible into at the time of exercise or, if earlier, the date on which the corresponding 2007 Convertible Note is either converted or repaid in full.

In recognition of the modification to the 2007 Convertible Notes and 2007 Warrants, the aggregate proceeds of \$3,875,000 received from Toucan Partners between October 2006 and May 2007 and the aggregate proceeds of \$950,000 received from Toucan Partners between November 14, 2005 and March 9, 2006 were reallocated between the notes (including accrued interest) and warrants on a relative fair value basis as of June 1, 2007. The value allocated to the warrants on the date of the modification was approximately \$3.7 million. The fair value of the warrants was determined using the Black-Scholes option pricing model with the following assumptions: expected dividend yield of 0%, risk-free interest rate of 4.9%, volatility of 240%, and a contractual life of 7 years. The value of the warrants was recorded as a deferred debt discount against the \$4.825 million proceeds (plus accrued interest) of the notes. In addition, a beneficial conversion feature related to the notes was determined to be approximately \$1.4 million. As a result, the total discount on the notes (including accrued interest) equaled \$5.1 million which has been expensed in its entirety in June 2007 in recognition of the June 30, 2007 maturity date of the respective notes. Interest expense on the notes of approximately \$363,000 and \$324,000 was recorded for the years ended December 31, 2007 and 2006, respectively.

Pursuant to the terms of the Conversion Agreement discussed in Note 2 above, which became effective on June 22, 2007, Toucan Partners agreed to eliminate all of its existing rights to receive Series A-1 Preferred Stock in connection with the 2007 Convertible Notes and 2007 Warrants (and thereafter to receive shares of Common Stock at \$0.60 per share rather than shares of Series A-1 Preferred Stock at \$1.60 per share), and the rights, preferences and protections associated with the Series A-1 Preferred Stock, including the liquidation preference that would entitle Toucan Partners to certain substantial cash payments, in return for the issuance by the Company of 2,572,710 shares of Common Stock.

At December 31, 2007, the principal and cumulative interest balance of the 2007 Convertible Notes has been fully repaid. Toucan Partners holds warrants related to these notes which are convertible into 8,832,541 shares of Common Stock at \$0.60 per share.

(11) Unaudited Quarterly Financial Information (in thousands, except loss per share data)

The following table contains selected unaudited statement of operations information for each of the quarters in 2005, 2006 and 2007. The Company believes that the following information reflects all adjustments, consisting of only normal recurring adjustments, necessary for a fair presentation of the information for the periods presented. The operating results for any quarter are not necessarily indicative of results for any future period.

	<u>First Quarter 2005</u>	<u>Second Quarter 2005</u>	<u>Third Quarter 2005</u>	<u>Fourth Quarter 2005</u>
Total revenues	\$ 87	\$ 8	\$ 15	\$ 14
Net loss applicable to common stockholders	\$(2,526)	\$(2,638)	\$(2,782)	\$(1,987)
Net loss per share applicable to common stockholders — basic and diluted	\$ (1.95)	\$ (2.10)	\$ (2.25)	\$ (1.50)
Weighted average shares used in computing basic and diluted loss per share.	1,269	1,272	1,272	1,272

	<u>First Quarter 2006</u>	<u>Second Quarter 2006</u>	<u>Third Quarter 2006</u>	<u>Fourth Quarter 2006</u>
Total revenues	\$ —	\$ —	\$ 80	\$ —
Net income (loss) applicable to common stockholders . . .	\$(3,958)	\$ 6,428	\$(1,809)	\$(2,057)
Net income (loss) per share applicable to common stockholders — basic	\$ (3.15)	\$ 1.50	\$ (0.45)	\$ (0.45)
Net income (loss) per share applicable to common stockholders — diluted	\$ (3.15)	\$ 0.45	\$ (0.45)	\$ (0.45)
Weighted average shares used in computing basic income (loss) per share	1,282	4,225	4,349	4,349
Weighted average shares used in computing diluted income (loss) per share	1,282	15,234	4,349	4,349
	<u>First Quarter 2007</u>	<u>Second Quarter 2007</u>	<u>Third Quarter 2007</u>	<u>Fourth Quarter 2007</u>
Total revenues	\$ —	\$ —	\$ 10	\$ —
Net loss applicable to common stockholders	\$(1,952)	\$(44,918)	\$(3,909)	\$(7,431)
Net loss per share applicable to common stockholders — basic and diluted	\$ (0.45)	\$ (5.56)	\$ (0.09)	\$ (0.18)
Weighted average shares used in computing basic and diluted loss per share	4,349	8,074	42,298	42,346

