

---

**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, 2003

**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  
(State or other jurisdiction  
of incorporation)

189 Wells Avenue, Newton, Massachusetts  
(Address of Principal Executive Offices)

04-3562325  
(I.R.S. Employer  
Identification No.)

02459  
(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**  
Common Stock, Par Value \$.001

**Name of Exchange on which registered**  
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, 2003 was \$49,045,386.

The number of shares outstanding of the registrant's common stock as of March 15, 2004 was 24,079,300.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the definitive Proxy Statement for the 2004 Annual Meeting of Stockholders are incorporated by reference into Part III of this Report.

---

[Table of Contents](#)

**INDEX TO FORM 10-K  
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2003**

	<b>PAGE</b>
<b><a href="#">PART I</a></b>	
ITEM 1. <a href="#">Business</a>	3
ITEM 2. <a href="#">Properties</a>	16
ITEM 3. <a href="#">Legal Proceedings</a>	16
ITEM 4. <a href="#">Submission of Matters to a Vote of Security Holders</a>	16
<b><a href="#">PART II</a></b>	
ITEM 5. <a href="#">Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</a>	17
ITEM 6. <a href="#">Selected Consolidated Financial Data</a>	18
ITEM 7. <a href="#">Management’s Discussion and Analysis of Financial Condition and Results of Operations</a>	19
ITEM 7A. <a href="#">Quantitative and Qualitative Disclosures about Market Risk</a>	28
ITEM 8. <a href="#">Financial Statements and Supplementary Data</a>	28
ITEM 9. <a href="#">Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</a>	28
ITEM 9A. <a href="#">Controls and Procedures</a>	28
<b><a href="#">PART III</a></b>	
ITEM 10. <a href="#">Directors and Executive Officers of the Registrant</a>	29
ITEM 11. <a href="#">Executive Compensation</a>	29
ITEM 12. <a href="#">Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</a>	29
ITEM 13. <a href="#">Certain Relationships and Related Transactions</a>	29
ITEM 14. <a href="#">Principal Accountant Fees and Services</a>	29
<b><a href="#">PART IV</a></b>	
ITEM 15. <a href="#">Exhibits, Financial Statement Schedules, and Reports on Form 8-K</a>	30
<b><a href="#">SIGNATURES</a></b>	32

## 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 preclinical 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, fax number is (617) 928-3450, e-mail address is [squeglia@pro-pharmaceuticals.com](mailto:squeglia@pro-pharmaceuticals.com), and our website address is [www.pro-pharmaceuticals.com](http://www.pro-pharmaceuticals.com). Our Annual Report on Form 10-K and Quarterly Reports on Form 10-QSB 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 system 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

## [Table of Contents](#)

surface of cancer cells. Reformulation of chemotherapy drugs 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.
- The industry would likely also be receptive to patent-protected drug delivery systems that combine with existing chemotherapy drugs whose efficacy has been proven and which may no longer have patent protection.
- We believe that drug delivery and targeting systems which upgrade widely used drugs can be developed with substantially lower costs, and result in faster returns for investors, 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 system 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 and cisplatin, by combining them with our proprietary delivery system.
- 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 (further described below) with respect to products to be used in treatment of types and stages of cancer for which treatments are now inadequate.
- 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.

## [Table of Contents](#)

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 reduce 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 very 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 seven widely used chemotherapy agents: 5-Fluorouracil, irinotecan, doxorubicin, paclitaxel, cyclophosphamide, oxaliplatin and cisplatin. Each of these drugs is widely used in cancer chemotherapy treatment, and for each of these drugs 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 Aducil® 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, inhibits 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 cancer 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. Its patent expires in April 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 Taxol® (paclitaxel). It is manufactured by Bristol-Myers-Squibb Company 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

## [Table of Contents](#)

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

*Oxaliplatin*, sold under the trade name Eloxatin<sup>®</sup>, 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. Preclinical 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 April 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<sup>®</sup> by Bristol-Myers-Squibb Company for intravenous injection. We believe that there are no patents covering the composition of Cisplatin.

