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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, 2004

☐ **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from to

Commission File No. 000-32877

PRO-PHARMACEUTICALS, INC.

Nevada	**04-3562325**
(State or other jurisdiction of incorporation)	**(I.R.S. Employer Identification No.)**
189 Wells Avenue, Newton, Massachusetts	**02459**
(Address of Principal Executive Offices)	**(Zip Code)**

(617) 559-0033
(Registrant's Telephone Number, Including Area Code)

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

Title of each class	**Name of Exchange on which registered**
Common Stock, Par Value $.001	**American Stock Exchange**

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

None

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 an accelerated filer (as defined in Exchange Act Rule 12b-2). YES ☐ NO ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was sold, or the average bid and asked price of such common equity, as of June 30, 2004 was $63,760,041.

The number of shares outstanding of the registrant's common stock as of March 15, 2005 was 27,315,411.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement for the 2005 Annual Meeting of Stockholders are incorporated by reference into Part III of this Report.

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FORWARD-LOOKING STATEMENTS

This annual report on Form 10-K contains, in addition to historical information, forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's current expectations and are subject to a number of factors and uncertainties, which could cause actual results to differ materially from those described in such statements. We caution investors that actual results or business conditions may differ materially from those projected or suggested in forward-looking statements as a result of various factors including, but not limited to, the following: uncertainties as to the utility and market for our potential products; uncertainties associated with pre-clinical and clinical trials of our drug delivery candidates; our limited experience in product development and expected dependence on potential licensees and collaborators for commercial manufacturing, sales, distribution and marketing of our potential products; possible development by competitors of competing products and technologies; lack of assurance regarding patent and other protection of our proprietary technology; compliance with and change of government regulation of our activities, facilities and personnel; uncertainties as to the extent of reimbursement for our potential products by government and private health insurers; our dependence on key personnel; our history of operating losses and accumulated deficit; and economic conditions related to the biotechnology and biopharmaceutical industry. We cannot assure you that we have identified all the factors that create uncertainties. Readers should not place undue reliance on forward-looking statements.

PART I

Item 1. *Business*

Corporate Formation

We were incorporated under Nevada law in January 2001. On May 15, 2001, we acquired all of the outstanding common stock of a Massachusetts corporation engaged in a drug delivery development business. After the acquisition, we merged with the Massachusetts corporation and are the surviving corporation. For additional information, please see Note 1 to our Consolidated Financial Statements included in this Annual Report on Form 10-K. In December 2003 we organized Pro-Pharmaceuticals Securities Corp. as a wholly-owned Delaware subsidiary, the sole purpose of which is to hold our cash and cash equivalents in a tax efficient manner.

Our address is 189 Wells Avenue, Newton, Massachusetts 02459. Our telephone number is (617) 559-0033, our fax number is (617) 928-3450, our e-mail address is squeglia@pro-pharmaceuticals.com, and our website address is www.pro-pharmaceuticals.com. Our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q are fully accessible on our website without charge.

Business of Pro-Pharmaceuticals

Introduction

We are a development-stage pharmaceutical company that intends to identify, develop and seek regulatory approval of technology that will reduce toxicity and improve the efficacy of currently existing chemotherapy drugs by combining the drugs with our proprietary carbohydrate compounds. Our fundamental objective is to increase the body's tolerance to the drugs by enabling targeted delivery of the drugs in order to protect healthy tissue. Our targeting technology could also permit higher doses of the chemotherapy drugs because current dosage levels are generally limited so as to avoid overly toxic effects on healthy cells. Our carbohydrate-based drug targeting and delivery compounds may also have applications for drugs used to treat other diseases and chronic health conditions.

In technical terms, we seek to "reformulate" existing cancer chemotherapy drugs with non-toxic, carbohydrate-based compounds that are recognized and adhere to specific binding sites, known as lectins, on the

surface of cancer cells. Reformulation of chemotherapy drugs that are already approved by the U.S. Food and Drug Administration ("FDA") has the following benefits for our business:

- Our drug delivery and targeting technology may require less time for development and FDA approval, and thus could reach the market sooner, because the active chemotherapy drugs are already approved and are widely used for cancer treatment.
- We expect fewer risks in drug development because our proprietary compounds would be "reformulated" with drugs already in widespread use. We foresee a market demand for less toxic and more effective chemotherapeutics, and believe the pharmaceutical industry would respond favorably to better drug delivery and targeting.
- We believe the industry would also be receptive to patent-protected drug delivery systems that combine with existing chemotherapy drugs whose efficacy has been proven and may no longer have patent protection.
- We believe that drug delivery and targeting compounds which upgrade widely used drugs can be developed with substantially lower costs, relative to the expenditures of pharmaceutical companies engaged in new drug development.

Our Business Strategy and Initial Objectives

The initial objectives of our business strategy are to:

- Verify and extend our carbohydrate-based drug delivery and targeting compounds for developing novel cancer chemotherapy products.
- Expand and enhance clinical applications of at least six widely used chemotherapy drugs, in addition to 5-Fluorouracil currently in our Phase I/II clinical trials, including irinotecan, doxorubicin, paclitaxel, cyclophosphamide, oxaliplatin, cisplatin, and bevacizumab by combining them with our proprietary delivery compounds.
- Demonstrate the safety and efficacy of such product candidates by means of pre-clinical evaluation and submitting investigational new drug (IND) applications to the FDA.
- Accelerate commercialization by identifying products and diseases that qualify for fast-track designation by the FDA. We are also seeking approval to conduct clinical trials in some European and other countries.
- Leverage our drug delivery and targeting technology through "reformulations" of our carbohydrate compounds with FDA-approved drugs, including drugs for conditions or ailments other than cancer that would benefit from reduced toxicity and/or greater efficacy.
- Apply our proprietary technology to enhance proven drugs under patent protection with the goal of extending the commercial life of such drugs, or creating new patent protection for generic drugs with expired patents.

Limitations of Chemotherapy for Cancer Treatment

Cancer is a disease characterized by uncontrolled growth and spread of abnormal cells. The disease may be caused by patient-specific factors such as genetic predisposition, immune deficiency, hormones, diet and smoking, or external factors such as exposure to a toxic environment. It is a leading cause of death in the United States and worldwide.

The most widely used methods to treat cancer are surgery, radiation and chemotherapy. Cancer patients often receive a combination of these treatments, and about half of all patients receive chemotherapy. Both

radiation and chemotherapy have significant limitations that often result in treatment failure. In the case of chemotherapy, these limitations include:

Toxicity. Most chemotherapy agents kill cancer cells by disrupting the cell division or metabolic process. Cells are killed once they begin to undergo division and replication. Although these agents are effective on cancer cells, which generally grow rapidly through cell division, the drugs also kill healthy, non-cancerous cells as they undergo ordinary division. This is particularly apparent in fast-growing normal cells, such as blood cells forming bone marrow, digestive tract tissue, hair follicles, and reproductive organ cells. As the chemotherapy harms healthy tissue, the effectiveness of the drug is limited because dosage levels and treatment frequency cannot exceed tolerance levels for non-cancerous cells. Moreover, the chemotherapy regimen often dramatically diminishes the quality of a patient's life through its physical and emotional side effects.

Inability to Selectively Target Diseased Cells. Chemotherapies, as now administered, reach both healthy and diseased tissue. Normal cells are generally as receptive as tumors to the toxic effects of chemotherapy. Without the ability to target the drug exclusively to cancerous tissue, chemotherapy dosages must be kept within a range that healthy tissue can tolerate, thus reducing the optimal effectiveness of chemotherapy on diseased tissue.

Drug Delivery Technologies

General

The ultimate objective of enhanced drug delivery is to control and optimize the localized release of a drug at the target site and rapidly eliminate from the body the portion of the drug that was not delivered to the diseased tissue. Conventional drug delivery systems such as controlled release, sustained release, transdermal systems, and others are based on a physical erosion process for delivering active product into the systemic circulation over time with the objective of improving compliance by patients with a therapy regimen. These systems do not address the biologically important issues such as site targeting, localized release and elimination of undelivered drug from the body.

The major factors that must be addressed in order to reach this objective are the physical characteristics of a drug, such as its interaction with pharmacological target sites and undesired toxicity, and the biological characteristics of diseased tissue, which affects the ability of a drug to selectively interact with the target site and have the desired pharmacological result. Both of these factors are important in increasing efficacy and reducing toxicity of cancer drugs. Biotechnology affords a new opportunity in drug delivery techniques by taking advantage of biological mechanisms such as drug-cell recognition and interactions and particular physical characteristics of cancerous tissue.

Our Focus: Carbohydrate-Based Drug Enhancement Technology

We are developing a carbohydrate-based drug delivery and targeting technology to direct cancer drugs more selectively to tumor tissue so as to reduce the toxic side effects and improve the tumor reduction capacity of chemotherapy drugs now in common use. Carbohydrates are found in the structural elements of cells and, among other functions, serve as recognition elements in biomolecules, enabling molecule-cell recognition, and hence, molecular targeting. The dense concentration of chemical functional groups within carbohydrates compared to other chemicals suits them for use in cell recognition applications in biological systems.

Our technology does not change the chemistry of the drugs themselves, but rather reformulates cancer drugs with our proprietary carbohydrate compounds, which interact with sugar specific proteins, i.e., lectins, found on the surface of tumor cells. Because of these cell surface interactions, we believe that our compounds may increase cell permeability, resulting in increased targeted absorption of drugs by cancer cells. These cell surface interactions may also alter the cells' ability to adhere to each other as well as to normal tissue, resulting in diminished ability of cancer cells to metastasize, or spread to other tissue systems.

Initial Chemotherapy Applications

We believe that our carbohydrate-based drug delivery and targeting enhancement technology applies to essentially any oncology drug whose delivery to the target can be improved by utilizing sugar-specific recognition at the cancer cell surface. Our initial program is designed to focus on proven drugs for which there are already substantial data on their therapeutic efficacy and toxicity, along with an accumulated knowledge of their limitations. We intend to apply our drug delivery technology initially to widely used chemotherapy agents: 5-fluorouracil, irinotecan, doxorubicin, paclitaxel, cyclophosphamide, oxaliplatin, cisplatin and bevacizumab. Each of these drugs is widely used in cancer chemotherapy treatment, and for each there is a strong market need for improving its therapeutic efficacy and decreasing its toxicity.

5-Fluorouracil (5-FU), a fluorinated pyrimidine (nucleic acid component), interferes with the synthesis of DNA and inhibits the formation of RNA. DNA is the chemical inside the nucleus of a cell that carries the genetic instructions for making living organisms. RNA delivers DNA's genetic message to the cytoplasm of a cell where proteins are made. Since DNA and RNA are essential for cell division and growth, 5-FU provokes unbalanced growth and death of the cell. The effect of DNA and RNA deprivation is most marked on those cells, such as cancer cells, which grow more rapidly and which absorb 5-FU at a more rapid rate. 5-FU is effective against cancers of the colon, rectum, breast, stomach and pancreas. This drug is toxic, resulting in side effects such as nausea, vomiting, cardiovascular damage, mouth sores, gastrointestinal ulceration and bleeding, skin darkening and fatigue. 5-FU is manufactured by Roche Laboratories under the name of FluorouracilRoche®, and by SICOR Pharmaceuticals, Inc. as Adrucil® for intravenous administration. Originally patented in the late 1950s, its patent protection has expired.

Irinotecan, sold under its trade name Camptosar®, is a semisynthetic, water-soluble derivative of camptothecin, which is a cytotoxic alkaloid extracted from plants. Irinotecan and its active metabolite, SN-38, inhibit the activity of topoisomerase I, an enzyme that produces reversible single-strand breaks in DNA during DNA replication. Although primarily used in the treatment of colorectal cancer, it is prescribed for cancers of the cervix, esophagus, stomach, lung and pancreas. Irinotecan is toxic, resulting in side effects such as severe diarrhea, anemia, leukopenia, anorexia, nausea, fever, fatigue and abdominal pain. Irinotecan is manufactured by Pfizer Inc. and its patent expires in 2005.

Doxorubicin is a cytotoxic agent that selectively kills malignant cells and causes tumor regression. It binds to the DNA, and presumably inhibits nucleic acid synthesis. It is used to treat, among others, leukemia, cancers of the breast, ovaries, bladder, stomach and thyroid, as well as Hodgkin's and non-Hodgkin's lymphoma. Doxorubicin is extremely toxic, resulting in side effects such as nausea, vomiting, loss of hair, mouth sores, colon ulceration and heart damage. It is manufactured by Pharmacia Upjohn for intravenous administration. Originally patented in 1971 and marketed as Adriamycin®, its patent protection has expired.

Paclitaxel, a relatively new anti-leukemic and anti-tumor agent, suppresses cell division by binding to so-called microtubules that form in a cell's nucleus to help move the chromosomes around during the division process. Paclitaxel is most effective against ovarian and advanced breast cancers, particularly after failure of standard chemotherapy. Studies indicate that it might be effective against leukemia, lung carcinoma, colon carcinoma, renal carcinoma, melanoma, and central nervous system carcinoma. Paclitaxel is toxic, resulting in problems ranging from irritation, drop in blood pressure and anemia to major breathing problems, hives and/or fluid buildup around the heart and bone marrow suppression. Almost all patients experience hair loss from paclitaxel, and some experience severe hypersensitivity reactions to paclitaxel. It is manufactured by Bristol-Myers-Squibb Company, under the trade name Taxol®, for intravenous administration. We believe that there are no patents covering the composition of paclitaxel.

Cyclophosphamide has action leading to cross-linking of RNA of tumor cells, and thereby interferes with the growth of susceptible rapidly proliferating malignant cells. It is effective against a range of cancers, such as malignant lymphomas, Hodgkin's disease, various leukemias, and cancer of the breast and ovaries. This drug is toxic, with side effects including nausea, vomiting, anorexia, diarrhea, skin rash and darkening and, in extreme

cases, heart damage or failure, and secondary malignancies. It is manufactured by Bristol-Myers-Squibb Company under the brand name Cytoxan® for intravenous and oral administration. We believe that there are no patents covering the composition of cyclophosphamide.

Oxaliplatin, sold under the trade name Eloxatin®, is classified as an alkylating agent, and belongs to a new class of platinum agents comprised of a platinum atom complexed with oxalate and diaminocyclohexane (DACH) and appears to inhibit DNA synthesis. The bulky DACH may have greater cytotoxicity than cisplatin and carboplatin. Pre-clinical studies have shown oxaliplatin to be synergistic with fluorouracil and SN-38, the active metabolite of irinotecan. Although oxaliplatin is primarily used to treat colorectal cancer, it has been used for cancers of the breast, stomach, head and neck and lung. The drug is toxic, with side effects including anemia, diarrhea, nausea, severe neuropathy, liver abnormalities, fever and vomiting. Its patent is due to expire in 2013.

Cisplatin appears to act by inhibiting DNA synthesis. It is effective against metastatic testicular and ovarian tumors (typically in combination with other chemotherapeutic agents), and advanced bladder cancer. This drug is toxic, with side effects including renal toxicity, nausea, vomiting, anorexia, diarrhea and anemia. It is manufactured as PLATINOL® by Bristol-Myers-Squibb Company for intravenous injection. We believe that there are no patents covering the composition of cisplatin.

Bevacizumab is an anti-angiogenesis drug, used in molecular targeted therapy, which prevents tumors from making new blood vessels thereby to inhibit tumor growth. It is approved for use in combination with chemotherapy drugs against metastatic colorectal cancer, and is being studied for the treatment of many different cancers. Bevacizumab is given in combination with 5-FU based chemotherapy. The drug is marketed by Genentech, Inc. under the trade name AVASTIN™.

Pre-clinical Studies

Toxicity Studies

Our initial toxicity studies in smaller animals, conducted in early 2001, were performed to test the potential reduction of toxicity of anticancer drugs co-administered with certain of our polysaccharide compounds. The results of one study demonstrated that one of our polysaccharide compounds, DAVANAT®, may significantly decrease the toxicity of 5-FU. A second, similar study was performed to test a potential reduction of toxicity of doxorubicin co-administered with each of two selected polysaccharide compounds. The results indicated that DAVANAT® may decrease the toxicity of doxorubicin. The fact that two different cancer drugs with chemically unrelated structures showed a marked reduction of their toxicity when co-administered with DAVANAT® indicates that there might be some fundamental underlying biological reasons related to this polysaccharide, rather than to the drugs, for the reduction in toxicity.

In subsequent pre-clinical experiments conducted in 2001 and 2002, we studied on larger animals the toxicity reduction of DAVANAT® co-administered with 5-FU, which had demonstrated toxicity reduction in the prior studies. These experiments were performed in accordance with FDA guidelines and recommendations on rats (acute and long-term toxicity study) and dogs (acute and long-term toxicity study) measuring the effect of DAVANAT®/5-FU on blood structure and survival of these animals. Results indicate that DAVANAT®/5-FU decreased toxicity, resulting in lower animal mortality and decreased loss of blood structure components in comparison to the results in animals which were administered 5-FU alone. These studies were presented to the FDA as part of our IND submission. We conducted additional toxicity studies on rats using escalating dosages of DAVANAT® and submitted these results to the FDA in an amendment to our IND in support of our Phase I clinical trials. The results of these additional toxicity studies were such that the FDA allowed our commencement of a Phase I clinical trial.

Efficacy Studies

We undertook independent studies at Southern Research Institute and Charles River Laboratories to test a potential change in the therapeutic efficacy of DAVANAT®/5-FU, which had decreased toxicity of 5-FU in

healthy animals. Results of the studies demonstrated that DAVANAT® also increases efficacy of 5-FU when administered into cancer-carrying animals. The studies, conducted with two different human colon tumors implanted into the test animals, demonstrated a decrease in tumor size following administration of 5-FU alone, as well as a significant decrease with the administration of DAVANAT®/5-FU.

Two of our efficacy studies were conducted to evaluate the compatibility of DAVANAT® with leucovorin, which is commonly used in cancer treatment with 5-FU. The studies showed that DAVANAT® and leucovorin do not interfere with each other when administered following standard procedures, and that DAVANAT®/5-FU is superior, compared to 5-FU/leucovorin, when both are administered in tumor-bearing animals. Leucovorin is a folinic acid derivative, which may enhance both the therapeutic and toxic effect of 5-FU in cancer therapy. In these studies, the growth of the tumor was decreased significantly by using DAVANAT®/5-FU compared to a 5-FU/leucovorin combination.

We also conducted a study that involved injecting radio-labeled DAVANAT® (with and without 5-FU) into tumor-free and tumor-bearing animals. The study provided experimental data with respect to DAVANAT® distribution in organs and tissues (liver, kidney, lungs, plasma, and tumor) and the capacity of such organs and tissue to clear DAVANAT® after various time periods. The study suggested that DAVANAT® may protect the liver from the toxic effect of 5-FU yet increase the amount, and hence the therapeutic effect, of 5-FU in the tumor. In other words, we have indications that DAVANAT® may decrease toxicity and increase efficacy of 5-FU.