(12) Impairment and Disposal of Long-lived Assets

The Company vacated its prior 5,045 square foot facility when signing a new sublease on November 4, 2005, and moving to a smaller administrative only facility of 2,325 square feet on December 31, 2005. The Company sold, disposed, or impaired \$159,000 of fixed assets and leasehold improvements, in the third and fourth quarters of 2005, recognizing a loss on retirement of fixed assets of approximately \$41,000, net of depreciation, and cash received of approximately \$97,000, the net of which is included in general and administrative expenses as of December 31, 2005.

(13) Subsequent Events

On March 21, 2008, the Company executed a Sublease Agreement (the “Sublease Agreement”) with Toucan Capital Corporation for the space the Company uses as its headquarters at 7600 Wisconsin Avenue, Suite 750, Bethesda, Maryland. The Sublease Agreement is effective as of July 1, 2007 and expires on October 31, 2016, unless sooner terminated according to its terms. Previously, the Company had been occupying its Bethesda headquarters under an oral arrangement with Toucan Capital Corporation, whereby the Company was required to pay base rent of \$32,949.10 per month through December 31, 2007. Under the Sublease Agreement, the Company is required to pay base rent of \$34,000 per month during the year 2008, which monthly amount increases by \$1,000 on an annual basis, to a maximum of \$42,000 per month during 2016, the last year of the lease term. In addition to monthly base rent, the Company was and remains obligated to pay operating expenses allocable to the subleased premises under Toucan Capital Corporation’s master lease.

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 Bethesda, State of Maryland, on April 14, 2008.

NORTHWEST BIOTHERAPEUTICS, INC.

By: /s/ ANTHONY P. DEASEY

Anthony P. Deasey

Its: *Senior Vice President and Chief Financial Officer*

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ALTON L. BOYNTON, PH.D.</u> Alton L. Boynton, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	April 14, 2008
<u>/s/ ANTHONY P. DEASEY</u> Anthony P. Deasey	Senior Vice President of Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	April 14, 2008
<u>/s/ LINDA F. POWERS</u> Linda F. Powers	Chairman of the Board, Director	April 14, 2008
<u>/s/ R. STEVE HARRIS</u> R. Steve Harris	Director	April 14, 2008

NORTHWEST BIOTHERAPEUTICS, INC.
(A Development Stage Company)

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
3.1	Seventh Amended and Restated Certificate of Incorporation.(3.1)(22)
3.2	Third Amended and Restated Bylaws of the Company.(3.1)(29)
3.3	Amendment to Seventh Amended and Restated Certificate of Incorporation.(3.2)(29)
3.4	Amendment to Seventh Amended and Restated Certificate of Incorporation.(3.4)(33)
4.1	Form of common stock certificate.(4.1)(2)
4.2	Northwest Biotherapeutics, Inc. Stockholders Rights Agreement dated February 26, 2002 between the Company and Mellon Investors Services, LLC.(4.2)(3)
4.3	Form of Rights Certificate.(4.1)(3)
4.4	Amendment to Northwest Biotherapeutics, Inc. Stockholders Rights Agreement dated April 26, 2004.(4.2)(4)
10.1	Amended and Restated Loan Agreement and 10% Promissory Note dated November 14, 2005 in the principal amount of \$400,000 as amended and restated on April 14, 2007 between the Company and Toucan Partners, LLC.(10.1)(23)
10.2	Second Amended and Restated Loan Agreement and 10% Promissory Note originally dated December 30, 2005, and amended and restated on April 17, 2006 and April 14, 2007 in the principal amount of \$250,000 between the Company and Toucan Partners, LLC.(10.2)(23)
10.3	Second Amended and Restated Loan Agreement and 10% Promissory Note originally dated March 9, 2006, and as amended and restated on April 17, 2006 and April 14, 2007 in the principal amount of \$300,000 between the Company and Toucan Partners, LLC.(10.3)(23)
10.4	Form of Loan Agreement and 10% Convertible, Promissory Note between the Company and Toucan Partners, LLC.(10.4)(23)
10.5	Amended and Restated Investor Rights Agreement dated April 17, 2006.(10.4)(18)
10.6	Second Amended and Restated Investor Rights Agreement dated June 22, 2007 between the Company and Toucan Capital Fund II, LLP.(10.3)(29)
10.7	Securities Purchase Agreement, dated March 30, 2006 by and among the Company and the Investors identified therein.(10.1)(6)
10.8	Form of Warrant.(10.2)(6)
10.9	Warrant to purchase securities of the Company dated April 26, 2004 issued to Toucan Capital Fund II, L.P.(10.9)(7)
10.10	Warrant to purchase securities of the Company dated June 11, 2004 issued to Toucan Capital Fund II, L.P.(10.8)(7)
10.11	Warrant to purchase securities of the Company dated July 30, 2004 issued to Toucan Capital Fund II, L.P.(10.7)(7)
10.12	Warrant to purchase securities of the Company dated October 22, 2004 issued to Toucan Capital Fund II, L.P.(10.3)(8)
10.13	Warrant to purchase securities of the Company dated November 10, 2004 issued to Toucan Capital Fund II, L.P.(10.3)(9)
10.14	Warrant to purchase securities of the Company dated December 27, 2004 issued to Toucan Capital Fund II, L.P.(10.3)(10)

<u>Exhibit Number</u>	<u>Description</u>
10.15	First Amendment to Warrants between Northwest Biotherapeutics, Inc. and Toucan Capital Fund II, L.P. dated January 26, 2005.(10.5)(1)
10.16	Warrant to purchase Series A Preferred Stock dated January 26, 2005 issued to Toucan Capital Fund II, L.P.(10.2)(1)
10.17	Warrant to purchase securities of the Company dated April 12, 2005 issued to Toucan Capital Fund II, L.P.(10.39)(11)
10.18	Warrant to purchase securities of the Company dated May 13, 2005 issued to Toucan Capital Fund II, L.P.(10.3)(12)
10.19	Warrant to purchase securities of the Company dated June 16, 2005 issued to Toucan Capital Fund II, L.P.(10.3)(13)
10.20	Warrant to purchase securities of the Company dated July 26, 2005 issued to Toucan Capital Fund II, L.P.(10.3)(14)
10.21	Warrant to purchase securities of the Company dated September 7, 2005 issued to Toucan Capital Fund II, L.P.(10.3)(15)
10.22	Amended Form of Warrant to purchase securities of the Company dated November 14, 2005 and April 17, 2006, as amended April 14, 2007, issued to Toucan Partners, LLC.(10.21)(23)
10.23	Form of Warrant to purchase securities of the Company dated April 14, 2007 issued to Toucan Partners, LLC.(10.22)(23)
10.24	Loan Agreement and 10% Convertible Promissory Note in the principal amount of \$100,000 between the Company and Toucan Partners, LLC, dated April 27, 2007.(10.1)(24)
10.25	Warrant to purchase securities of the Company issued to Toucan Partners, LLC, dated April 27, 2007.(10.2)(24)
10.26	Form of Toucan Partners Loan Agreement and 10% Convertible Note, dated as of June 1, 2007.(10.1)(27)
10.27	Form of Toucan Partners Warrant, dated as of June 1, 2007.(10.2)(27)
10.28	Amended and Restated Warrant to purchase Series A Preferred Stock issued to Toucan Capital Fund II, L.P., dated as of June 1, 2007.(10.3)(27)
10.29	Warrant to purchase Series A-1 Preferred Stock issued to Toucan Capital Fund II, L.P., dated as of June 1, 2007.(10.4)(27)
10.30	Warrant to purchase Series A-1 Preferred Stock issued to Toucan Capital Fund II, L.P., dated as of June 1, 2007.(10.5)(27)
10.31	Northwest Biotherapeutics, Inc. \$225,000 Demand Note dated June 13, 2007.(10.1)(28)
10.32	Conversion Agreement dated June 15, 2007 and effective June 22, 2007 between the Company and Toucan Capital Fund II, LLP.(10.1)(29)
10.33	Termination Agreement dated June 22, 2007 between the Company and Toucan Capital Fund II, LLP.(10.2)(29)
10.34	NOMAD Agreement dated June 15, 2007 and effective June 22, 2007 between the Company and Collins Stewart Europe Limited.(10.4)(29)
10.35***	Employment Agreement dated June 18, 2007 between Dr. Alton L. Boynton and the Company.(10.6)(29)
10.36***	Employment Agreement dated October 1, 2007 between Anthony P. Deasey and the Company.(10.1)(30)
10.37***	Letter of Appointment for Linda F. Powers.(10.8)(29)