In addition to DAVANAT®/5-FU, in 2003 and 2004 we conducted pre-clinical studies for irinotecan, doxorubicin, oxaliplatin, paclitaxel, cyclophosphamide and cisplatin both co-administered with DAVANAT® and other polysaccharide compounds. Human colon and breast xenographs were used to optimize formulations and results show that DAVANAT® exhibits a broad spectrum of activity with the tested drugs. In 2005, we began pre-clinical studies using DAVANAT®/5-FU in combination therapies that include irinotecan, oxaliplatin and bevacizumab.

Although the foregoing studies are encouraging, the results achieved in pre-clinical studies with animals are often not duplicated in human patients. Please see “Risk Factors That May Affect Future Results — Our Product Candidates Will Be Based On Novel Unproven Technologies.”

Phase I Clinical Trial

We submitted an investigational new drug application (IND) to the FDA in May 2002 based on the pre-clinical data obtained from our 5-FU studies. The FDA accepted the IND in June 2002, which allowed us to begin Phase I clinical trials with humans. We filed an amendment to the IND in November 2002 to incorporate new toxicology data and to enable us to undertake dose escalation in our Phase I trial. In response to the amendment, the FDA allowed the dose escalation scheme which would allow assessment in the clinical trial of DAVANAT® doses anticipated to be in the range of those for which the pre-clinical studies suggested efficacy.

In Phase I we are evaluating the ability of cancer patients to tolerate increasing doses of DAVANAT® while receiving a stable dose of 5-FU for treatment of a variety of solid tumors which have not responded to accepted therapies. The Phase I study has two primary objectives: (1) to determine the maximum dose of DAVANAT® that can be tolerated when administered with a stable dose of 5-FU, and (2) to define the dose-limiting toxicities of DAVANAT® co-administered with 5-FU. Approximately 40 male and female patients suffering from advanced solid malignancies, who failed the accepted chemotherapeutic, radiation, and/or surgical treatments, have participated in the study. In January 2005, we closed the enrollment in the Phase I trial.

Four clinical sites participated in our Phase I trial: the Norris Cotton Cancer Center at Dartmouth-Hitchcock Medical Center in Lebanon, New Hampshire; The Comprehensive Cancer Center at the University of Michigan in Ann Arbor, Michigan; the Ochsner Cancer Institute in New Orleans, Louisiana; and Florida Oncology Associates in Jacksonville, Florida.

We engaged a professional affiliated with Harvard Medical School and Massachusetts General Hospital to serve, on a consulting basis, as Medical Director/Monitor of our Phase I clinical trial. We also engaged five physicians with expertise in clinical trials to serve as a Medical Advisory Board and guide us through the clinical development of DAVANAT®.

We have contracted the pharmaceutical company, Sigma-Aldrich Corporation, to produce DAVANAT®, a certified Good Manufacturing Practices (cGMP) facility that manufactured sufficient quantities needed for the human clinical trials. We have engaged PPD Development, to provide analytical support for stability and compatibility studies for Phase I/II. Studies show that DAVANAT® is very stable in the formulation and is compatible with intravenous infusion systems. We continually provide reports to the FDA in support of our clinical trials as required.

We have engaged PRA International Inc. to serve as our independent contract research organization (CRO) to monitor and implement the Phase I/II clinical trials on our behalf, and Medidata Solutions Inc. to develop a web-based electronic data capture (EDC) system to collect and aggregate clinical trial data. This EDC system enables us to better manage clinical data and increase the speed at which such data are reported and compiled.

Phase ll Clinical Trial

In January 2004, we initiated and submitted to the FDA a Phase II clinical trial of DAVANAT®/5-FU in refractory colorectal cancer patients. This trial had been amended to the highest dose of Phase I and targets patients with metastatic colorectal cancer that have failed standard chemotherapeutic regimens. The study will evaluate the efficacy and safety of intravenous DAVANAT®/5-FU. The objectives for the Phase II study are (i) to document the complete and partial response and the rate of stable disease with DAVANAT®/5-FU therapy when administered in monthly cycles to patients with metastatic carcinoma of the colon or rectum whose tumor has failed to respond to, or has progressed despite standard first- and second-line chemotherapy, and (ii) to evaluate the safety of DAVANAT®/5-FU in this population. In addition to the services of PRA International and Medidata, which will continue from our Phase I clinical trial, we have also contracted with WorldCare Clinical, Inc. to provide diagnostic imaging services for our Phase II trial.

We engaged a board-certified oncologist with PRA's Global Medical and Safety Services Group to serve as Medical Monitor for our Phase II trial. We have also engaged five physicians with expertise in clinical trials to continue from Phase I and serve on our Medical Advisory Board to guide us through the clinical development of DAVANAT®.

Other Carbohydrate-Cancer Drug Formulations

We continue to chemically synthesize a library of products that are carbohydrate derivatives of doxorubicin, irinotecan, and paclitaxel and are currently studying both efficacy (*in vitro* and on cancer-carrying animals) and toxicity (on healthy animals). One compound, named Galactomycin, has demonstrated improved therapeutic index. We continue to develop these chemistries in contract research facilities in Russia, England and Italy. We have started the scale-up manufacturing for Galactomycin and are currently conducting pre-clinical efficacy studies *invitro* and in tumor-bearing animals. Although the foregoing studies are encouraging, the results achieved in preclinical studies with animals are often not duplicated in human patients. Please see "Risk Factors That May Affect Future Results — Our Product Candidates Will Be Based On Novel Unproven Technologies."

Patents and Proprietary Rights

We have built an intellectual property portfolio to protect our development efforts, including two issued patents and several patent applications pending. Issued patents cover methods and composition for reducing toxicity of a chemotherapeutic drug by co-administering a polysaccharide with a chemotherapeutic agent, and enhancing the delivery of a chemotherapeutic drug by covalently binding a carbohydrate compound with a chemotherapeutic agent. In addition, international patent applications corresponding to several of our U.S. applications have been filed under the Patent Cooperation Treaty.

The U.S. Patent and Trademark Office (PTO) has registered the following trademarks: PRO-PHARMACEUTICALS, INC., DAVANAT and ADVANCING DRUGS THROUGH GLYCOSCIENCE. We filed applications with the PTO to register additional trademarks and servicemarks.

Research

We focus on the design and analysis of carbohydrate-based drug delivery and target enhancement compounds. We do not anticipate building in-house research or development facilities or hiring staff in this connection other than for purposes of designing and managing our out-sourced research. Our pre-clinical testing has been conducted by outside laboratories and accredited facilities.

Our early stage research was conducted by Toxikon Corporation, based in Bedford, Massachusetts, and Charles River Laboratories, Inc., based in Wilmington, Massachusetts. Toxikon is a comprehensive compliance FDA-registered service testing laboratory that is not affiliated with Pro-Pharmaceuticals. Toxikon's laboratory is ISO-9001 certified and EN-45001 approved, meaning that it complies with quality management standards as established by the International Organization for Standardization and other international organizations. Charles River Laboratories, a contract laboratory not affiliated with Pro-Pharmaceuticals, conducted the research on our behalf in major part through its Redfield Laboratories division in Redfield, Arkansas. Redfield Laboratories is licensed by the U.S. Department of Agriculture to conduct research in laboratory animals, and its conditions are in compliance with the Federal Animal Welfare Act.

Our current research on toxicity and efficacy of several chemotherapy drugs both alone and formulated with our technology on cancer-carrying animals is being conducted by Charles River Laboratories and by Southern Research Institute in Birmingham, Alabama. Southern Research Institute is an independent, not-for-profit contract research organization that is not affiliated with our company. In addition to the above laboratories, we are conducting additional research in the United States, England, Israel, Italy and Russia.

As we develop products eligible for clinical trials, we contract with an independent clinical research organization to design the trial protocols and arrange for and monitor the clinical trials. We also rely on academic institutions or clinical research organizations to conduct, supervise or monitor some or all aspects of clinical trials involving our products. In addition, certain clinical trials for our products may be conducted by government-sponsored agencies and consequently will be dependent on governmental participation and funding. Our dependence on third-party clinical research organizations (CRO) will involve risks including lessened control over the timing and other aspects of any clinical trials, since we will not be conducting them on our own.

Our research and development expenditures totaled approximately $7.5 million for the cumulative period from inception (July 10, 2000) through December 31, 2004.

Manufacturing and Marketing

We are a development company and do not have, or intend to obtain, internal facilities for the manufacture of our products for clinical or commercial production. In order to have our products manufactured, we need to develop relationships with third-party manufacturing resources, enter into collaborative arrangements with other parties that have established manufacturing capabilities or elect to have other third parties manufacture our products on a contract basis.

We have no marketing infrastructure, and have not undertaken to develop a sales and marketing staff to commercialize pharmaceutical products. If we develop products eligible for commercial sale, we will need to rely on third parties such as licensees, collaborators, joint venture partners or independent distributors to market and sell those products. Our dependence on third-party manufacturers and marketers will involve risks relating to our lessened control, and other risks including those discussed in "Risk Factors That May Affect Future Results — We Will Depend On Third Parties To Manufacture And Market Our Products."

We currently envision having our manufacturing and marketing operations conducted pursuant to license agreements that we would negotiate with pharmaceutical companies with respect to manufacturing and marketing of their upgraded drugs. While we presently contemplate offering the rights to manufacture and market an upgraded drug to the original pharmaceutical company that developed the drug, we will evaluate other manufacturing and marketing arrangements as well.

Competition

A number of biotechnology and pharmaceutical companies are developing new drug delivery technologies for the treatment of cancer and other diseases. Drug delivery targeting technologies including monoclonal antibodies being developed by companies such as Seattle Genetics, Inc., Immunogen, Inc. and Dendreon Corporation could be competitive with our carbohydrate-based platforms. Several companies are developing carbohydrate technologies and sequencing of complex sugars to improve or develop new or existing drugs, including Momenta Pharmaceuticals, Inc., Adventrx Pharmaceuticals, Inc. and GlycoFi, Inc. Neose Technologies, Inc. is seeking to improve the therapeutic profile of widely used protein-based drugs and Optimer Pharmaceuticals, Inc. is developing carbohydrate technologies for drug discovery and improvement. We believe we are the only company using carbohydrate-based technologies to reformulate widely used chemotherapies that enable targeted delivery of toxic chemotherapy drugs.

Please see "Risk Factors That May Affect Future Results — We Face Intense Competition in the Biotechnology and Pharmaceutical Industries" for additional discussion related to our current and potential competition.

Government Regulation

The research, development, testing, manufacture, labeling, promotion, advertising, distribution, and marketing, among other things, of our products are extensively regulated by governmental authorities in the United States and other countries. In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act and its implementing regulations. Failure to comply with the applicable U.S. requirements may subject us to administrative or judicial sanctions, such as FDA refusal to approve pending new drug applications, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, and/or criminal prosecution. Please see "Risk Factors That May Affect Results — We Will Need Regulatory Approvals To Commercialize Our Products" for additional discussion of risks related to regulatory compliance.

Drug Approval Process

Drugs may not be marketed in the U.S. until the FDA has approved them. The steps required before a drug may be marketed in the U.S. include (similar rules apply in other countries):

1. Pre-clinical laboratory tests, animal studies, and formulation studies,
2. Submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin,
3. Adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for each indication,
4. Submission to the FDA of a New Drug Application (NDA),
5. Satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with cGMP established by the FDA,
6. FDA review and approval of the NDA, and
7. FDA review and approval of a trademark used in connection with a pharmaceutical.

Pre-clinical tests include laboratory evaluation of product chemistry, toxicity, and formulation, as well as animal studies. The results of the pre-clinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND, which must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions about issues such as the conduct of the trials as outlined in the IND. In such a case, the IND sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. There is no certainty that submission of an IND will result in the FDA allowing clinical trials to begin.

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

Clinical trials typically are conducted in three sequential phases, but the phases may overlap or be combined. Each trial must be reviewed and approved by an independent Institutional Review Board (IRB) before it can begin. Study subjects must sign an informed consent form before participating in a clinical trial. Phase I usually involves the initial introduction of the investigational drug into people to evaluate its safety, dosage tolerance, pharmacodynamics, and, if possible, to gain an early indication of its effectiveness. Phase II usually involves trials in a limited patient population to (i) evaluate dosage tolerance and appropriate dosage; (ii) identify possible adverse effects and safety risks; and (iii) evaluate preliminarily the efficacy of the drug for specific indications. Phase III trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. There is no assurance that these trials will be completed within a specified period of time, if at all.

Assuming successful completion of the required clinical testing, the results of the pre-clinical studies and of the clinical studies, together with other detailed information, including information on the manufacture and composition of the drug, are submitted to the FDA in the form of an NDA requesting approval to market the product for one or more indications. Before approving an NDA, the FDA usually will inspect the facilities at which the drug is manufactured, and will not approve the product unless cGMP compliance is satisfactory. If the FDA evaluates the NDA and the manufacturing facilities as acceptable, the FDA will issue an approval letter. If the FDA evaluates the NDA submission or the manufacturing facilities as not acceptable, the FDA will outline the deficiencies in the submission and often will request additional testing or information. Even if an applicant submits the requested additional information, the FDA ultimately may decide that the NDA does not satisfy the regulatory criteria for approval. The testing and approval process requires substantial time, effort, and financial resources, and there is no assurance that any approval will be granted on a timely basis, if at all. After approval, certain changes to the approved product, such as adding new indications, manufacturing changes, or additional labeling claims are subject to further FDA review and approval.

FDA "Fast Track" Program; Priority Review

The FDA's "fast track" program is intended to facilitate the development and expedite the review of drugs intended for the treatment of serious or life-threatening diseases and that demonstrate the potential to address unmet medical needs for such conditions. Under this program, the FDA can, for example, review portions of an NDA for a fast track product before the entire application is complete, thus potentially beginning the review process at an earlier time. We may seek to have some of our products designated as fast track products, with the goal of reducing review time. There can be no guarantee that the FDA will grant any of our requests for fast track designation, that any fast track designation would affect the time of review, or that the FDA will approve the NDA submitted for any of our product candidates, whether or not fast track designation is granted. Additionally, FDA approval of a fast track product can include restrictions on the product's use or distribution (such as permitting use only for specified medical procedures or limiting distribution to physicians or facilities with special training or experience), and can be conditioned on the performance of additional clinical studies after approval.

FDA procedures also provide priority review of NDAs submitted for drugs that, compared to currently marketed products, offer a significant improvement in the treatment, diagnosis, or prevention of a disease. NDAs that are granted priority review are acted upon more quickly than NDAs given standard review. The FDA's goal is to act on 90% of priority NDAs within six months of receipt. We anticipate seeking priority review with regard to some of our product candidates. There can be no guarantee that the FDA will grant priority review status in any instance, that priority review status will affect the time of review, or that the FDA will approve the NDA submitted for any of our product candidates, whether or not priority review status is granted.

Post-Approval Requirements

If FDA approval of one or more of our products is obtained, we will be required to comply with a number of post-approval requirements. For example, holders of an approved NDA are required to report certain adverse reactions to the FDA and to comply with certain requirements concerning advertising and promotional labeling for their products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. In addition, discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of our products under development.

FDA "Orphan Drug" Designation

The FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which generally is a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are publicly disclosed by the FDA. Orphan drug designation does not convey an advantage in, or shorten the duration of, the regulatory review and approval process. If a product which has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to orphan exclusivity, meaning that the FDA may not approve any other applications to market the same drug for the same indication, except in certain very limited circumstances, for a period of seven years. As well, orphan drugs usually receive ten years of marketing exclusivity in the European Union.

Non-United States Regulation

Before our products can be marketed outside of the United States, they are subject to regulatory approval similar to that required in the United States, although the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country. No action can be taken to market any product in a country until an appropriate application has been approved by the regulatory authorities in that country. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In certain countries, the sales price of a product must also be approved. The pricing review period often begins after market approval is granted. No assurance can be given that even if a product is approved by a regulatory authority, satisfactory prices will be approved for such product.

Environmental Regulation

Pharmaceutical research and development involves the controlled use of hazardous materials including, but not limited to, certain hazardous chemicals and radioactive materials. In connection with research, development and manufacturing activities, biotechnology and pharmaceutical companies are subject to federal, state and local laws, rules, regulations and policies governing the use, generation, manufacture, storage, air emission, effluent discharge, handling and disposal of certain materials, biological specimens and wastes. Since we do not

anticipate building in-house research, development or manufacturing facilities, but plan to have these activities conducted by contractors and other third parties, we do not anticipate that we will be directly affected by environmental regulations. However, our contractors and others conducting research, development or manufacturing activities for us may be required to incur significant costs to comply with environmental and health and safety regulations in the future, and this could in turn affect our costs of doing business and might ultimately interfere with timely completion of research or manufacturing programs if those third parties are unable to comply with environmental regulatory requirements.

Employees

As of March 20, 2005, we had six full-time employees comprised of our President and Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Vice President, Manufacturing and Product Development, Vice President of Investor Relations, and an Operations Administrator. Our Chief Scientist and Medical Director/Monitor (clinical trials) each provide service part-time as an independent contractor or consultant.

Scientific Advisory Board

Our Scientific Advisory Board includes recognized scientists with expertise in the fields of carbohydrate chemistry and biochemistry, immunology, cell and molecular biology, and synthetic and medical chemistry. The Scientific Advisory Board meets periodically with our management and in smaller groups or individually from time to time on an informal basis. The members assist us in identifying scientific and product development opportunities and reviewing with management the progress of our specific projects.

The members of our Scientific Advisory Board are the following:

David Platt, Ph.D. our Chairman, President and Chief Executive Officer, is a founding stockholder and co-inventor of our patented technology. From 1992 to 2000, he was Chairman and Chief Executive Officer of SafeScience, Inc. (now known as GlycoGenesys, Inc.; Nasdaq SmallCap: GLGS), a biotechnology company involved in research and development of products for treating cancer and immune system diseases. From 1991 to 1992, Dr. Platt was a research scientist with the Department of Internal Medicine at the University of Michigan, Ann Arbor, and from 1988 to 1990 was a research fellow at Wayne State University and the Michigan Cancer Foundation in Detroit (renamed Barbara Ann Karmanos Cancer Institute). Previously, he was a research fellow in the Weizmann Institute of Science, Rehovot, Israel. Dr. Platt received a Ph.D. in chemical engineering from Hebrew University in Jerusalem and earned an M.S. and a B.S. degree from Hebrew University. He also earned a bachelor of engineering degree from Technion in Haifa, Israel. Dr. Platt has published peer review articles and holds many patents, primarily in the field of carbohydrate chemistry.

Anatole A. Klyosov, Ph.D., **D.Sc**. is a founding stockholder and, by virtue of being a co-inventor of our patented technology and a consultant to us through his company, MIR International Inc., holds the title of Chief Scientist. He is Vice President, Research & Development for Kadant Composites, Inc., a subsidiary of Kadant, Inc. (NYSE: KAI), where, since 1996, he has directed a laboratory performing work in biochemistry, microbiology, polymer engineering and other fields in the development of composite polymer-based products. From 1990 to 1998 Dr. Klyosov was Visiting Professor of Biochemistry, Center for Biochemical and Biophysical Sciences, Harvard Medical School and from 1981 to 1990 he was Professor and Head of the Carbohydrates Research Laboratory at the A.N. Bach Institute of Biochemistry, USSR Academy of Sciences. Dr. Klyosov was elected as a member of the World Academy of Art and Sciences and is the recipient of several distinguished awards including the USSR National Prize in Science and Technology. He has published more than 230 peer review articles in scientific journals, authored books on enzymes, carbohydrates, and biotechnology, and holds more than 20 patents. He has also been a consultant to various organizations including the World Bank and the United Nations Industrial Development Organization and serves on the editorial boards of scientific journals in the field of biochemistry and biotechnology. Dr. Klyosov earned his Ph.D. and D.Sc. degrees in physical chemistry, and an M.S. degree in enzyme kinetics, from Moscow State University.

Dale H. Conaway, D.V.M. is the Deputy Regional Director (Southern Region) and Chief Veterinary Medical Officer for the Office of Research Oversight, an office within the Veterans Health Administration under the U.S. Department of Veterans Affairs. From 1998 to 2001, he served as Manager of the Equine Drug Testing and Animal Disease Surveillance Laboratories for the Michigan Department of Agriculture. From 1994 to 1998 he was Regulatory Affairs Manager for the Michigan Department of Public Health Vaccine Production Division. Dr. Conaway received a D.V.M. degree from Tuskegee Institute and an M.S. degree in pathology from the College of Veterinary Medicine at Michigan State University. He is also a member of our Board of Directors.

Eliezer Zomer, Ph.D. is our Vice President, Manufacturing and Product Development. Dr. Zomer was the founder of ALICOM Biological Control where he served from 2000 to 2002, was Vice President of Product Development at SafeScience Inc. (now known as GlycoGenesys, Inc.) from 1998 to 2000, and was Vice-President of Research and Development at Charm Sciences, Inc. from 1987 to 1998. He served as Associate Researcher at Harvard Medical School from 1986 to 1994. Dr. Zomer received an M.Sc. degree in industrial microbiology from the University of Tel Aviv and a Ph.D. in biochemistry from the University of Massachusetts and undertook post-doctoral study at the National Institutes of Health.

Edgar Ben-Josef, M.D. is Associate Professor, Department of Radiation Oncology, at the University of Michigan Medical School and previously had been Associate Professor (2000 to 2003) and Assistant Professor (1995 to 2000) in radiation oncology at the Wayne State University School of Medicine. Since 1995, he has served as an attending physician at the Gershenson Radiation Oncology Center, Karmanos Cancer Institute, in Detroit, Michigan. Dr. Ben-Josef is a consultant to the National Cancer Institute, a member of the American Society of Clinical Oncology Task Force on Metastic Prostate Cancer, and a member of the National Comprehensive Cancer Network panels on pancreatic cancer and hepatobilliary cancer. Dr. Ben-Josef received B.Med.Sc. and M.D. degrees from The Hebrew University-Hadassah School of Medicine in Jerusalem, Israel. He is also a member of our Board of Directors and Medical Advisory Board.

Mildred S. Christian, Ph.D. is President and Chief Executive Officer of Argus International, Inc., a provider of consulting services in regulatory affairs, and Chairman and Chief Executive Officer of Argus Health Products, LLC, which develops and internationally distributes preventive and maintenance health care products for health care professionals and the over-the-counter market. Until 2002, she was Executive Director of Research of Argus and Redfield Laboratories, both divisions of Charles River Laboratories. Before founding Argus Research Laboratories in 1979 and Argus International in 1980, Dr. Christian spent 14 years in drug development at McNeil Laboratories, a division of Johnson & Johnson Corporation. She has participated at all levels from protocol to final report in the performance, evaluation and submission of over 1,800 pre-clinical studies. Dr. Christian is a member of a number of professional organizations, including current service as Councilor of the European Teratology Society and Secretary/Treasurer of the Academy of Toxicological Sciences, and was past president of the Teratology Society, the American College of Toxicology, and the Academy of Toxicological Sciences. She is an honorary member of the Society of Quality Assurance and founding editor of the *Journal of Toxicological Sciences*. She has edited or contributed to several major textbooks and is the author of over 120 papers and abstracts published in U.S. and international journals. Dr. Christian earned her Ph.D. from Thomas Jefferson University in developmental anatomy and pharmacology. She is also a member of our Board of Directors.

Henry J. Esber, Ph.D. is a Senior Consultant, Business Development, at Charles River Laboratories, Preclinical. He is the co-founder of BioSignature Diagnostics, Inc. and Advanced Drug Delivery, Inc. He also serves on the Scientific Advisory Boards of several biotechnology companies and is the author of over 130 technical publications. Dr. Esber has more than 25 years of experience in the areas of oncology/tumor immunology and immunotherapy as well as strong knowledge in the field of toxicology and regulatory affairs. Dr. Esber received a B.S. degree in biology/Pre-Med from the College of William and Mary, an M.S. degree in public health and parasitology from the University of North Carolina, and a Ph.D. in immunology/microbiology from West Virginia University Medical Center.

Irwin Goldstein, Ph.D. is Emeritus Professor and Interim Chair of the Department of Biological Chemistry at the University of Michigan Medical School, and was Professor from 1972 to 1999. He is the recipient of many professional awards and is the author of over 200 publications. Dr. Goldstein received a B.A. degree in chemistry from Syracuse University, and a Ph.D. in biochemistry from the University of Minnesota.

Zbigniew J. Witczak, Ph.D. is Associate Professor at the Nesbitt School of Pharmacy, Wilkes University (Wilkes-Barre, Pennsylvania). From 1991 to 1999 he was Associate Professor in the Department of Pharmaceutical Sciences, School of Pharmacy, at the University of Connecticut. Dr. Witczak has extensive industrial and academic experience in carbohydrates. In 2002, he chaired the Division of Carbohydrate Chemistry of the American Chemical Society (ACS) and is the current chair of its awards committee. He has published more than 80 research papers and holds patents in the field of carbohydrate, medicinal and biological chemistry, and serves on the editorial board of numerous journals in carbohydrate chemistry and related fields. In 1997, Dr. Witczak co-edited *Carbohydrates in Drug Design*, which has since become a leading reference in the field. In 2000, Dr. Witczak was awarded the Melville L. Wolform Award of the ACS for his outstanding research contribution to carbohydrate chemistry. Dr Witczak received a M.S. degree in organic chemistry from the University of Lodz and a Ph.D. in natural products chemistry from the Faculty of Pharmacy, Medical University, Lodz, Poland. He worked as a postdoctoral fellow with Professor Roy L. Whistler, a renowned authority in carbohydrate chemistry at Purdue University.

Medical Advisory Board

Our Medical Advisory Board includes recognized doctors with expertise in the area of clinical trial management. The Advisory Board meets periodically with our management and in smaller groups or individually from time to time on an informal basis. The members assist us in the oversight of protocol development and management of our clinical trials.

The members of our Medical Advisory Board are the following:

Edgar Ben-Josef, M.D. has more than 20 years of medical practice. He is also a member of our Board of Directors and Scientific Advisory Board. Please see his biography above.

Adi Kurgan, M.D., Ph.D. has 30 years of academic and medical experience and is board certified in General Surgery. Dr. Kurgan teaches and practices at The Hebrew University Hadassah Medical School and Shaare Zedek Hospital, Jerusalem. Dr. Kurgan is founder of community medical centers in Israel and participates in clinical research and medical device validation. He is the author of more than 40 clinical articles.

Leslie R. Laufman, M.D. has 30 years of medical practice and clinical research experience, primarily in the areas of hematology and oncology. American board-certified in Internal medicine, Dr. Laufman has served as a principal investigator for the Columbus (Ohio) Community Clinical Oncology Program, an investigator for the Ohio State University Comprehensive Cancer Center, and president of Hematology Oncology Consultants. Dr. Laufman is the author of more than 40 articles on oncology research and studies.

John S. Macdonald, M.D. is Professor of Medicine at New York Medical College (New York City), and Chief of Gastrointestinal Oncology Service at Saint Vincent's Comprehensive Cancer Center (New York City). Dr. Macdonald was the recipient of the fifth annual Petros A. Palandjian Visiting Professor in Gastrointestinal Oncology Award at the Dana Farber Cancer Institute at Harvard in 2002. Dr. Macdonald is active in various cancer organizations and an editor or a member of the editorial advisory boards of numerous cancer publications. Dr. Macdonald is the author of more than 300 articles and has presented more than 130 abstracts, primarily in the oncology field.

Bruce Silver, M.D., F.A.C.P. has 20 years of clinical oncology practice. Dr. Silver is a board-certified medical oncologist, Fellow of the American College of Physicians and member of the American Society of

Clinical Oncology. Dr. Silver has participated in clinical trials for treatment of breast, colon, ovary, and lung cancers; lymphomas and Hodgkin's disease, and supportive care trials. He has served as Chairman of the Cancer Committee and Tumor Boards and as a principal investigator at various hospitals. Dr. Silver is involved in providing oncology drug development consultative services to biotechnology and pharmaceutical clients and in the direct medical and safety management of these trials. Dr. Silver is Senior Director, Global Product Development Services, PRA International.

Item 2. ***Properties***

We entered into a five-year sublease that commenced on June 1, 2001 for approximately 2,830 square feet for our executive offices located at 189 Wells Avenue, Suite 200, Newton, Massachusetts 02459. The base rent for the year ended December 31, 2004 was approximately $110,000 and is subject to increase in subsequent years. The sublease is a so-called "triple net" lease, meaning that we must pay our proportionate share of items such as property taxes, insurance and operating costs. During 2004, there were no capital expenditures related to our leased premises. During 2005 we will be reviewing our needs for office space in anticipation of securing suitable facilities for use upon expiration of our current sublease in May 2006.

Item 3. ***Legal Proceedings***

In May 2003, a former employee commenced a lawsuit in Massachusetts Superior Court and filed a related complainant letter with the Occupational Safety and Health Administration of the U.S. Department of Labor. The plaintiff asserted claims for wrongful discharge in violation of public policy and of employee protection provided for under the Sarbanes-Oxley Act of 2002, and sought monetary damages. In August 2003, the Department of Labor dismissed the complaint. The plaintiff objected and requested a hearing by an administrative law judge at the Department. The hearing occurred in April 2004 and the judge issued a decision on February 11, 2005. The judge determined that the former employee had a reasonable belief that we engaged in some activity that violated federal securities law, and ordered us to pay the former employee's legal expenses. The purpose of the hearing was not to determine whether we violated federal securities law and the Judge did not find that we violated federal securities law. On March 8, we paid the former employee's legal expenses. The parties dismissed the federal and Massachusetts cases and the matter was closed.

In October 2003, the Securities and Exchange Commission began an investigation related to the foregoing. We were notified in November 2004, that the SEC had expanded the investigation to determine, whether certain statements made concerning our company were false or misleading. We have fully cooperated with the SEC throughout by providing information and documents.

In February 2004, we received an order from the Commonwealth of Massachusetts to provide information concerning our prior securities offerings. We timely responded and have not received further communication from the state on this matter. We believe the SEC and Massachusetts investigations may be related to the matters alleged by the former employee.

The regulatory investigations are subject to various uncertainties, and it is possible that either may be resolved unfavorably. Management believes that an unfavorable resolution will not have a material adverse effect on our financial position, results of operations or cash flows.

In January 2004, Dr. Platt, our Chairman and Chief Executive Officer, filed a lawsuit in Massachusetts Superior Court against GlycoGenesys, Inc. for various claims including breach of contract. In its filing in February 2004, GlycoGenesys asserted counterclaims against us and Dr. Platt alleging tortious interference and misappropriation of proprietary rights. The counterclaims seek monetary damages and injunctive relief related to our intellectual property. In March 2004, we and Dr. Platt answered the counterclaims and denied any liability. In June 2004, the Court allowed, without opposition, a motion of GlycoGenesys for leave to file a supplemental counterclaim against us for defamation and unfair competition. We and Dr. Platt intend to contest these

counterclaims vigorously and believe we will ultimately prevail. However, if we do not prevail, there could be a material adverse impact on our financial position, results of operations or cash flows.

On January 28, 2005, we filed a request with the U.S. Patent and Trademark Office for an inter partes re-examination of U.S. Patent No. 6,680,306 owned by GlycoGenesys, Inc. because we believe that the invention claimed in this patent is disclosed in literature that precedes it including our U.S. Patent No. 6,645,946 for DAVANAT®.

In the ordinary course of business, we may from time to time be involved in other legal matters that in our estimation will not have a material adverse impact on us. We record accruals for such contingencies to the extent that we conclude their occurrence is probable and the related damages are estimable.

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

No matter was submitted to a vote of our stockholders during the fourth quarter of the fiscal year covered by this report.

PART II

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

Price Range of Common Stock

Our common stock trades under the symbol "PRW" on the American Stock Exchange. The high and low closing prices for our common stock as reported on the American Stock Exchange for the periods indicated below were as follows:

	High	Low
Fiscal Year Ended December 31, 2004		
First Quarter	$5.51	$3.75
Second Quarter	$4.41	$3.15
Third Quarter	$4.04	$2.08
Fourth Quarter	$2.50	$1.39
Fiscal Year Ended December 31, 2003		
September 10, 2003* to September 30, 2003	$6.14	$5.40
Fourth Quarter	$5.29	$3.11

* Commencement of trading on the American Stock Exchange.

Prior to September 10, 2003, our common stock traded under the symbol "PROH" on the Over-the-Counter Bulletin Board Electronic Quotation System maintained by the National Association of Securities Dealers, Inc. The following table sets forth the range of high and low bid prices for our common stock for the periods indicated in 2003. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not necessarily represent actual transactions.

	High Bid Quotation	Low Bid Quotation
Fiscal Year Ended December 31, 2003		
First Quarter	$ 3.14	$ 2.41
Second Quarter	$ 4.66	$ 2.30
July 1, 2003 to September 9, 2003	$ 4.85	$ 3.60

Holders of Common Stock

As of February 7, 2005, there were approximately 335 holders of record of our common stock. Because shares of our common stock are held by depositaries, brokers and other nominees, the number of beneficial holders of our shares is substantially larger than the number of record holders. Based on information available to us, we believe there are approximately 1,775 beneficial owners of our shares of our common stock in addition to the record holders.

Dividends

There have been no cash dividends declared on our common stock since our company was formed. Dividends are declared at the sole discretion of our Board of Directors. Our intention is not to declare cash dividends and retain all cash for our operations.

Item 6. ***Selected Consolidated Financial Data***

The following table sets forth financial data for the years ended December 31, 2004, 2003, 2002, 2001, and for the period from inception (July 10, 2000) to December 31, 2000 and cumulative period since inception (July 10, 2000) through December 31, 2004. This selected financial data should be read in conjunction with the Consolidated Financial Statements and related notes included in Item 15 of this Annual Report on Form 10-K.

	Fiscal Year Ended December 31,				Period from Inception (July 10, 2000) to December 31, 2000	Cumulative Period from Inception (July 10, 2000) to December 31, 2004
	2004	2003	2002	2001		
	(dollars in thousands, except per share data)(4)					
Consolidated Statements of Operations Data:						
Operating expenses:						
Research and development	$ 3,042	$ 1,950	$ 1,483	$ 893	$ 100	$ 7,469
General and administrative	4,262	2,988	1,804,	1,289	67	10,409
Operating loss	(7,304)	(4,938)	(3,287)	(2,182)	(167)	(17,878)
Interest and other income	124	69	24	25		243
Interest and other expenses (1)		(4)	(415)	(1,813)	(18)	(2,251)
Net loss	$ (7,180)	$ (4,873)	$ (3,678)	$ (3,970)	$ (185)	$ (19,886)
Net loss per share: basic and diluted	$ (0.28)	$ (0.23)	$ (0.22)	$ (0.29)	$ (0.01)	
Weighted average shares out-standing: basic and diluted (2)	25,750,789	21,360,572	16,374,524	13,601,795	12,354,670	

	As of December 31,				
	2004	2003	2002	2001	2000
	(dollars in thousands)				
Consolidated Balance Sheet Data:					
Working capital	$ 9,819	$7,318	$1,327	$1,021	$ 23
Total assets	11,110	8,002	2,283	1,767	228
Convertible notes payable (3)	—	—	—	195	79
Stockholders' equity	10,105	7,624	1,616	1,216	46

(1) Interest expense in 2001 includes $1,241 relating to a beneficial conversion feature and $503 relating to the fair value of certain warrants issued to induce the conversion of the notes prior to maturity.
(2) Basic and diluted net loss per share is the same for each reporting period as the anti-dilutive shares were not included in the per-share calculations.
(3) Net of discount of $205 at December 31, 2000.
(4) Amounts in this table may not agree due to rounding.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations (in thousands, except share and per share data)***

Overview

We are a development-stage company engaged in research and development of drug technologies to enable targeted delivery of chemotherapy drugs. We intend initially to "reformulate" existing widely used chemotherapies with our proprietary carbohydrate compounds. We believe our technology may increase the body's tolerance to these toxic drugs by targeting the delivery directly to cancerous cells and increasing the efficacy, thereby creating a preferable treatment to existing oncology regimens. Our goal is to develop and commercialize a new generation of reformulated drugs. For additional information, please see "Item 1. Business — Business of Pro-Pharmaceuticals."

All of our drug candidates are currently in pre-clinical and clinical development. To commercialize our drug candidates, we will be required to successfully complete pre-clinical studies and clinical trials to obtain regulatory approvals. We do not expect to file a New Drug Application ("NDA") for a drug candidate before 2006, even if development of our drug candidates continues successfully. Any delay in obtaining or failure to obtain required approvals will materially adversely affect our ability to generate revenues from commercial sales relating to our drug candidates. We expect our sources of funding for the next several years to come from finance transactions.