<u>Exhibit Number</u>	<u>Description</u>
10.38***	Letter of Appointment for R. Steve Harris.(10.9)(29)
10.39	Form of Warrant to purchase common stock of the Company, as amended.(10.27)(18)
10.40**	Northwest Biotherapeutics DCVax — Brain Services Agreement with Cognate BioServices, Inc. dated May 17, 2007.(10.1)(25)
10.41***	1998 Stock Option Plan.(10.15)(2)
10.42***	1999 Executive Stock Option Plan.(10.16)(2)
10.43***	2001 Stock Option Plan.(10.17)(2)
10.44***	2001 Nonemployee Director Stock Incentive Plan.(10.18)(2)
10.45***	Employee Stock Purchase Plan.(10.19)(2)
10.46***	2007 Stock Option Plan.(10.5)(29)
10.47***	Form of Stock Option Agreement under the 2007 Stock Option Plan.(10.2)(31)
10.48	Lease Agreement.(10.34)(18)
10.49	Lease Extension between the Company and the International Union of Operating Engineers Local 302, dated May 31, 2007(10.1)(26).
10.50	Clinical Study Agreement between the Company and the Regents of the University of California dated February 14, 2006.(10.35)(18)
10.51***	Employment Agreement dated June 18, 2007, by and between Jim Johnston and the Company. (10.7)(29)
10.52***	Form of Stock Option Agreement, dated December 31, 2007, by and between Dr. Alton L. Boynton and the Company.(99.1)(32)
10.53***	Form of Stock Option Agreement, dated December 31, 2007, by and between Dr. Marnix Bosch and the Company.(99.2)(32)
10.54	Sublease Agreement, dated as of March 21, 2008, between the Company and Toucan Capital Corporation.(10.1)(34)
11	Computation of net loss per share included within the Northwest Biotherapeutics, Inc. audited financial statements for the year ended December 31, 2007 included in this Annual Report on Form 10-K.
21	Subsidiary of the registrant.(21.1)(35)
23*	Consent of Peterson Sullivan PLLC, Independent Registered Public Accounting Firm.
31.1*	Certification of President (Principal 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 Chief Financial Officer (Principal Financial and Accounting 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.
32.1*	Certification of President Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Filed or furnished herewith.

** Portions of this exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

*** Denotes management contract or compensation plan or arrangement.

- (1) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K, February 1, 2005.
- (2) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Amendment No. 3 to the Registration Statement on Form S-1 (Registration No. 333-67350) on November 14, 2001.
- (3) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Registration Statement on Form 8-A on July 8, 2002.
- (4) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Form 10-K on May 14, 2004.
- (5) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Quarterly Report on Form 10-Q on November 14, 2005.
- (6) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on March 31, 2006.
- (7) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on August 6, 2004.
- (8) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on October 28, 2004.
- (9) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on November 16, 2004.
- (10) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on December 30, 2004.
- (11) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Annual Report on Form 10-K on April 15, 2005.
- (12) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on May 18, 2005.
- (13) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on June 21, 2005.
- (14) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on August 1, 2005.
- (15) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on September 9, 2005.
- (16) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Quarterly Report on Form 10-Q on November 14, 2003.
- (17) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on August 5, 2005.
- (18) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 10-K on April 18, 2006.
- (19) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on April 26, 2006.
- (20) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Form 10-K/A on June 30, 2006.
- (21) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Registration Statement on Form S-1 (File No. 33-134320) on May 19, 2006.
- (22) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-134320) on July 17, 2006.
- (23) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Form 10-K on April 17, 2007.

- (24) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on May 3, 2007.
- (25) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on May 21, 2007.
- (26) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on June 4, 2007.
- (27) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on June 7, 2007.
- (28) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on June 18, 2007.
- (29) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on June 22, 2007.
- (30) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on October 2, 2007.
- (31) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Registration Statement on Form S-8 on November 21, 2007.
- (32) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on January 3, 2008.
- (33) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Post-Effective Amendment No. 2 to the Registrant's Registration Statement on Form S-1 on January 28, 2008.
- (34) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Registrant's Current Report on Form 8-K on March 24, 2008.
- (35) Incorporated by reference to the exhibit shown in the preceding parentheses filed with the Post-Effective Amendment No. 1 to the Registrant's Registration Statement on Form S-1 on December 17, 2007.



PETERSON SULLIVAN PLLC

CERTIFIED PUBLIC ACCOUNTANTS

601 UNION STREET, SUITE 2300
SEATTLE, WASHINGTON 98101

Tel 206.382.7777 • Fax 206.382.

<http://www.pscpa.com>

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference into Registration Statement No. 333-134320 on Form S-1 and into Registration Statement No. 333-147579 on Form S-8 of our report dated April 7, 2008, on our audit of the consolidated financial statements of Northwest Biotherapeutics, Inc. appearing in the Annual Report on Form 10-K of Northwest Biotherapeutics, Inc. for the year ended December 31, 2007.

Our report, dated April 7, 2008, contains an explanatory paragraph that states that Northwest Biotherapeutics, Inc. has experienced recurring losses from operations since inception, net operating cash flow deficits, and has a deficit accumulated during the development stage. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/S/ PETERSON SULLIVAN PLLC

Seattle, Washington
April 7, 2008

**CERTIFICATION PURSUANT TO
RULE 13a-14 UNDER THE
SECURITIES EXCHANGE ACT OF 1934**

I, Alton L. Boynton, certify that:

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

Date: April 14, 2008

By: /s/ ALTON L. BOYNTON
Alton L. Boynton
President and Chief Executive Officer (Principal
Executive Officer)

**CERTIFICATION PURSUANT TO
RULE 13a-14 UNDER THE
SECURITIES EXCHANGE ACT OF 1934**

I, Anthony P. Deasey, certify that:

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

Date: April 14, 2008

By: /s/ ANTHONY P. DEASEY

Anthony P. Deasey
Senior Vice President of Finance and Chief
Financial Officer (Principal Financial and
Accounting Officer)

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

In connection with the Annual Report of Northwest Biotherapeutics, Inc. and its subsidiary (the "Company") on Form 10-K for the year ended December 31, 2007, as filed with the Securities and Exchange Commission (the "Report"), I, Alton L. Boynton, in my capacity as President and Chief Executive Officer of the Company, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: April 14, 2008

/s/ ALTON L. BOYNTON

Alton L. Boynton
President and Chief Executive Officer (Principal
Executive Officer)

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company as part of the Report or as a separate disclosure document for purposes of Section 18 or any other provision of the Securities Exchange Act of 1934, as amended.

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

In connection with the Annual Report of Northwest Biotherapeutics, Inc. and its subsidiary (the "Company") on Form 10-K for the year ended December 31, 2007, as filed with the Securities and Exchange Commission (the "Report"), I, Anthony P. Deasey, in my capacity as Senior Vice President of Finance and Chief Financial Officer of the Company, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: April 14, 2008

/s/ ANTHONY P. DEASEY

Anthony P. Deasey
Senior Vice President of Finance and Chief
Financial Officer (Principal Financial and
Accounting Officer)

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company as part of the Report or as a separate disclosure document for purposes of Section 18 or any other provision of the Securities Exchange Act of 1934, as amended.