We are devoting substantially all of our efforts toward product research and development, and raising capital. We have no source of revenue and have incurred significant losses to date. We have incurred net losses of $19,886 for the cumulative period from inception (July 10, 2000) through December 31, 2004. Our losses have resulted principally from costs associated with research and development expenses, including clinical trial costs, and general and administrative activities. As a result of planned expenditures for future research, discovery, development and commercialization activities, we expect to incur additional operating losses for the foreseeable future.

We have raised $26,630 in capital principally through the issuance of convertible notes, the sale of common stock through a public offering and the sale of common stock and warrants through private placements. From inception (July 10, 2000) through December 31, 2004, we used cash of $15,356 for our operations. At December 31, 2004, we had $10,704 of cash and cash equivalents available to fund future operations, which our management believes is sufficient to fund our operations through at least March 31, 2006.

Because we lack revenue and must continue our research and development, we must continually identify new sources of capital and complete financing transactions in order to continue our business. We must continually monitor the monthly "burn rate" of our capital resources.

We have expanded our management team with the hiring, as of February 7, 2005, of a full time Chief Financial Officer who has substantial experience with public company financial accounting and reporting. His predecessor served us on a consulting basis through December 2004.

New Accounting Pronouncement

In December 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 123R, "Share-Based Payment" (SFAS No. 123R). This Statement is a revision of SFAS No. 123, "Accounting for Stock-Based Compensation," and supercedes Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and its related implementation guidance. SFAS No. 123R focuses primarily on accounting for transactions in which a company obtains employee services in share-based payment transactions. The Statement requires companies to recognize stock compensation expense for awards of equity instruments to employees based on grant-date fair value of those awards (with limited exceptions). SFAS No. 123R is effective for the first interim or annual reporting period that begins after June 15, 2005. We are evaluating the methods of adoption allowed by SFAS No. 123R. We do not yet have an estimate of the effect on our statements of operations of adopting SFAS No. 123R.

Critical Accounting Policies and Estimates

Our significant accounting policies are more fully described in Note 2 to our Consolidated Financial Statements included in this Annual Report on Form 10-K, and in Part IV, Item 15 "Exhibits and Financial Statement Schedules." Certain of our accounting policies, however, are critical to the portrayal of our financial position and results of operations and require the application of significant judgment by our management, which subjects them to an inherent degree of uncertainty. In applying our accounting policies, our management uses its best judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical experience, terms of existing contracts, our observance of trends in the industry, information available from other outside sources, and on various other factors that we believe to be appropriate under the circumstances. We believe that the critical accounting policies discussed below involve more complex management judgment due to the sensitivity of the methods, assumptions and estimates necessary in determining the related asset, liability, revenue and expense amounts.

Stock-Based Compensation. We account for stock-based compensation to employees and non-employee directors in accordance with Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees", and related interpretations. Under APB No. 25, no compensation expense is recorded for stock options and restricted stock awards granted at fair market value with fixed terms. We account for stock or other equity-based compensation to non-employees utilizing the fair value method in accordance with Statement of Financial Accounting Standards (SFAS) No. 123, "Accounting for Stock-Based Compensation," and the Emerging Issues Task Force Abstract No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods or Services," and the related interpretations. Under the fair value method, compensation is recorded at the fair value of the consideration received or the fair value of the equity instrument until the final measurement date, which is the earlier of performance completion or vesting. Fluctuations in the quoted market price of the our stock covered by the unvested equity instrument are reflected as adjustments to deferred compensation and compensation expense over the related service period.

We determine the fair value of the equity instrument by using the Black-Scholes option-pricing model, which requires us to make certain assumptions. Some of the assumptions, such as the risk-free interest rate, come from published sources. Other assumptions, such as the expected life of the equity instrument or the expected volatility of our stock, are subjective and may differ from period to period. Accordingly, changes in the value of our stock or changes in the assumptions used to calculate the fair value of the equity instruments, such as the expected life of the options, could have a significant effect on our results of operations in any period.

We consider equity compensation to be an important component in attracting and retaining key employees. During 2004 and 2003, we awarded approximately 252,750 and 1,647,250 stock options, respectively, to employees and non-employee members of our Board of Directors for normal services. Because the exercise price of the options granted equal the fair market value of a share of our common stock on the date of grant and the options have fixed terms, we recorded no stock compensation expense on these awards. If we had used the fair value method provided for under SFAS No. 123 our reported net loss of $7,180 would have increased by $749 to $7,929 in 2004.

Accrued Expenses. As part of the process of preparing our financial statements, we are required to estimate accrued expenses. This process involves identifying services that third parties have performed on our behalf and estimating the level of service performed and the associated cost incurred on these services as of each balance sheet date in our financial statements. Examples of estimated accrued expenses include contract service fees, such as amounts paid to clinical research organizations (CRO) and investigators in conjunction with pre-clinical and clinical trials, and professional service fees, such as attorneys and accountants. In connection with these service fees, our estimates are most affected by our understanding of the status and timing of services provided relative to the actual services incurred by the service providers. In the event that we do not identify certain costs that have been incurred or we under- or over-estimate the level of services or costs of such services, our reported expenses for a reporting period could be understated or overstated. The date on which certain

services commence, the level of services performed on or before a given date, and the cost of services are often subject to our judgment. We make these judgments based upon the facts and circumstances known to us in accordance with accounting principles generally accepted in the United States.

Income Taxes. We determine if our deferred tax assets and liabilities are realizable on an ongoing basis by assessing our valuation allowance and by adjusting the amount of such allowance, as necessary. In the determination of the valuation allowance, we have considered future taxable income and the feasibility of tax planning initiatives. Should we determine that it is more likely than not that we will realize certain of our deferred tax assets for which we previously provided a valuation allowance, an adjustment would be required to reduce the existing valuation allowance. In addition, we operate within multiple taxing jurisdictions and are subject to audit in these jurisdictions. These audits can involve complex issues, which may require an extended period of time for resolution. Although we believe that adequate consideration has been made for such issues, there is the possibility that the ultimate resolution of such issues could have an adverse effect on the results of our operations.

Results of Operations

Fiscal Year Ended December 31, 2004 Compared to Fiscal Year Ended December 31, 2003 (in thousands)

Research and Development Expenses. Research and development expenses were $3,042 in 2004 or an increase of 56% as compared to $1,950 incurred in 2003. Research and development expenses consist primarily of costs of clinical research organizations (CRO), clinical data management services, outsourcing product development to chemical research laboratories regulatory and medical consultants, drug manufacturing for clinical trials, salaries, stock based compensation and other personnel related expenses. Of the $1,092 increase, approximately $380 was due to Phase I clinical trials of DAVANAT®/5-FU and the remainder was due to drug manufacturing for clinical trials, pre-clinical product development and CRO costs primarily for Phase II clinical trials.

We began our Phase I clinical trial of DAVANAT® and DAVANAT®/5-FU in February 2003. Due to additional drug administration cycles, enrollment closed in January 2005. We completed the sixth and final cohort of the Phase I trial in March 2005 and expect to issue a report of the final clinical results in the second quarter of 2005. We initiated our Phase II clinical trial of DAVANAT®/5-FU colorectal cancer patients in January 2004, and are currently completing our negotiations and contracts with clinical sites. We expect to begin dosing patients in the second quarter of 2005 and expect Phase II to be completed in 2006. We continue to develop our pipeline of drug candidates. Accordingly, we expect that our research and development costs will increase in 2005 due to Phase II clinical trial of DAVANAT®/5-FU and preparation for Phase III combined with development of additional drug candidates.

General and Administrative Expenses. General and administrative expenses were $4,262 in 2004 or an increase of 43%, as compared to $2,988 in 2003. General and administrative expenses consist primarily of salaries including stock based compensation, legal and accounting fees, insurance, investor relations, business development and other office related costs. Of the $1,274 increase in costs in 2004, approximately $1,315 was due to higher legal fees offset by lower expenses in other areas. Approximately $580 of the legal fee increase was incurred in connection with the arbitration between GlycoGenesys, Inc. and David Platt concerning rights to control prosecution of some patent applications that Dr. Platt licensed to GlycoGenesys. In November 2004 the arbitrator awarded the patent prosecution rights to Dr. Platt. We consider the costs incurred on this matter to be ordinary and necessary for purposes of protection of our intellectual property in general and to enable us to defend the claims against our intellectual property alleged by GlycoGenesys described in “Item 3 — Legal Proceedings” above. The remainder of the increase in legal costs was incurred principally for the protection of our intellectual property. Legal expenses in 2004 also increased to a lesser degree by expenditures to defend the lawsuit asserted by a former employee described in “Item 3 — Legal Proceedings” above.

Additionally, investor relations expense increased by approximately $135. This increase was offset by lower stock-based compensation expense of approximately $325. The lower stock-based compensation expense was

primarily due to fewer compensatory option grants. We expect legal costs in 2005 will remain at about the same level as 2004. The arbitration with GlycoGenesys and the former employee wrongful discharge lawsuits have now been concluded. We expect the reduction in expenses related to these concluded matters to be offset by an increase related to the defense of our DAVANAT® patent lawsuit brought by GlycoGenesys. We expect the remainder of general and administrative costs to increase modestly due to increased business activity and costs associated with being a public company.

Interest and Other Income. Interest and other income in 2004 was $124 or an increase of 80% as compared to $69 in 2003. Interest and other income consists primarily of interest income on interest-bearing cash equivalents. The increase in interest income is due to higher average cash balances resulting from larger financings in 2004, partially offset by lower average interest rates. Average interest rates were approximately 1.30% per annum in 2004 versus approximately 1.60% per annum in 2003.

Fiscal Year Ended December 31, 2003 Compared to Fiscal Year Ended December 31, 2002 (in thousands)

Research and Development Expenses. Research and development expenses were $1,950 in 2003, or 32% higher than the $1,483 incurred in 2002. The increase reflects the costs to initiate and conduct the Phase I clinical trial of DAVANAT®/5-FU, which began in February 2003. We expect the Phase I trial to be completed in 2005. In 2004, we began a concurrent Phase II clinical trial of DAVANAT®/5-FU. We are continuing to develop our pipeline of additional drug candidates. Accordingly, we expect that our research and development costs will continue to increase in 2004 and thereafter and could comprise a higher percentage of our annual expenditures.

General and Administrative Expenses. General and administrative expenses were $2,988 in 2003, or 66% higher than the $1,804 incurred in 2002. The increase in costs in 2003 was primarily due to the significant expansion of our business development activities and to costs associated with further strengthening our finance functions, including the addition of a financial expert on the Audit Committee of our Board of Directors and a Chief Financial Officer. Approximately $378 of the increase in costs was due to stock-based compensation charges, primarily relating to options granted to consultants serving in business development capacities and our former Chief Financial Officer who resigned in October 2003. We have since secured the services of a new Chief Financial Officer on a consulting basis who remained until December 31, 2004 and was succeeded by a full-time Chief Financial Officer as of February 7, 2005.

Interest and Other Income. Interest and other income was $69 in 2003 compared to $24 in 2002 and primarily consists of interest income on short-term investments. The increase in interest income is due to higher average cash balances as we raised approximately $9,959 in new financing in 2003 compared to $3,637 in 2002. Average interest rates in 2003 were approximately 10 basis points below the average interest rates in 2002.

Interest Expense. Interest expense was $4 in 2003 compared to $415 in 2002. The decrease in interest expense in 2003 is due to the lower debt balances as the convertible notes payable were converted into common stock or repaid in 2002 and 2001. Approximately $407 of the interest expense in 2002 represented the fair value of warrants issued to placement agents in connection with the 2001 debt offering and the fair value of shares of common stock issued to the holders of $195 of convertible notes as consideration for our extension of the maturity date beyond December 31, 2001.

Liquidity and Capital Resources (in thousands)

As described above in the section entitled “Overview” above and elsewhere in this Annual Report on Form 10-K, we are in the development stage and have not generated any revenues to date. Since our inception on July 10, 2000, we have financed our operations primarily through private placements of convertible debt, shares of common stock and warrants, and a public offering of shares of common stock. To date, we have raised a total of $26,630 from these offerings and had $10,704 of cash available at December 31, 2004.

Net cash used in operations increased to $6,333 in 2004, from $4,152 in 2003 and $2,983 in 2002, respectively. The increased use of cash in operations is primarily due to the impact of a full year's research and management costs for the Phase I clinical trial of approximately $380, drug manufacturing for clinical trials, pre-clinical product development and CRO costs primarily for Phase II clinical trials of approximately $695, and higher legal costs related primarily to the patent arbitration and intellectual property litigation described in "Item 3 — Legal Proceedings" above of approximately $1,315.

Net cash used in investing activities was approximately $69 in 2004, $105 in 2003 and $138 in 2002. Of the $69 used in 2004 approximately $46 was related to new patents and the remainder was related to furniture and equipment for office expansion. Fixed asset purchases were higher in 2003 and 2002 as we added staff and relocated to new offices. With the build-out substantially completed, fixed asset purchases in 2005 are not expected to increase over the 2004 level. Patent costs increased in 2004 and 2003 due to the continued development of our drug research and development.

Net cash provided by financing activities was $9,498 in 2004, $9,944 in 2003 and $3,551 in 2002. Net cash provided by financing activities in 2004 resulted from the sale of common stock and warrants through two private equity offerings, structured as "PIPE" transactions (Private Investment in Public Equity). In 2003, the net cash provided by financing activities resulted from the sale of common stock and warrants in three private placements with net proceeds of $9,944. In 2002, the net cash provided by financing activities resulted from one private placement and one public offering of common stock with net proceeds totaling $3,637. In addition, approximately $109 of convertible notes outstanding at December 31, 2001 were converted into common stock in 2002 and the balance of the convertible notes of $86 were repaid in cash.

We believe that our cash on hand of $10,704 at December 31, 2004 will be sufficient to enable us to meet our financing and operating obligations through at least March 31, 2006. We will require more cash to fund our operations and believe that we will be able to obtain additional financing. However, there can be no assurance that we will be successful in obtaining such new financing or, if available, that such financing will be obtainable on terms favorable to us.

Payments Due Under Contractual Obligations (in thousands)

The following table summarizes the payments due under our contractual obligations at December 31, 2004, and the effect such obligations are expected to have on liquidity and cash flow in future periods:

	Payments due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 - 3 years**	**3 - 5 years**	**More than 5 years**
Clinical trial and related scientific contracts	$1,463	$ 1,206	$257	$—	$ —
Operating leases	155	109	46	—	—
Total Payments Due Under Contractual Obligations	$1,618	$ 1,315	$303	$—	$ —

In connection with the operating lease for our office space in Newton, Massachusetts included in the table above, a commercial bank has issued a letter of credit collateralized by cash we have on deposit with the bank of approximately $21. The letter of credit expires on May 31, 2005, and we expect to renew it for an additional 12 months.

Off-Balance Sheet Arrangements

We have not created, and are not a party to, any special-purpose or off-balance sheet entities for the purpose of raising capital, incurring debt or operating parts of our business that are not consolidated into our financial statements. We do not have any arrangements or relationships with entities that are not consolidated into our financial statements that are reasonably likely to materially affect our liquidity or the availability of capital resources.

RISK FACTORS THAT MAY AFFECT FUTURE RESULTS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below and the other information before deciding to invest in our common stock. The risks described below are not the only ones facing our company. Additional risks not presently known to us or that we currently consider immaterial may also adversely affect our business. We have attempted to identify below the major factors that could cause differences between actual and planned or expected results, but we cannot assure you that we have identified all of those factors.

If any of the following risks actually happen, our business, financial condition and operating results could be materially adversely affected. In this case, the trading price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Pro-Pharmaceuticals (dollar amounts in thousands)

We Are At An Early Stage Of Development With Limited Operating History. We are a development-stage company with a limited operating history, and we have not generated any revenues to date. We have no therapeutic products available for sale, and none are expected to be commercially available for several years, if at all. We may never generate revenue or become profitable, even if we are able to commercialize any products.

We Have Incurred Net Losses To Date And Depend On Outside Capital. Our accumulated deficit as of December 31, 2004 was $19,886. We will need to continue to conduct significant research, development, testing and regulatory compliance activities that, together with projected general and administrative expenses, we expect will result in substantial operating losses for the next several years. Accordingly, we will not be generating sales or other revenue and will remain dependent on outside sources of financing during that time. If we are unable to raise funds from outside sources for our continuing operations, we may be adversely affected.

We may raise such capital through public or private equity financings, partnerships, debt financings, bank borrowings, or other sources. Additional funding may not be available on favorable terms or at all. If adequate funds are not otherwise available, we may need to significantly curtail operations. To obtain additional funding, we may need to enter into arrangements that require us to relinquish rights to certain technologies, products and/or potential markets. To the extent that additional capital is raised through the sale of equity, or securities convertible into equity, our equity holders may experience dilution of their proportionate ownership of the company.

Based on $10,704 of available cash and cash equivalents as of December 31, 2004, we believe that we have sufficient capital to fund our operations through at least March 31, 2006.

Our Product Candidates Will Be Based On Novel Unproven Technologies. Our product candidates will be based on novel unproven technologies using proprietary carbohydrate compounds in “reformulations” of drugs currently used in the treatment of cancer and other diseases. Carbohydrates are difficult to synthesize, and we may not be able to synthesize carbohydrates that would be usable as delivery vehicles for the anti-cancer drugs we plan to work with.

Our Drug Candidates are in Clinical Trials And Results Are Uncertain. We have one product candidate in human clinical trials. Pre-clinical results in animal studies are not necessarily predictive of outcomes in human clinical trials. Clinical trials are expensive, time-consuming and may not be successful. They involve the testing of potential therapeutic agents, or effective treatments, in humans, typically in three phases, to determine the safety and efficacy of the product candidates necessary for an approved drug. Many products in human clinical trials fail to demonstrate the desired safety and efficacy characteristics. Even if our products progress successfully through initial human testing, they may fail in later stages of development. We will be dependent on others to conduct our clinical trials, including clinical research organizations and, possibly, government-sponsored agencies. These trials may not start or be completed as we forecast, or may be unsuccessful.

Our Product Candidates May Not Be Successfully Commercialized. Even if our product candidates are successful in clinical trials, they may not be successfully commercialized. Potential products may fail to receive necessary regulatory approvals, be difficult to manufacture on a large scale, be uneconomical to produce, fail to achieve market acceptance, or be precluded from commercialization by proprietary rights of third parties.

Our Lack Of Operating Experience May Cause Us Difficulty In Managing Our Growth. We have limited experience in manufacturing or procuring products in commercial quantities, conducting other later-stage phases of the regulatory approval process, selling pharmaceutical products, or negotiating, establishing and maintaining strategic relationships. Any growth of our company will require us to expand our management and our operational and financial systems and controls. If we are unable to do so, our business and financial condition would be materially harmed. If rapid growth occurs, it may strain our operational, managerial and financial resources.

We Will Depend On Third Parties To Manufacture And Market Our Products. We do not have, and do not now intend to develop, facilities for the manufacture of any of our products for clinical or commercial production. Accordingly, we will need to develop relationships with manufacturers and enter into collaborative arrangements with licensees or have others manufacture our products on a contract basis. We expect to depend on such collaborators to supply us with products manufactured in compliance with standards imposed by the FDA and foreign regulators.

In addition, we have limited experience in marketing, sales or distribution, and we do not intend to develop a sales and marketing infrastructure to commercialize our pharmaceutical products. If we develop commercial products, we will need to rely on licensees, collaborators, joint venture partners or independent distributors to market and sell those products.

We Depend On Key Individuals To Develop Our Products And Pursue Collaborations. We are highly dependent on Dr. David Platt, President and Chief Executive Officer; Dr. Anatole Klyosov, a member of our Scientific Advisory Board and a consultant; and Dr. Eliezer Zomer, Vice President, Manufacturing and Product Development. The loss of any of these persons, or failure to attract or retain other key personnel, could prevent us from pursuing collaborations or developing our products and core technologies.

We Are a Counterclaim Defendant in a Lawsuit Instituted by Dr. Platt. Dr. Platt filed a lawsuit in Massachusetts in January 2004 against GlycoGenesys, Inc. for claims including breach of contract. In its answer GlycoGenesys named us as a counterclaim defendant alleging tortious interference and misappropriation of proprietary rights, and seeks monetary damages and injunctive relief related to our intellectual property. In March 2004, we answered the counterclaim and denied any liability. We and Dr. Platt intend to contest these counterclaims vigorously. If we do not prevail there could be a material adverse impact on our financial position, results of operations or cash flows.

Risks Related to the Drug Development Industry

We Will Need Regulatory Approvals To Commercialize Our Products. We currently do not have products approved for sale in the U.S. or any foreign market. We are required to obtain approval from the FDA in order to sell our products in the U.S. and from foreign regulatory authorities in order to sell our products in other countries. The FDA's review and approval process is lengthy, expensive and uncertain. Extensive pre-clinical and clinical data and supporting information must be submitted to the FDA for each indication for each product candidate in order to secure FDA approval. The FDA could reject an application or require us to conduct additional clinical or other studies as part of the regulatory review process. Delays in obtaining or failure to obtain FDA approvals would prevent or delay the commercialization of our products, which would prevent, defer or decrease our receipt of revenues. If we receive initial regulatory approval, our product candidates will be subject to extensive and rigorous ongoing domestic and foreign government regulation.

Our Competitive Position Depends On Protection Of Our Intellectual Property. Development and protection of our intellectual property are critical to our business. If we do not adequately protect our intellectual property, competitors may be able to practice our technologies. Our success depends in part on our ability to obtain patent protection for our products or processes in the United States and other countries, protect trade secrets, and prevent others from infringing on our proprietary rights.

Since patent applications in the United States are maintained in secrecy for at least portions of their pendency periods (published on U.S. patent issuance or, if earlier, 18 months from earliest filing date for most applications) and since other publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain that we are the first to make the inventions to be covered by our patent applications. The patent position of biopharmaceutical firms generally is highly uncertain and involves complex legal and factual questions. The U.S. Patent and Trademark Office has not established a consistent policy regarding the breadth of claims that it will allow in biotechnology patents.

We cannot assure you that all of our patent applications will issue as patents or that the claims of any issued patents will afford meaningful protection for our technologies or products. In addition, patents issued to us or our licensors may be challenged and subsequently narrowed, invalidated or circumvented. Patent litigation is widespread in the biotechnology industry and could harm our business. Litigation might be necessary to protect our patent position or to determine the scope and validity of third-party proprietary rights, and we may not have the required resources to pursue such litigation or to protect our patent rights.

Although we require our scientific and technical employees and consultants to enter into broad assignment of inventions agreements, and all of our employees, consultants and corporate partners with access to proprietary information to enter into confidentiality agreements, these agreements may not be honored.

We are a counterclaim defendant in a lawsuit instituted by Dr. Platt. See “Risks Related to Pro-Pharmaceuticals” above.

Products We Develop Could Be Subject to Infringement Claims Asserted by Others. We cannot assure that products based on our patents or intellectual property that we license from others will not be challenged by a third party claiming infringement of its proprietary rights. If we were not able to successfully defend our patents or licensed rights, we may have to pay substantial damages, possibly including treble damages, for past infringement.

We Face Intense Competition In The Biotechnology And Pharmaceutical Industries. The biotechnology and pharmaceutical industries are intensely competitive. We face direct competition from U.S. and foreign companies focusing on drug delivery technologies, which are rapidly evolving. Our competitors include major, multinational pharmaceutical and chemical companies, specialized biotechnology firms and universities and other research institutions. Many of these competitors have greater financial and other resources, larger research and development staffs and more effective marketing and manufacturing organizations, than we do. In addition, academic and government institutions are increasingly likely to enter into exclusive licensing agreements with commercial enterprises, including our competitors, to market commercial products based on technology developed at such institutions. Our competitors may succeed in developing or licensing technologies and products that are more effective or less costly than ours, or succeed in obtaining FDA or other regulatory approvals for product candidates before we do.

Health Care Cost Containment Initiatives and The Growth Of Managed Care May Limit Our Returns. Our ability to commercialize our products successfully will be affected by the ongoing efforts of governmental and third-party payors to contain the cost of health care. These entities are challenging prices of health care products and services, denying or limiting coverage and reimbursement amounts for new therapeutic products, and for FDA-approved products considered experimental or investigational, or which are used for disease indications without FDA marketing approval.

Even if we succeed in bringing any products to the market, they may not be considered cost-effective and third-party reimbursement might not be available or sufficient. If adequate third-party coverage is not available, we may not be able to maintain price levels sufficient to realize an appropriate return on our investment in research and product development. In addition, legislation and regulations affecting the pricing of pharmaceuticals may change in ways adverse to us before or after any of our proposed products are approved for marketing.

Our Insurance Coverage May Not Be Adequate In All Circumstances. In the future, we may, in the ordinary course of business, be subject to claims by, and liability to, persons alleging injury as a result of taking products we have under development. If we are successful in having products approved by the FDA, the sale of such products would expose us to additional potential product liability and other claims resulting from their use. This liability may result from claims made directly by consumers or by pharmaceutical companies or others selling such products. Although we currently have insurance coverage for both product liability and professional liability, it is possible that we will not be able to maintain such insurance on acceptable terms. Any inability to maintain insurance coverage on acceptable terms could prevent or limit the commercialization of any products we develop.

Risks Related to Our Stock

Stock Prices for Biopharmaceutical and Biotechnology Companies Are Volatile. The market price for securities of biopharmaceutical and biotechnology companies historically has been highly volatile, and the market from time-to-time has experienced significant price and volume fluctuations that are unrelated to the operating performance of such companies. Fluctuations in the trading price or liquidity of our common stock may adversely affect our ability to raise capital through future equity financings.

Large Sales Could Reduce The Trading Price Of Our Common Stock. We listed our common stock on the American Stock Exchange in September 2003, prior to which our stock traded on the OTC Bulletin Board. Accordingly, there is a limited history of trading of our stock on a national exchange and, based on varying trading volume to date, our stock could be considered "thinly traded." In the last six months of 2003 we undertook the registration, on behalf of certain of our stockholders, of a total of 11,358,835 shares of our common stock and 832,635 shares of stock issuable upon exercise of immediately exercisable warrants. In 2004, we registered an additional 3,286,111 shares of common stock and 2,779,862 shares of stock issuable upon exercise of warrants on behalf of certain of our stockholders. In general, shares of registered common stock may be re-sold into the public markets without volume or other restrictions. Large sales of our registered shares could place substantial downward pressure on the trading price of our common stock, particularly if the amount sold significantly exceeds the then-current trading volume of our stock.

Downward Pressure on Our Stock Price Could Result if Certain Stockholders Become Short-term Investors. We sold shares of common stock and warrants to purchase common stock in so-called PIPE (Private Investment in Public Equity) transactions in October 2003, April 2004 and August 2004 to investors who, as an incentive to purchase our securities in private placements, required us promptly to register their shares (including shares issuable upon exercise of the warrants) for resale into the public markets. We may enter into similar financing transactions in the future with the same or different investors. Because such investors typically receive registered shares well in advance of the expiration of the holding periods under Rule 144 of the Securities Act, they may choose to sell their shares after a short period of holding our stock. If sufficient quantities of stock are sold during a brief interval of time, this could result in downward pressure on the market price for shares of our publicly traded common stock.

Four Principal Stockholders Own Enough Shares To Control The Company. Four of our principal stockholders, David Platt, James Czirr, Offer Binder and Anatole Klyosov own or control approximately 43% of the outstanding shares of our common stock, and Dr. Platt and Mr. Czirr together own approximately 34%. Some or all of these stockholders, acting in concert, may be able to substantially influence the election of the Board of Directors and other corporate actions requiring stockholder approval, such as recapitalization or other

fundamental corporate action, as well as the direction and policies of our company. Such concentration of ownership also could have the effect of delaying, deterring or preventing a change in control of the company that might otherwise be beneficial to stockholders.

Changes In Laws, Regulations And Financial Accounting Standards May Affect Our Reported Results Of Operations. The Sarbanes-Oxley Act of 2002 and related regulations may result in changes in accounting standards or accepted practices within our industry and could add significant new costs to being a public company. New laws, regulations and accounting standards, as well as changes to currently accepted accounting practices, including the expensing of stock options, could adversely affect our reported financial results and negatively affect our stock price. Additional unanticipated expenses incurred to comply with new requirements could also negatively impact our results of operations.

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

Market risk represents the risk of loss that may impact our financial position, operating results or cash flows due to changes in the U.S. interest rates. The primary objective of our investment activities is to preserve cash until it is required to fund operations. To minimize risk, we maintain our portfolio of cash and cash equivalents in operating bank accounts and money market funds. Since our investments are short-term in duration, we believe that we are not subject to any material market risk exposure. We do not have any interest-bearing debt, foreign currency or other derivative financial instruments.

Item 8. ***Financial Statements and Supplementary Data***

The financial statements required by this item are attached to this Annual Report on Form 10-K beginning on Page F-1.

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

None.

Item 9A. ***Controls and Procedures***

In accordance with Securities Exchange Act of 1934 (the "Exchange Act"), Rules 13a - 15(e) and 15d -15(e), we carried out an evaluation, under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer, as well as other key members of our management, of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Under the direction of our Chief Executive Officer and Chief Financial Officer, we evaluated our disclosure controls and procedures and internal control over financial reporting, and concluded that (i) our disclosure controls and procedures were effective as of December 31, 2004 and (ii) no change in internal control over financial reporting occurred during the quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, such internal control over financial reporting.

Item 9B. ***Other Information***

None.

PART III

Item 10. ***Directors and Executive Officers of the Registrant***

The information required by this Item will be contained in our definitive Proxy Statement to be filed with the SEC in connection with our 2005 Annual Meeting of Stockholders to be held on May 25, 2005 (the "2005 Proxy Statement") under the captions "Election of Directors," "Board of Directors Meetings and Committees of the Board," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance" and is incorporated herein by reference.

We have adopted a Code of Ethics that applies to all our directors, officers and employees. The Code of Ethics is publicly available on our website at ***www.pro-pharmaceuticals.com***. Amendments to the Code of Ethics and any grant of a waiver from a provision of the Code of Ethics requiring disclosure under applicable SEC and American Stock Exchange rules will be disclosed on our website.

Item 11. ***Executive Compensation***

The information required by this Item is incorporated by reference from the information under the caption "Executive Compensation" contained in our 2005 Proxy Statement.

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

The information required by this item is incorporated by reference from the information under the caption "Ownership of Pro-Pharmaceuticals, Inc. Common Stock" contained in our 2005 Proxy Statement.

Item 13. ***Certain Relationships and Related Transactions***

The information required by this item is incorporated by reference from the information under the caption "Certain Relationships and Related Transactions" contained in our 2005 Proxy Statement.

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

The information required by this item is incorporated by reference from the information under the captions "Audit Fees", "Audit-Related Fees," "Tax Fees," "All Other Fees" and "Pre-Approval Policies and Procedures" contained in our 2005 Proxy Statement.

PART IV

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

(a) 1. Consolidated Financial Statements

The Consolidated Financial Statements are filed as part of this report.

2. Consolidated Financial Statement Schedules

All schedules are omitted because of the absence of conditions under which they are required or because the required information is included in the Consolidated Financial Statements or notes thereto.

3. Exhibits

Exhibit Number	Description of Document	Note Reference
3.1	Articles of Incorporation of the Registrant, dated January 23, 2001	1
3.2	Amended and Restated By-laws of the Registrant	2
3.3	Certificate of Amendment to Articles of Incorporation of the Registrant, as filed with the Nevada Secretary of State on May 28, 2004	11
10.1	Assignment/Assumption Agreement, dated April 23, 2001, by and between Developed Technology Resource, Inc. and DTR-Med Pharma Corp.	1
10.2	Stock Exchange Agreement, dated April 25, 2001, by and among DTR-Med Pharma Corp., Developed Technology Resource, Inc., Pro-Pharmaceuticals, Inc. and the Shareholders (as defined therein)	1
10.3	Pro-Pharmaceuticals, Inc. 2001 Stock Incentive Plan	2
10.4	Consulting Agreement, dated as of March 1, 2002, as amended November 14, 2002, by and between Pro-Pharmaceuticals, Inc. and Burton Firtel	4
10.5	Consulting Agreement, dated as of January 16, 2003, by and between Pro-Pharmaceuticals, Inc. and David H. Smith	4
10.6	Employment Agreement, dated effective as of April 1, 2003, by and between Pro-Pharmaceuticals, Inc. and David A. Christopher (Agreement Terminated)	5
10.7	Securities Purchase Agreement, dated October 2, 2003, by and among Pro-Pharmaceuticals, Inc. and the Purchasers named therein	6
10.8	Registration Rights Agreement, dated October 2, 2003, by and among Pro-Pharmaceuticals, Inc. and the Purchasers named therein	6
10.9	Form of Common Stock Purchase Warrant issued to Rodman & Renshaw, Inc.	6
10.10	Form of Common Stock Purchase Warrant issued to the Purchasers under the Securities Purchase Agreement identified as Exhibit 10.7	6
10.11	Pro-Pharmaceuticals, Inc. 2003 Non-employee Director Stock Incentive Plan	7
10.12	Consulting Agreement, dated as of November 12, 2003, by and among Pro-Pharmaceuticals, Inc., The Harney Group and Charles F. Harney	8
10.13	Employment Agreement, dated effective as of January 2, 2004, by and between Pro-Pharmaceuticals, Inc. and David Platt	8
10.14	Securities Purchase Agreement, dated April 7, 2004, by and among Pro-Pharmaceuticals, Inc. and the Purchasers named therein	9

Exhibit Number	Description of Document	Note Reference
10.15	Registration Rights Agreement, dated April 7, 2004, by and among Pro-Pharmaceuticals, Inc. and the Purchasers named therein	9
10.16	Form of Common Stock Purchase Warrant issuable pursuant to the Securities Purchase Agreement identified as Exhibit 10.14 and to the placement agent	9
10.17	Securities Purchase Agreement, dated August 12, 2004, by and among Pro-Pharmaceuticals, Inc. and the Purchasers named therein	10
10.18	Registration Rights Agreement, dated August 12, 2004, by and among Pro-Pharmaceuticals, Inc. and the Purchasers named therein	10
10.19	Form of Common Stock Purchase Warrant issuable pursuant to the Securities Purchase Agreement identified as Exhibit 10.17 and to the placement agent	10
10.20	Form of Incentive Stock Option Agreement (under the 2001 Stock Incentive Plan)	12
10.21	Form of Non-Qualified Stock Option Agreement (under the 2001 Stock Incentive Plan)	12
10.22	Form of Non-Qualified Stock Stock Option Agreement (under the 2003 Non-Employee Director Stock Incentive Plan)	12
10.23	Option Agreement, dated November 11, 2004, between David Platt and Pro-Pharmaceuticals, Inc.	12
10.24	Employment Agreement, dated February 9, 2005, between Carl L. Lueders and Pro-Pharmaceuticals, Inc.	13
16.1	Letter from Scillia Dowling & Natarelli LLC to the Commission, dated February 25, 2002, concerning change in certifying accountant	3
16.2	Letter from Scillia Dowling & Natarelli LLC to the Commission, dated March 7, 2002, concerning change in certifying accountant	3
21.1*	Subsidiaries of the Registrant	
23.1*	Consent of Deloitte & Touche LLP, an independent registered public accounting firm	
31.1*	Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934	
31.2*	Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934	
32.1**	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	
32.2**	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	

* Filed herewith.
** Furnished herewith and not "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.
1 Incorporated by reference to the Registrant's Registration Statement on Form 10-SB, as filed with the Commission on June 13, 2001.
2 Incorporated by reference to the Registrant's Quarterly Report on Form 10-QSB for the period ended September 30, 2001, as filed with the Commission on November 14, 2001.
3 Incorporated by reference to the Registrant's Current Report on Form 8-K as filed with the Commission on March 8, 2002.
4 Incorporated by reference to the Registrant's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2002, as filed with the Commission on March 31, 2003.

5 Incorporated by reference to the Registrant's Quarterly Report on Form 10-QSB for the period ended June 30, 2003, as filed with the Commission on August 14, 2003.
6 Incorporated by reference to the Registrant's Current Report on Form 8-K/A as filed with the Commission on October 10, 2003 for the period October 2, 2003.
7 Incorporated by reference to the Registrant's Registration Statement on Form S-8, as filed with the Commission on October 22, 2003.
8 Incorporated by reference to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2003, as filed with the Commission on March 30, 2004.
9 Incorporated by reference to the Registrant's Current Report on Form 8-K as filed with the Commission on April 9, 2004.
10 Incorporated by reference to the Registrant's Current Report on Form 8-K as filed with the Commission on August 16, 2004.
11 Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2004 as filed with the Commission on August 16, 2004.
12 Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the period ended September 30, 2004 as filed with the Commission on November 19, 2004.
13 Incorporated by reference to the Registrant's Current Report on Form 8-K as filed with the Commission on February 11, 2005.

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, on April 7, 2005.

PRO-PHARMACEUTICALS, INC.

By /s/ DAVID PLATT

Name: David Platt, Ph.D.
Title: Chief Executive Officer

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

Signature	Title	Date
/s/ DAVID PLATT David Platt, Ph.D.	President, Chief Executive Officer and Director	April 7, 2005
/s/ CARL L. LUEDERS Carl L. Lueders	Chief Financial Officer (Principal Financial and Accounting Officer)	April 7, 2005
/s/ EDGAR BEN-JOSEF Edgar Ben-Josef, M.D.	Director	April 7, 2005
/s/ MILDRED S. CHRISTIAN Mildred S. Christian, Ph.D.	Director	April 7, 2005
/s/ DALE H. CONAWAY Dale H. Conaway, D.V.M.	Director	April 7, 2005
/s/ BURTON C. FIRTEL Burton C. Firtel	Director	April 7, 2005
/s/ STEVEN PRELACK Steven Prelack	Director	April 7, 2005
/s/ JERALD K. ROME Jerald K. Rome	Director	April 7, 2005
/s/ DAVID H. SMITH David H. Smith	Director	April 7, 2005

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Pro-Pharmaceuticals, Inc., Newton, Massachusetts:

We have audited the accompanying consolidated balance sheets of Pro-Pharmaceuticals, Inc. and subsidiary (a development stage company) (the "Company") as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2004, and for the period from inception (July 10, 2000) to December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with 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 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 also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2004 and 2003, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, and for the period from inception (July 10, 2000) to December 31, 2004 in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP
Boston, Massachusetts
April 7, 2005

PRO-PHARMACEUTICALS, INC.
(A Development-Stage Company)

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2004 AND 2003 (dollars in thousands)

	2004	2003
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 10,704	$ 7,608
Prepaid expenses and other current assets	120	88
Total current assets	10,824	7,696
PROPERTY AND EQUIPMENT—NET	103	144
INTANGIBLE ASSETS—NET	156	135
DEPOSITS AND OTHER ASSETS	27	27
TOTAL ASSETS	$ 11,110	$ 8,002
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 206	$ 144
Accounts payable—related party	—	22
Other accrued expenses	799	212
Total current liabilities	$ 1005	$ 378
COMMITMENTS AND CONTINGENCIES (Note 9)		
STOCKHOLDERS' EQUITY:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 27,315,411 and 24,079,300 shares of common stock issued and outstanding at December 31, 2004 and 2003, respectively; Undesignated shares, $.01 par value; 10,000,000 and 5,000,000 shares authorized at December 31, 2004 and 2003, respectively	27	24
Additional paid-in capital	29,965	20,376
Deferred compensation	(1)	(70)
Deficit accumulated during the development stage	(19,886)	(12,706)
Total stockholders' equity	10,105	7,624
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 11,110	$ 8,002

See notes to consolidated financial statements.

PRO-PHARMACEUTICALS, INC.
(A Development-Stage Company)

CONSOLIDATED STATEMENTS OF OPERATIONS
YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002, AND CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2004 (dollars in thousands)

	Years Ended December 31,			Cumulative Period from Inception (July 10, 2000) to December 31, 2004
	2004	2003	2002	
OPERATING EXPENSES: (a)				
Research and development	$ 3,042	$ 1,950	$ 1,483	$ 7,469
General and administrative	4,262	2,988	1,804	10,409
Total operating expenses	(7,304)	(4,938)	(3,287)	(17,878)
INTEREST AND OTHER INCOME	124	69	24	243
INTEREST AND OTHER EXPENSES:				
Amortization of debt discount on convertible notes	—	—	—	1,258
Debt conversion expense	—	—	—	503
Interest expense on convertible notes	—	—	415	486
Other interest expense	—	4	—	4
Total interest and other expenses	—	4	(415)	(2,251)
NET LOSS	$ (7,180)	$ (4,873)	$ (3,678)	$ (19,886)
NET LOSS PER SHARE—BASIC AND DILUTED	$ (0.28)	$ (0.23)	$ (0.22)	
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING—BASIC AND DILUTED	25,750,789	21,360,572	16,374,524	
(a) The following summarizes the allocation of the stock-based compensation charge:				
Research and development	$ 5	$ 135	$ —	$ 140
General and administrative	157	484	105	894
Total	$ 162	$ 619	$ 105	$ 1,034

See notes to consolidated financial statements.

PRO-PHARMACEUTICALS, INC.
(A Development-Stage Company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002, AND CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2004 (dollars in thousands)

	Common Stock		Additional Paid-in Capital	Stock Subscription Receivable	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' Equity
	Number of Shares	$0.001 Par Value					
Issuance of founders shares	12,354,670	$ 12	$ (3)	$ —	$ —	$ —	$ 9
Beneficial conversion feature and rights to common stock embedded in convertible note	—	—	222	—	—	—	222
Net loss	—	—	—	—	—	(185)	(185)
BALANCE, DECEMBER 31, 2000	12,354,670	12	219	—	—	(185)	46
Issuance of common stock and beneficial conversion feature related to convertible note	660,321	1	1,035	—	—	—	1,036
Issuance of common stock in connection with reverse merger of Pro-Pharmaceuticals-NV	1,221,890	1	106	—	—	—	107
Conversion of notes payable and accrued interest to common stock	598,229	1	1,125	—	—	—	1,126
Issuance of warrants to induce conversion of notes payable	—	—	503	—	—	—	503
Issuance of common stock and warrants (net of issuance costs of $16,750)	689,300	1	2,220	—	—	—	2,221
Deferred compensation relating to issuance of stock options	—	—	239	—	(239)	—	—
Amortization of deferred compensation	—	—	—	—	147	—	147
Net loss	—	—	—	—	—	(3,970)	(3,970)
BALANCE, DECEMBER 31, 2001	15,524,410	16	5,447	—	(92)	(4,155)	1,216
Issuance of common stock (net of issuance costs of $49,208)	185,999	*	602	—	—	—	602
Issuance of common stock related to 2002 private placement (net of issuance costs of $212,458)	3,223,360	3	3,008	(150)	—	—	2,861
Conversion of notes payable and accrued interest to common stock	100,878	*	275	—	—	—	275
Stock compensation expense related to issuance of options to consultant	—	—	41	—	—	—	41
Issuance of warrants to purchase common stock in consideration for placement of convertible notes payable	—	—	236	—	—	—	236
Deferred compensation relating to issuance of stock options	—	—	11	—	(11)	—	—
Amortization of deferred compensation	—	—	—	—	48	—	48
Stock compensation expense related to fair market revaluation	—	—	16	—	—	—	16
Net loss	—	—	—	—	—	(3,678)	(3,678)

(Continued)

PRO-PHARMACEUTICALS, INC.
(A Development-Stage Company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002, AND CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2004 (dollars in thousands)

	Common Stock		Additional Paid-in Capital	Stock Subscription Receivable	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' Equity
	Number of Shares	$0.001 Par Value					
BALANCE, DECEMBER 31, 2002	19,034,647	19	9,636	(150)	(55)	(7,833)	1,617
Issuance of common stock to investors in 2002 Private Placement (net of issuance costs of $17,500)	1,088,000	1	1,069	—	—	—	1,070
Issuance of common stock to consultants for services related to 2002 Private Placement	12,250	*	12	—	—	—	12
Receipt of subscription receivable	—	—	—	150	—	—	150
Conversion of accrued expenses to common stock and options	201,704	*	302	—	—	—	302
Issuance of common stock to investors in 2003 private placements (net of issuance costs of $688,309)	3,719,070	4	7,029	—	—	—	7,033
Fair value of common stock warrants issued to investors in 2003 private placements	—	—	1,242	—	—	—	1,242
Fair value of common stock warrants issued to placement agents in 2003 private placements	—	—	452	—	—	—	452
Stock compensation expense related to issuance of common stock and options	7,000	*	149	—	—	—	149
Issuance of common stock options in consideration for investor relations services	—	—	29	—	—	—	29
Stock compensation expense related to accelerated option vesting	—	—	40	—	—	—	40
Cashless exercise of employee stock options	16,629	*	74	—			74
Deferred compensation relating to issuance of stock options	—	—	205	—	(205)	—	—
Amortization of deferred compensation	—	—	—	—	327	—	327
Deferred compensation expense related to fair market revaluation	—	—	137	—	(137)	—	—
Net loss	—	—	—	—	—	(4,873)	(4,873)
BALANCE, DECEMBER 31, 2003	24,079,300	$ 24	$ 20,376	$ —	$ (70)	$ (12,706)	$ 7,624

(Concluded)

* Amounts less than $500

See notes to consolidated financial statements.

PRO-PHARMACEUTICALS, INC.
(A Development-Stage Company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002, AND CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2004 (dollars in thousands)

	Common Stock		Additional Paid-in Capital	Stock Subscription Receivable	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' Equity
	Number of Shares	$0.001 Par Value					
BALANCE, DECEMBER 31, 2003	24,079,300	$ 24	$ 20,376	$ —	$ (70)	$ (12,706)	$ 7,624
Issuance of common stock to investors in April, 2004 Private Placement (net of issuance costs of $466)	1,236,111	1	2,664	—	—	—	2,665
Fair value of common stock warrants issued to investors on April, 2004 private placement	—	—	1,164	—	—	—	1,164
Fair value of common stock warrants issued to placement agent in April, 2004 private placement			154				154
Issuance of common stock to investors in August, 2004 private placements (net of issuance costs of $485)	2,000,000	2	2,791	—	—	—	2,793
Fair value of common stock warrants issued to investors in August, 2004 private placements	—	—	2,483	—	—	—	2,483
Fair value of common stock warrants issued to placement agents in August, 2004 private placements	—	—	239	—	—	—	239
Issuance of common stock options in consideration for investor relations services	—	—	90	—	—	—	90
Amortization of deferred compensation	—	—	—	—	73	—	73
Deferred compensation expense related to fair market revaluation	—	—	4	—	(4)	—	—
Net loss	—	—	—	—	—	(7,180)	(7,180)
BALANCE, DECEMBER 31, 2004	27,315,411	$ 27	$ 29,965	$ —	$ (1)	$ (19,886)	$ 10,105

(Concluded)

See notes to consolidated financial statements.

PRO-PHARMACEUTICALS, INC.
(A Development-Stage Company)

CONSOLIDATED STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002, AND CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2004 (dollars in thousands)

	Years Ended December 31,			Cumulative Period from Inception (July 10, 2000) to December 31, 2004
	2004	2003	2002	
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net loss	$ (7,180)	$(4,873)	$ (3,678)	$ (19,886)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	81	89	44	226
Stock-based compensation expense	162	619	105	1,034
Amortization of deferred extension costs through interest expense	—	—	167	167
Settlement of accrued interest through issuance of common stock	—	—	10	10
Amortization of debt discount on convertible notes	—	—		1,258
Write-off of intangible assets	9	—	—	116
Debt conversion expense	—	—	—	503
Interest expense related to issuance of warrants to purchase common stock	—	—	236	236
Changes in current assets and liabilities:				
Prepaid expenses and other current assets	(32)	(16)	11	(117)
Deposits and other assets	—	—	—	(27)
Accounts payable and accrued expenses	627	29	122	1124
Net cash used in operating activities	(6,333)	(4,152)	(2,983)	(15,356)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchases of property and equipment	(23)	(39)	(109)	(295)
Increase in patents costs and other assets	(46)	(66)	(29)	(198)
Net cash used in investing activities	(69)	(105)	(138)	(493)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Net proceeds from issuance of common stock and warrants	9,498	9,944	3,637	25,309
Net proceeds from issuance of convertible notes payable			—	1,321
Repayment of convertible notes payable	—	—	(86)	(86)
Proceeds from shareholder advances	—	—	—	9
Net cash provided by financing activities	9,498	9,944	3,551	26,553
NET INCREASE IN CASH AND CASH EQUIVALENTS	3,096	5,687	430	10,704
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	7,608	1,921	1,491	—
CASH AND CASH EQUIVALENTS, END OF PERIOD	$ 10,704	$ 7,608	$ 1,921	$ 10,704
SUPPLEMENTAL DISCLOSURE – Cash paid for interest	$ —	$ —	—	$ 19
NONCASH FINANCING ACTIVITIES				
Issuance of warrants in connection with equity offerings	4,040	1,503	236	6,645
Conversion of accrued expenses into common stock	—	303	—	303
Cashless exercise of employee stock options	—	74	—	74
Conversion of convertible notes and accrued interest into common stock	—	—	94	1,220
Conversion of extension costs related to convertible notes into common stock	—	—	171	171
Issuance of warrants to induce conversion of notes payable	—	—	—	503
Issuance of stock to acquire Pro-Pharmaceuticals-NV	—	—	—	107

See notes to consolidated financial statements.

PRO-PHARMACEUTICALS, INC.
(A DEVELOPMENT-STAGE COMPANY)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (dollar amounts in thousands)

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION

Pro-Pharmaceuticals, Inc. (the "Company") is a development stage life sciences company established in July 2000. The Company is developing technologies that are intended to reduce toxicity and improve the efficacy of chemotherapy drugs by combining the drugs with proprietary carbohydrate compounds. The carbohydrate-based drug delivery compounds may also have application for drugs to treat other diseases and chronic health conditions.

The Company is devoting substantially all of its efforts toward product research and development, and raising capital. Its first product candidate began Phase I clinical trial in February 2003. This same product candidate began concurrent Phase II clinical trial in January 2004.

As shown in the consolidated financial statements, the Company incurred net losses of $19,886 for the cumulative period from inception (July 10, 2000) through December 31, 2004. The Company expects to incur additional losses and use additional cash in its operations in the near future. To date, the Company has raised $26,630 in capital through (i) the issuance of convertible notes; (ii) the sale of common stock through a public offering; and (iii) the sale of common stock and warrants through private placements. From inception (July 10, 2000) through December 31, 2004, the Company used cash of $15,356 in its operations. At December 31, 2004, the Company had $10,704 of cash and cash equivalents available to fund future operations, which management believes is sufficient cash to fund its operations through at least March 31, 2006.

The Company is subject to a number of risks similar to those of other development-stage companies, including dependence on key individuals, uncertainty of product development and generation of revenues, dependence on outside sources of capital, risks associated with clinical trials of products, dependence on third-party collaborators for research operations, need for regulatory approval of products, risks associated with protection of intellectual property, and competition with larger, better-capitalized companies. Successful completion of the Company's development program and, ultimately, the attainment of profitable operations is dependent upon future events, including obtaining adequate financing to fulfill its development activities and achieving a level of revenues adequate to support the Company's cost structure. There are no assurances, however, that the Company will be able to obtain additional financing on favorable terms, or at all, or successfully market its products.

Reverse Merger Transaction - On May 15, 2001, Pro-Pharmaceuticals, Inc., a Nevada corporation organized in January 2001 ("Pro-Pharmaceuticals-NV"), issued 12,354,670 shares of its common stock to the stockholders of Pro-Pharmaceuticals, Inc., a Massachusetts corporation organized in July 2000 ("Pro-Pharmaceuticals-MA"), in exchange for all of the outstanding shares of the common stock of Pro-Pharmaceuticals-MA. Following the exchange of stock, Pro-Pharmaceuticals-MA as a wholly-owned subsidiary merged with Pro-Pharmaceuticals-NV which is the surviving corporation in the merger. At the time of the merger, the common shares issued to the stockholders of Pro-Pharmaceuticals-NV represented a majority of the Company's common stock, thus enabling those stockholders to retain voting and operating control of the Company. The merger was treated as a capital transaction and was accounted for as a reverse merger in which Pro-Pharmaceuticals-MA was the accounting acquirer. The historical results presented are those of Pro-Pharmaceuticals-MA, the accounting acquirer.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying consolidated financial statements reflect the application of certain accounting policies, as described in this note and elsewhere in the accompanying notes to financial statements.

Basis of Consolidation – The consolidated financial statements include the accounts of the Company and Pro-Pharmaceuticals Securities Corp., its wholly owned subsidiary, which was incorporated in Delaware on December 23, 2003. All significant intercompany transactions have been eliminated.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and disclosure of contingent assets and liabilities. Management's estimates are based primarily on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

Cash and Cash Equivalents – The Company considers all highly liquid investments with original maturities of 90 days or less at the time of acquisition to be cash equivalents.

Property and Equipment – Property and equipment, including leasehold improvements, are stated at cost, net of accumulated depreciation, and are depreciated using the straight-line method over the lesser of the estimated useful lives of the assets or the related lease term.

The estimated useful lives of property and equipment are as follows:

Asset Classification	Estimated Useful Life
Computers and office equipment	Three years
Furniture and fixtures	Five years
Leasehold improvements	Life of lease

Intangible Assets – Intangible assets include patent costs, consisting primarily of related legal fees, which are capitalized as incurred and amortized over an estimated useful life of five years from issuance. Amortization expense in 2004, 2003, 2002 and cumulative since inception was $17, $17, $0 and $34 respectively at December 31, 2004.

Deposits and Other Assets – Deposits and other assets consist principally of lease deposits on the Company's leased executive office space.

Long-Lived Assets – In accordance with Statement of Financial Accounting Standards ("SFAS") No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", the Company reviews all long-lived assets for impairment whenever events or circumstances indicate the carrying amount of such assets may not be recoverable. Recoverability of assets to be held or used is measured by comparison of the carrying value of the asset to the future undiscounted net cash flows expected to be generated by the asset. If such asset is considered to be impaired, the impairment recognized is measured by the amount by which the carrying value of the asset exceeds the discounted future cash flows expected to be generated by the asset.

In 2004, 2003 and 2002, the Company recorded no adjustment to the carrying value of the long-lived assets.

Research and Development Expenses – Costs associated with research and development are expensed as incurred. Research and development expenses include, among other costs, salaries and other personnel-related costs, and costs incurred by outside laboratories and other accredited facilities in connection with clinical trials and preclinical studies

Stock-Based Compensation – At December 31, 2004, the Company has two equity incentive plans, which are described more fully in Note 8. The Company accounts for stock-based compensation to employees and non-employee directors under the intrinsic method in accordance with Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees," and the related interpretations. Under APB No. 25, no compensation expense is recognized for stock options and restricted stock awards granted at fair market value and with fixed terms.

Stock or other equity-based compensation granted to non-employees is accounted for under the fair value method in accordance with SFAS No. 123, "Accounting for Stock-Based Compensation", and the Emerging Issues Task Force ("EITF") Abstract No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services," and the related interpretations. Under this method, compensation is recorded at the fair value of the consideration received or the fair value of the equity instrument until the final measurement date, which is the earlier of performance completion or vesting. Compensation related to stock appreciation rights and other variable stock option or award plans are remeasured at the end of each reporting period. Fluctuations in the quoted market price of the Company's stock covered by unvested equity instruments are reflected as an adjustment to deferred compensation and compensation expense over the periods the related service is performed. Stock-based compensation expense totaled $162, $619 and $105 in 2004, 2003 and 2002 respectively.

The fair value of the equity instruments granted to non-employees, including options and warrants, is determined using the Black-Scholes option-pricing model. Key assumptions used to apply this option-pricing model are as follows:

	2004	2003	2002	Cumulative Period from Inception (July 10, 2000) to December 31, 2003
Risk-free interest rate	2.00% - 3.28%	1.51% - 2.45%	2.25% - 2.32%	1.51% - 3.28%
Expected life of the options and warrants	3 years	3 years	3 years	3 years
Expected volatility of the underlying stock	95%	95%	95%	95%
Expected dividend rate	None	None	None	None

Had the Company used the fair-value method to measure all stock-based compensation awarded to employees and non-employee directors, the Company's net loss and basic and diluted loss per share would have been as follows at December 31:

	2004	2003	2002	Cumulative Period from Inception (July 10, 2000) to December 31, 2004
Net loss—as reported	$(7,180)	$(4,873)	$(3,678)	$ (19,886)
Deduct stock-based employee compensation determined under the fair-value method	(749)	(2,824)	(354)	(3,927)
Net loss—pro forma	$(7,929)	$(7,697)	$(4,032)	$ (23,813)
Basic and diluted loss per share:				
As reported	$ (0.28)	$ (0.23)	$ (0.22)	
Pro forma	$ (0.31)	$ (0.36)	$ (0.25)	

Income Taxes – The Company accounts for income taxes in accordance with SFAS No. 109, "Accounting for Income Taxes". This statement requires an asset and liability approach to accounting for income taxes based upon the future expected values of the related assets and liabilities. Deferred income tax assets and liabilities are determined based on the differences between the financial reporting and tax bases of assets and liabilities and for tax loss and credit carryforwards, and are measured using the expected tax rates estimated to be in effect when such basis differences reverse. Valuation allowances are established, if necessary, to reduce the deferred tax asset to the amount that will more likely than not be realized.

Loss per Share – Basic and diluted loss per share is presented in conformity with SFAS No. 128, "Earnings Per Share". Basic loss per share is calculated using the weighted-average number of common shares outstanding during the year. Diluted loss per share is calculated using the weighted-average number of common shares and common share equivalents resulting from outstanding options and warrants, except where such items would be anti-dilutive.

The loss used to calculate basic and diluted loss per share for the years ended December 31, 2004, 2003 and 2002 was equal to the reported net loss for each period.

A reconciliation between the shares used for computation of basic and diluted income per share is as follows:

	2004	2003	2002
Shares for basic computation	25,750,789	21,360,572	16,374,524
Effect of dilutive stock options and warrants	—	—	—
Shares for dilutive computation	25,750,789	21,360,572	16,374,524

Anti-dilutive shares were not included in the per-share calculations for the years ended December 31, 2004, 2003 and 2002 due to the reported net losses for those years. Anti-dilutive shares which could exist pursuant to the exercise of outstanding stock options and warrants and conversion of convertible debt at December 31, 2004, 2003 and 2002 totaled approximately 7,377,952, 4,434,890 and 1,852,423, respectively.

Comprehensive Income (Loss) – Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. The Company does not have any items of comprehensive income (loss) other than net losses as reported.

Fair Value of Financial Instruments – SFAS No. 107, "Disclosures About Fair Value of Financial Instruments", requires disclosure of the fair value of certain financial instruments. The Company's financial instruments consist of cash equivalents, accounts payable and accrued expenses. The estimated fair value of these financial instruments approximates their carrying value due to their short-term nature.

Concentration of Credit Risk – The Company has no significant concentrations of credit risk, such as foreign exchange contracts or other hedging arrangements. Financial instruments that subject the Company to credit risk consist of cash and cash equivalents. The Company maintains cash equivalents with well-capitalized financial institutions.

Segment Information – SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information", requires companies to report selected information about operating segments, as well as enterprise-wide disclosures about products, services, geographic areas and major customers. Operating segments are determined based on the way management organizes its business for making operating decisions and assessing performance. The Company has concluded that it operates in one operating segment.

Recent Accounting Pronouncement – In December 2004, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 123R, *Share-Based Payment* ("SFAS No 123R"). This Statement is a revision of SFAS No. 123, *Accounting for Stock-Based Compensation*, and supercedes Accounting Principles Board Opinion No. 25 *Accounting for Stock Issued to Employees*, and its related implementation guidance. SFAS No. 123R focuses primarily on accounting for transactions in which a company obtains employee services in share-based payment transactions. The Statement requires companies to recognize stock compensation expense for awards of equity instruments to employees based on grant-date fair value of those awards (with limited exceptions). SFAS No. 123R is effective for the first interim or annual reporting period that begins after June 15, 2005. The Company is currently evaluating the methods of adoption allowed by SFAS No. 123R. The Company does not yet have an estimate of the effect on its statements of operations of adopting SFAS No. 123R.

3. PROPERTY AND EQUIPMENT

Property and equipment consists of the following at December 31:

	2004	2003
Leasehold improvements	$ 104	$ 104
Computer and office equipment	110	101
Furniture and fixtures	81	67
Total	295	272
Less accumulated depreciation	(192)	(128)
Property and equipment—net	$ 103	$ 144

Depreciation expense in 2004, 2003, 2002 and cumulative since inception was $64, $72, $44 and $192 respectively at December 31, 2004.

4. OTHER ACCRUED EXPENSES

Other accrued expenses consist of the following at December 31:

	2004	2003
Legal and accounting fees	$250	$142
Scientific and clinical fees	374	40
Accrued Payroll	116	
Other	59	30
Total	$799	$212

5. RELATED PARTY TRANSACTIONS

For the period from inception (July 10, 2000) through December 31, 2000, the Company paid two of its stockholders $25 and $13, respectively, for fees associated with research and development and the day-to-day operations of the Company. A stockholder and spouse of a Company officer was paid approximately $8 for services during the year ended December 31, 2001.

The Company has entered into various consulting agreements, each terminable on thirty days notice, with certain related parties as follows: (i) a corporation controlled by a person who is a stockholder, and former director and officer, of the Company for financing and business development services (subsequently terminated when such person became an employee of the Company in 2002), (ii) a corporation controlled by a person who is a stockholder, and former officer, of the Company for research and development services, including reimbursable expenses, (iii) an individual who is a stockholder of the Company for management and consultant services, and (iv) a corporation controlled by a person who is a stockholder and director of the Company for scientific advisory services. The total related party consulting expenses and related expenses paid to these corporations and individuals were $178, $162 and $202 for 2004, 2003 and 2002, respectively.

In addition, the stockholder and director of the Company described under (iv) above agreed to receive compensation for certain 2002 scientific advisory services in the form of 25,354 shares of common stock and 25,354 options at an exercise price of $2.96 to purchase common stock of the Company. As of December 31, 2002, the Company recorded the deemed fair value of such compensation of approximately $122 as an accrued liability. The common stock has been valued at $76, based on the closing price of the publicly traded shares of common stock on the date of grant. The options were valued at $46 using the Black-Scholes option-pricing model, based on a deemed fair value of the Company's common stock of $3.00 per share. The accrued liability at December 31, 2002 was converted to equity in 2003 when the 25,354 shares of common stock and 25,354 options were issued to this individual.

In addition, the Company issued stock options to six members of the Board of Directors in 2004, three members of the Board of Directors in 2003 and to one member of the Board of Directors in 2001 and 2002 in consideration for services performed—see Note 8.

6. CONVERTIBLE NOTES

During 2001 and 2000, the Company issued $1,036 and $285 of convertible notes, respectively. In August 2001, the Company offered warrants to holders of its outstanding convertible notes as an inducement to convert prior to the maturity of the notes. Holders representing $1,126 of the outstanding principal and accrued interest chose to convert at a conversion price of $2.00 per share and received 598,229 common shares and 562,801 warrants. The warrants have an exercise price of $6.50 per share and are immediately exercisable. As described in Note 7, the Company valued the warrants at $503 using the Black-Scholes option-pricing model, and recorded such value as a debt conversion 2001.

In May 2002, the Company extended the maturity date on the $195 of convertible notes payable at December 31, 2001. In consideration for the extension, the holders received one-quarter of one share of the Company's common stock for each whole dollar amount of principal outstanding, or 48,750 shares of common stock. The Company deferred $171 in costs associated with the extension, based on the fair value of the Company's common stock of $3.50 at the time of the extension. These deferred convertible notes payable costs were amortized ratably over the twelve-month extended term of the notes, or expensed immediately upon conversion of the note prior to the extended maturity date.

In June 2002, $80 in convertible notes payable and $10 in related accrued interest was converted into 45,128 shares of common stock. In October 2002, the Company settled a convertible note payable of $100 through a cash payment of $86 and conversion of the remaining $14 of principal into 7,000 shares of common stock pursuant to the original terms of the note. In addition, $17 of related accrued interest was repaid in cash.

During 2002, $167 of the deferred convertible notes payable extension costs was amortized to expense.

7. STOCKHOLDERS' EQUITY

2001 Private Placement – From May 25, 2001 through December 3, 2001, the Company sold a total of 689,300 shares of common stock for proceeds of $2,221, net of $17 of issuance costs through a private placement of securities (the "2001 Private Placement"). Each share sold in the 2001 Private Placement included a warrant to purchase common stock of the Company. These warrants are described below.

Public Offering – On December 13, 2001, the Company commenced a public offering of 1,428,572 shares of common stock, at a price to the public of $3.50 per share. The Company concluded the offering on June 30, 2002. The Company sold 185,999 shares of common stock in this offering for proceeds of $602, net of $49 of issuance costs, all in 2002.

2002 Private Placement – In September 2002, the Company began a private placement (the "2002 Private Placement") of up to 10 million shares of common stock at $1.00 per share, exempt from registration

pursuant to Rule 506 of Regulation D under the Securities Act of 1933. As of December 31, 2002, the Company had sold 3,223,360 shares for proceeds of $2,861, net of issuance costs of $212 and stock subscription receivable of $150, which related to shares purchased but for which payment had not been received as of December 31, 2002. This offering was closed on January 14, 2003, although subsequent to year end the Company sold an additional 1,088 shares for additional proceeds of $1,071, net of $18 of offering costs.

The Company agreed to compensate a registered investment adviser with respect to shares purchased by its clients. As of December 31, 2002, the adviser was entitled to receive 173,500 shares of common stock. The Company also agreed to compensate a finder registered under applicable law, and such finder's agents, for identifying qualified investors. As of December 31, 2002, one of the finder's agents was entitled to receive 750 shares of common stock. On January 14, 2003, the Company closed the 2002 Private Placement, at which point the Company agreed to issue the adviser an additional 2,500 shares, and the finder and its other agent an aggregate of 9,750 additional shares and $3 in cash in connection with the shares sold subsequent to December 31, 2002 and through the closing date.

Shares placed by such registered adviser, finder and finder's agent were accounted for as offering costs and valued at $1.00 per share, consistent with the price paid for the shares placed in the offering. Such offering costs were netted against the proceeds of the 2002 Private Placement. Since none of the 174,250 shares had been issued as of December 31, 2002, the Company recorded the obligation to issue such shares as offering costs payable. The additional 12,250 shares issued in January 2003 were also valued at $1.00 per share and included in the $18 offering costs recorded at the closing.

During 2002, the Company also agreed to issue 2,100 shares of common stock to an employee for finding investors in connection with the 2002 Private Placement. None of the shares had been issued as of December 31, 2002. Accordingly, the Company recorded the obligation to general and administrative expenses in the statement of operations in the amount of $6. On January 14, 2003, the Company closed the 2002 Private Placement, at which point the Company agreed to issue such employee an additional 7,000 shares in connection with shares sold subsequent to December 31, 2002 and through the closing date. The Company recorded an additional obligation of $21 to general and administrative expenses in 2003 representing the fair value of the additional 7,000 shares.

May 2003 Private Placement – In May 2003, the Company began a private placement of up to 2.5 million shares of common stock at $2.00 per share, exempt from registration pursuant to Rule 506 of Regulation D under the Securities Act of 1933. As of the closing on July 15, 2003, the Company had sold 2,399,500 shares of common stock for proceeds of $4,394, net of issuance costs of $405. The issuance costs include $261 related to the fair value of 109,613 common stock warrants (exercisable at $5.40 per share) issued to the finders in connection with the offering. These warrants are described below.

October 2003 "PIPE" Transaction – On October 2, 2003 the Company closed a private offering, structured as a so-called "PIPE" (Private Investment, Public Equity), exempt from registration under Section 4(2) of the Securities Act of 1933, in which it sold to institutional investors 1,314,571 of the 1,428,571 offered shares of common stock at $3.50 per share and 657,293 common stock warrants (initially exercisable at $5.29 per share and currently exercisable at $4.99 per share) for proceeds of $3,866, net of issuance costs of $735. The issuance costs include $191 related to the fair value of 65,729 common stock warrants (initially exercisable at $6.86 per share and currently exercisable at $6.24 per share)) issued to the placement agent in connection with this offering. These warrants are described below.

April 2004 "PIPE" Transaction – On April 7, 2004, the Company closed a private equity offering, structured as a "PIPE" and exempt from registration under Section 4(2) of the Securities Act of 1933, in which it sold to certain institutional investors 1,236,111 shares of common stock and 618,056 common stock warrants (initially exercisable at $5.30 per share and currently exercisable at $5.07 per share) at $3.60

per share for proceeds of approximately $3,983, net of cash issuance costs of approximately $466. The placement agent also received 61,806 common stock warrants (initially exercisable at $5.30 per share and currently exercisable at $5.07 per share) in connection with this offering. These warrants are described below.

August 2004 "PIPE" Transaction – On August 12, 2004, the Company closed a private offering, structured as a "PIPE" and exempt from registration under Section 4(2) of the Securities Act of 1933, in which it sold to certain institutional investors 2,000,000 shares of common stock in tandem with 2,000,000 common stock warrants (exercisable at $4.20 per share) at $3.00 per share for proceeds of approximately $5,515, net of cash issuance costs of approximately $485. The placement agent also received 100,000 common stock warrants (exercisable at $4.20 per share) in connection with this offering. These warrants are described below.

Common Stock Warrants – The Company has issued common stock warrants in connection with the execution of certain equity and debt financings and consulting agreements. The fair value of common stock warrants is determined using the Black-Scholes option-pricing model. The key assumptions are described in Note 2.

The following table summarizes information with regard to outstanding warrants issued in connection with equity and debt financings as of December 31, 2004:

Issued in Connection With	Number Issued	Exercise Price	Exercisable Date	Expiration Date
2001 Private Placement	689,300	$5.00-$6.50	May 25, 2001 to December 3, 2001	May 25, 2005 to December 3, 2005
Convertible notes:				
Noteholders—inducement to convert	562,801	6.50	October 1, 2001	October 1, 2005
Placement Agents	110,000	3.50	February 1, 2002	February 1, 2012
May 2003 Private Placement				
Placement Agents	109,613	5.40	July 15, 2003	July 15, 2006
October 2003 PIPE Transaction				
Investors	657,293	4.99	October 2, 2003	October 2, 2008
Placement Agent	65,729	6.24	October 2, 2003	October 2, 2006
April 2004 PIPE Transaction				
Investors	618,056	5.07	April 7, 2004	April 7, 2009
Placement Agent	61,806	5.07	April 7, 2004	April 7, 2007
August 2004 PIPE Transaction				
Investors	2,000,000	4.20	February 13, 2005	August 12, 2009
Placement Agent	100,000	4.20	February 13, 2005	August 12, 2009
Total	4,974,598			

None of the above warrants have been exercised as of December 31, 2004.

In connection with the 2001 Private Placement, the Company issued 339,200 and 350,100 warrants to purchase common stock at $6.50 and $5.00 per share, respectively. The Company, upon giving written notice, may accelerate the exercise of the warrants and effect an early termination thereof in the event of either of the following: (i) the Company files a new drug application ("NDA") with the Food and Drug Administration or (ii) the market price exceeds $11.00 and $10.00 for warrants with exercise prices of $6.50 and $5.00, respectively on any 10 trading days within a period of 20 consecutive trading days, as defined. In the event of acceleration, the unexercised warrants automatically terminate without payment by the Company upon the thirtieth day following the written notice. The Company valued the warrants at $886, based on a deemed fair market value of the Company's common stock of $2.28 per share.

As described in Note 6, in August 2001, the Company offered warrants to holders of its outstanding convertible notes as an inducement to convert prior to the maturity of the notes. Holders representing $1,126 of the outstanding principal and accrued interest chose to convert at a conversion price of $2.00 per share and received 598,229 common shares and 562,801 warrants. These warrants have an exercise price of $6.50 per share and are immediately exercisable. The Company may, upon giving written notice, accelerate the exercise of the warrant and effect an early termination thereof in the event of either of the following: (i) the Company files a new drug application ("NDA") with the Food and Drug Administration, or (ii) the market price exceeds $11.00 on any 10 trading days within a period of 20 consecutive trading days as defined. In the event of acceleration, the unexercised warrants automatically terminate without payment by the Company upon the thirtieth day following the written notice. The Company valued the warrants at $503 based on a deemed fair market value of the Company's common stock of $2.28 per share. The value of the warrants has been recorded as a debt conversion expense.

In 2002, the Company issued 110,000 warrants to the agents in connection with the 2001 debt offering. The warrants are exercisable immediately at an exercise price of $3.50 per share and have a 10 year life. The Company valued these warrants at $236 based on a deemed fair value of the Company's common stock of $3.50 per share and recorded such value as interest expense in the statement of operations for the year ended December 31, 2002.

In connection with the May 2003 Private Placement, the Company issued 109,613 warrants exercisable at $5.40 per share to its placement agents. The Company valued the warrants at $261 based on a fair market value of the Company's common stock of $4.30 per share and recorded the warrant value as offering costs with a corresponding increase to additional paid-in capital.

In connection with the October 2003 PIPE transaction, the Company issued 657,293 warrants with an initial exercise price of $5.29 per share to the investors and 65,729 warrants with an initial exercise price of $6.86 per share to its placement agent. The exercise price of the warrants is subject to adjustment pursuant to anti-dilution and other provisions. The fair value of the warrants was determined based on a fair market value of the Company's common stock of $5.29 per share. As the shares of common stock were issued at a discount to their fair market value at the closing of the October 2003 PIPE transaction, the Company used the relative fair value method to record the value of the warrants to the investors. Accordingly, $1,242 of the proceeds has been attributed to such warrants and recorded as an increase to additional paid-in capital. In addition, the $191 fair value of the warrants issued to the placement agent has been recorded as an increase to additional paid-in capital.

In connection with the April 2004 PIPE transaction, the Company issued 618,056 and 61,806 warrants with an initial exercise price of $5.30 per share to the investors and to the placement agent, respectively. The exercise price of the warrants is subject to adjustment pursuant to anti-dilution and other provisions. The fair value of the warrants was determined based on a fair market value of the Company's common stock of $4.41 per share. As the shares of common stock were issued at a discount to their fair market value at the closing of the April 2004 PIPE transaction, the Company used the relative fair value method to record the value of the warrants to the investors. Accordingly, $1,164 of the proceeds has been attributed to such warrants and recorded as an increase to additional paid-in capital. In addition, the $154 fair value of the warrants issued to the placement agent has been recorded as an increase to additional paid-in capital.

In connection with the August 2004 PIPE transaction, the Company issued 2,000,000 and 100,000 warrants with an exercise price of $4.20 per share to the investors and to the placement agent, respectively. The exercise price of the warrants is subject to adjustment solely as a result of stock splits, recapitalizations and similar events. The fair value of the warrants was determined based on a fair market value of the Company's common stock of $3.39 per share. As the shares of common stock were issued at a discount to their fair market value at the closing of the April 2004 PIPE transaction, the Company used the relative fair value method to record the value of the warrants to the investors. Accordingly, $2,483 of the proceeds has been

attributed to such warrants and recorded as an increase to additional paid-in capital. In addition, the $239 fair value of the warrants issued to the placement agent has been recorded as an increase to additional paid-in capital.

Since the shares of common stock issued in the August 2004 PIPE transaction were sold at a price below the exercise price of the warrants issued in the October 2003 and April 2004 PIPE transactions, the exercise price of the common stock warrants granted to the investors and placement agent in the Company's October 2003 and April 2004 PIPE transactions has been adjusted to reflect the subsequent issuance of dilutive securities as provided for in the respective warrants. Accordingly, the exercise price of the warrants issued to the investors and placement agent in October 2003 has been adjusted from their original amounts of $5.29 and $6.86 per share to $4.99 and $6.24 per share, respectively. The exercise price of the warrants issued to the investors and placement agent in the April 2004 PIPE transaction has been adjusted from its original amount of $5.30 per share to $4.91 per share to $5.07.

In 2004, the stockholders approved an increase in the number of "undesignated" shares that the Company is authorized to issue by 5,000,000 such that the total number of authorized "undesignated" shares following the effectiveness of such increase is 10,000,000 at December 31, 2004.

8. STOCK INCENTIVE PLAN

In October 2001, the Company's Board of Directors adopted the Pro-Pharmaceuticals, Inc. 2001 Stock Incentive Plan (the "Incentive Plan"), which permits awards of incentive and nonqualified stock options and other forms of incentive compensation to employees and non-employees such as directors and consultants. The Board reserved 2,000,000 shares of common stock for issuance upon exercise of grants made under the Incentive Plan. Options granted under the Incentive Plan vest either immediately or over a period of up to three years, and expire 5 years to 10 years from the grant date. In 2004, the stockholders approved an increase in the number of shares of common stock subject to the Incentive Plan by 3,000,000 such that the total number of shares subject to awards under the Incentive Plan is 5,000,000. At December 31, 2004, there were 3,049,000 shares available for future grant under the Incentive Plan.

In 2003, the stockholders approved the Pro-Pharmaceuticals, Inc. 2003 Non-Employee Director Stock Option Plan (the "Director Plan"), which permits awards of stock options to non-employee directors. The stockholders reserved 1,000,000 shares of common stock for issuance upon exercise of grants made under the Director Plan. At December 31, 2004, there were 962,250 shares available for future grant under the Director Plan.

In addition, the Company has awarded 464,604 non-plan stock option grants to non-employees. The non-plan grants have vesting periods and expiration dates similar to those options granted under the Incentive Plan. All 464,604 non-plan grants are outstanding at December 31, 2004.

Information about all options granted and outstanding during these periods is as follows:

	Shares	Exercise Price Per Share	Weighted Average Exercise Price
Outstanding, December 31, 2002	569,000	$ 3.50	$ 3.50
Granted	2,057,604	2.92 – 4.05	3.78
Exercised	(50,000)	2.97	2.97
Cancelled	(351,000)	2.97 – 4.05	3.58
Outstanding, December 31, 2003	2,225,604	2.92 – 4.05	3.76
Granted	277,750	1.90 – 5.80	2.55
Cancelled	(100,000)	4.05	4.05
Outstanding, December 31, 2004	2,403,354	$1.90 – 5.80	$ 3.61

The following tables summarize information about stock options outstanding at December 31, 2004:

Options Outstanding				Options Exercisable	
Exercise Price	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$ 1.90	215,000	10.00	$ 1.90	—	$ —
$ 2.92 – $ 4.05	2,163,354	6.44	$ 3.75	2,125,021	$ 3.75
$ 5.80	25,000	2.25	$ 5.80	25,000	$ 5.80

The 253,333 of unvested options at December 31, 2004 vest as follows: 110,000 in 2005, 71,667 in 2006 and 71,666 in 2007.

During 2001, the Company entered into a consulting agreement with a non-employee, who was also a Board member and former member of the Audit Committee, pursuant to which the Company granted 200,000 options to purchase common stock at an exercise price of $3.50 in consideration for services to be performed. At the time of issuance, these options were valued at $239 based on a deemed fair market value of the Company's common stock of $2.28 per share. A portion of these options vested during fiscal years 2001 and 2002, and the remainder vested in 2003. The Company recorded fair value adjustments of $28 and $17 related to the unvested consultant options during 2003 and 2002, respectively. Total expense for the years ended December 31, 2003, 2002 and 2001 related to these options was $72, $64 and $147, respectively.

In March 2002, the Company entered into a second agreement with the same non-employee, by which the Company granted 2,000 options a month to purchase common stock at an exercise price of $3.50 in consideration for monthly consulting services. On November 11, 2002 such agreement was superceded by an amendment, which was effective retroactively to the date of the original agreement, March 1, 2002. Under the amended agreement, the Company granted 24,000 options on March 1, 2002, which vest at a rate of 2,000 options per month, as services are performed. These options were valued using the Black-Scholes option-pricing model, based on a deemed fair market value of the Company's common stock of $3.50 per share. During 2002, the Company recorded a $41 charge to stock compensation expense related to the 20,000 options that vested during the year under the amended agreement. As of December 31, 2002, the Company had deferred compensation of $11 that related to the remaining unvested options, which was recognized in 2003.

In June 2003, the Company entered into a third agreement with the same non-employee, by which the Company granted 24,000 options effective retroactively to March 1, 2003, which vest at a rate of 2,000 options per month as services are performed. These options were valued using the Black-Scholes option-pricing model, based on a fair market value of the Company's common stock of $3.50 per share. The consulting arrangement was concluded on March 1, 2004. The Company recorded fair value adjustments of ($2) and $21 related to the unvested consultant options during 2004 and 2003, respectively. Total expense for the years ended December 31, 2004 and 2003 related to these options was $17 and $40, respectively.

In January 2003, the Company granted 100,000 options at an exercise price of $3.50 to a Board Member for consulting services unrelated to services performed as a director. One-third of the options vested immediately and the balance vests in equal amounts on the first and second anniversaries of the award. The options were valued using the Black-Scholes option-pricing model, based on a fair market value of the Company's common stock of $2.80 per share. The consulting services were completed and the consulting arrangement was concluded as of March 31, 2004. The Company recorded fair value adjustments of ($5) and $82 related to the unvested consultant options during 2004 and 2003, respectively. Total expense for the years ended December 31, 2004 and 2003 related to these options was $51 and $192, respectively.

In May 2003, the Company granted 10,000 options at an exercise price of $3.50 to a new member of the Scientific Advisory Board. One-half of the options vested immediately and the balance vests on the second anniversary. These options were valued using the Black-Scholes option-pricing model based on a fair market value of the Company's common stock of $2.80 per share. The Company recorded fair value adjustments of $2 and $6 related to the unvested consultant options during 2004 and 2003, respectively. Total expense for the years ended December 31, 2004 and 2003 related to these options was $5 and $13, respectively.

In September 2003, the Company granted 25,000 options each to a Board Member and to a member of the Scientific Advisory Board for consulting services. The options were exercisable immediately at $4.05 per share. These options were valued using the Black-Scholes option-pricing model based on a deemed fair market value of the Company's common stock of $4.05 per share. The Company recorded a $122 charge to stock compensation expense in 2003 related to these awards.

In October 2003, in connection with the resignation of its former Chief Financial Officer, the Company accelerated the vesting on 100,000 options granted to such officer in September 2003 at an exercise price of $4.05, which was equal to the fair market value of the common stock on the date of grant. As the fair market value of the common stock was $4.45 per share at the time the vesting was accelerated, the Company recorded a $40 charge to stock compensation expense as required under APB No. 25 and related interpretations. Also, in October 2003, such officer exercised on a cashless basis 50,000 options at an exercise price of $2.97 per share in October 2003. As the fair market value of the Company's common stock on the date of exercise was $4.45 per share, the Company recorded a charge of $74 to stock compensation expense in 2003 related to the exercise of these options.

In March 2004, the Company issued 25,000 options in fulfillment of a September 2003 agreement with an investor relations firm. The agreement obligated the Company to pay a monthly retainer and issue options at a rate of 5,000 options per month, up to a maximum of 100,000 options, exercisable at $5.80 per share as services are performed. The Company concluded the engagement in February 2004. The options are exercisable immediately and expire on March 26, 2007. Accordingly, the Company recorded $29 as stock compensation expense in 2003 on the 15,000 options that vested as of December 31, 2003 and an additional stock compensation expense of $23 in 2004 on the 10,000 options that vested in January and February 2004. The stock compensation expense was determined based on a fair market value of the options when the options were earned.

In April 2004, the Company entered into an agreement with an investor relations firm. The agreement obligated the Company to pay a monthly retainer and issue options at a rate of 5,000 per month up to a maximum of 60,000 options excercisable at $5.16 per share as services are performed. During 2004, 45,000 options were earned but not issued. Accordingly, the Company recorded $66 as stock compensation expense in 2004 related to this agreement. The stock compensation expense was determined based on the fair market value of the options when the options were earned. The options are exercisable immediately upon issue and expire three years from the issuance date.

9. COMMITMENTS AND CONTINGENCIES

Research and Development Commitments – During March 2005, the Company entered into contracts with PRA International, Inc. ("PRA"), a clinical research organization, and Medidata Solutions, Inc. ("Medidata"), a data management company, to assist with the Phase II clinical trials of the Company's DAVANAT® product in combination with 5-Fluorouracil. PRA will serve as the manager of the clinical trial including in design, management and implementation. The Company's expenditure commitments under its PRA contract, terminable at any time upon 30 days' notice, represent 5% of the contracted budgetary amounts, or approximately $47. Medidata was engaged for purposes of electronic collection, analysis and management of the data generated by the Company's Phase I clinical trial. The Company's expenditure commitment under its Medidata contract, terminable at any time upon 30 days' notice, represents 8% of the contracted budgetary amounts, less fees previously paid or payable. The projected target date of completion of the engagements with PRA and Medidata is June 2006.

Lease Commitments – The Company leases its facility under a non-cancelable operating lease that expires in May 2006. In connection with the operating lease, the Company has issued a letter of credit, which is renewed annually, in the amount of $21,933 as part of the security deposit.

Future minimum rental payments under this operating lease as of December 31, 2004 are approximately as follows:

Year Ending December 31,	
2005	$109
2006	46
Total lease payments	$155

Rent expense under this operating lease was $110, $110, $98, and $368 for the years ended December 2004, 2003, 2002 and the cumulative period from inception (July 10, 2000) to December 31, 2004, respectively.

Contingency – In May 2003, a former employee commenced a lawsuit in Massachusetts Superior Court against the Company and filed a related complainant letter with the Occupational Safety and Health Administration of the U.S. Department of Labor. The plaintiff asserted claims for wrongful discharge in violation of public policy and of employee protection provided for under the Sarbanes-Oxley Act of 2002, and sought monetary damages. In August 2003, the Department of Labor dismissed the complaint. The plaintiff objected and requested a hearing by an Administrative Law Judge at the Department. The hearing occurred in April 2004 and the Judge issued a decision was rendered on February 11, 2005. The Judge determined that the former employee had a reasonable belief that the Company engaged in some activity that violated federal securities law, and ordered the Company to pay the former employee's legal expenses. The purpose of the hearing was not to determine whether the Company violated federal securities law and the Judge did not find that the Company violated federal securities law. On March 8, 2005 the Company paid the former employee's legal expenses, the parties dismissed the federal and Massachusetts cases and the matter was closed.

In October 2003, the Securities and Exchange Commission began an investigation related to the foregoing. The Company was notified in November 2004, that the SEC had expanded the investigation to determine whether statements concerning the Company were false or misleading. The Company has fully cooperated with the SEC throughout by providing information and documents.

In February 2004, the Company received an order from the Commonwealth of Massachusetts to provide information concerning the Company's offerings of securities. The Company timely responded and has not received further communication from the state on this matter. The Company believes the SEC and Massachusetts investigations may be related to the matters alleged by the former employee.

The regulatory investigations are subject to various uncertainties, and it is possible one or more may be resolved unfavorably. Management believes that an unfavorable resolution will not have a material adverse effect on our financial position, results of operations or cash flows.

In January 2004, Dr. Platt, the Company's Chairman and Chief Executive Officer, filed a lawsuit in Massachusetts Superior Court against GlycoGenesys, Inc. for various claims including breach of contract. In its filing in February 2004, GlycoGenesys asserted counterclaims against the Company and Dr. Platt alleging tortious interference and misappropriation of proprietary rights. The counterclaims seek monetary damages and injunctive relief related to the Company's intellectual property. In March 2004, the Company and Dr. Platt answered the counterclaims and denied any liability. In June 2004, the Court allowed, without opposition, a motion of GlycoGenesys for leave to file a supplemental counterclaim against the Company for defamation and unfair competition. The Company and Dr. Platt intend to contest these counterclaims vigorously and believe they will ultimately prevail. However, if the Company does not prevail, there could be a material adverse impact on the financial position, results of operations or cash flows of the Company.

Pursuant to Board approval, the Company has agreed to indemnify Dr. Platt for the expenses of his defense of the counterclaims, some of which may be recoverable under insurance. During the year ended December 31, 2004, the Company paid approximately $153 in legal and related costs in connection with the indemnification. No amount, if any, potentially recoverable from the insurance company has been recorded at December 31, 2004.

On January 28, 2005, the Company filed a request with the U.S. Patent and Trademark Office for an inter partes re-examination of U.S. Patent No. 6,680,306 owned by GlycoGenesys, Inc. because the Company believes that the invention claimed in this patent is disclosed in literature that preceded it including the Company's U.S. Patent No. 6,645,946 for DAVANAT®.

In the ordinary course of business, the Company may from time to time be involved in other legal matters that in the Company's estimation will not have a material adverse impact on it. The Company records accruals for such contingencies to the extent that the Company concludes that their occurrence is probable and the related damages are estimable.

10. INCOME TAXES

The components of the net deferred tax assets are as follows at December 31:

	2004	2003
Operating loss carryforwards	$ 6,551	$ 4,120
Tax credit carryforwards	444	250
Other temporary differences	45	(4)
	7,040	4,366
Less valuation allowance	(7,040)	(4,366)
Net deferred tax asset	$ —	$ —

As of December 31, 2004, the Company has federal and state net operating loss carryforwards totaling approximately $16,368 and $15,715, respectively, which expire beginning in 2021. In addition, the Company has federal and state research and development and investment tax credits of approximately $303 and $141, respectively, which expire beginning in 2016. If substantial changes in the Company's ownership should occur as defined by Section 382 of the Internal Revenue Code (the "Code"), there could be annual limitations on the amount of carryforwards which may be realized in future periods. Because of the Company's limited operating history and its recorded losses, management has provided a 100% allowance against the Company's net deferred tax assets.

11. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

Summarized quarterly financial data for the last two years are as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2004				
Operating expenses	$ 1,874	$ 1,437	$ 1,799	$ 2,194
Net loss	(1,854)	(1,405)	(1,763)	(2,158)
Net loss per share:				
Basic	(0.08)	(0.06)	(0.07)	(0.07)
Diluted	(0.08)	(0.06)	(0.07)	(0.07)
2003				
Operating expenses	$ 953	$ 982	$ 1,400	$ 1,603
Net loss	(945)	(975)	(1,382)	(1,571)
Net loss per share:				
Basic	(0.05)	(0.05)	(0.06)	(0.07)
Diluted	(0.05)	(0.05)	(0.06)	(0.07)

* * * * * *

Exhibit 21.1

Subsidiaries of the Registrant

The following is a list of the Registrant's subsidiaries as of December 31, 2004. The Registrant owns, directly or indirectly, 100% of the voting securities of each subsidiary, unless noted otherwise.

Name	State or Jurisdiction of Organization
Pro-Pharmaceuticals Securities Corp.	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-109887, 333-115118, 333-118907 and 333-116500 on Form S-3 and in Registration Statement Nos. 333-116629 and 333-109893 on Form S-8 of our report dated April 7, 2005, relating to the financial statements of Pro-Pharmaceuticals, Inc. appearing in this Annual Report on Form 10-K of Pro- Pharmaceuticals, Inc. for the year ended December 31, 2004.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
April 7, 2005

Exhibit 31.1

Certification pursuant to Rule 13a-14(a) of the Securities Act of 1934

I, David Platt, certify that:

1. I have reviewed this annual report on Form 10-K of Pro-Pharmaceuticals, 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)) for the registrant and we 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 subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) [Paragraph omitted in accordance with SEC transition instructions contained in SEC Release Nos. 34-47986 and 34-49313];

   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 the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting 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 7, 2005

/s/ DAVID PLATT

Name: David Platt
Title: President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

Certification pursuant to Rule 13a-14(a) of the Securities Act of 1934

I, Carl Lueders, certify that:

1. I have reviewed this annual report on Form 10-K of Pro-Pharmaceuticals, 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)) for the registrant and we 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 subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) [Paragraph omitted in accordance with SEC transition instructions contained in SEC Release Nos. 34-47986 and 34-49313];

   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 the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting 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 7, 2005

/s/ CARL LUEDERS

Name: Carl Lueders
Title: Chief Financial Officer
(principal financial and accounting officer)

Exhibit 32.1

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 Pro-Pharmaceuticals, Inc. (the "Company") on Form 10-K for the period ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Platt, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Dated: April 7, 2005

/s/ David Platt

Name: David Platt
Title: President and Chief Executive Officer
(principal executive officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Pro-Pharmaceuticals, Inc. and will be retained by Pro-Pharmaceuticals, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

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 Pro-Pharmaceuticals, Inc. (the "Company") on Form 10-K for the period ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Carl Lueders, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Dated: April 7, 2005

/s/ Carl Lueders

Name: Carl Lueders
Title: Chief Financial Officer
(principal financial and accounting officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Pro-Pharmaceuticals, Inc. and will be retained by Pro-Pharmaceuticals, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.