### ***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 in combination with certain of our polysaccharide compounds. The results of one study demonstrated that one of our polysaccharide compounds, DAVANAT<sup>®</sup>, might significantly decrease the toxicity of 5-FU. A second, similar study was performed to test a potential reduction of toxicity of doxorubicin in combination with each of two selected polysaccharide compounds. The results indicated that DAVANAT<sup>®</sup> might decrease the toxicity of doxorubicin. The fact that two different cancer drugs with chemically unrelated structures showed a marked reduction of their toxicity in combination with DAVANAT<sup>®</sup> 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<sup>®</sup>-1, a DAVANAT<sup>®</sup> combination 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<sup>®</sup>-1 on blood structure and survival of these animals. Results indicate that DAVANAT<sup>®</sup>-1 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<sup>®</sup> 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 Phase I clinical trials.

#### *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<sup>®</sup>-1, which had decreased toxicity of 5-FU in healthy animals. Results of the studies demonstrated that DAVANAT<sup>®</sup> might also increase 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<sup>®</sup>-1.

## [Table of Contents](#)

Two of our efficacy studies were conducted to evaluate the compatibility of DAVANAT<sup>®</sup> with leucovorin, which is commonly used in cancer treatment with 5-FU. The studies showed that DAVANAT<sup>®</sup> and leucovorin do not interfere with each other when administered following standard procedures, and that DAVANAT<sup>®</sup>-1 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<sup>®</sup>-1 compared to a 5-FU/leucovorin combination.

We also conducted a study that involved injecting radiolabeled DAVANAT<sup>®</sup> (with and without 5-FU) into tumor-free and tumor-bearing animals. The study provided experimental data with respect to DAVANAT<sup>®</sup> distribution in organs and tissues (liver, kidney, lungs, plasma, and tumor) and the capacity of such organs and tissue to clear DAVANAT<sup>®</sup> after various time periods. The study suggested that DAVANAT<sup>®</sup> 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<sup>®</sup> may decrease toxicity and increase efficacy of 5-FU.

In addition to DAVANAT<sup>®</sup>-1, in 2003 and 2004 we have been conducting pre-clinical studies for irinotecan, doxorubicin, oxaliplatin, paclitaxel, cyclophosphamide and cisplatin both in combination with DAVANAT<sup>®</sup> and other polysaccharide compounds. Human colon and breast xenography are being used to optimize formulations and results show that DAVANAT<sup>®</sup> exhibits a broad spectrum of activity with the tested drugs.

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 Results — Our Product Candidates Will Be Based On Novel Unproven Technologies”.

### ***Phase I Clinical Trials***

We submitted an investigational new drug application (IND) to the FDA on May 26, 2002 based on the pre-clinical data obtained from our 5-FU studies. The FDA accepted the IND on June 26, 2002 which authorized us to begin Phase I clinical trials with humans. We filed an amendment to the IND on November 27, 2002 to incorporate new toxicology data and to enable us to undertake dose escalation in our Phase I trials. In response to the amendment, the FDA allowed the dose escalation schema which would allow assessment in clinical trials of DAVANAT<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> that can be tolerated when administered with a stable dose of 5-FU, and (2) to define the dose-limiting toxicities of DAVANAT<sup>®</sup> in combination with 5-FU. Approximately 20 male and female patients suffering from advanced solid malignancies, who failed the accepted chemotherapeutic, radiation, and/or surgical treatments, have participated in the study. We expect to enroll an additional 10 patients in the Phase I trial.

Four clinical sites and lead investigators are currently participating in our Phase I trials: 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 have engaged a professional consultant, affiliated with Harvard Medical School and Massachusetts General Hospital, to serve as Medical Director of our Phase I/II clinical trials.

The pharmaceutical company, Sigma Aldrich, with which we contracted to produce DAVANAT<sup>®</sup>, is a certified Good Manufacturing Procedures (“cGMP”) facility that has manufactured sufficient quantities for the



## [Table of Contents](#)

doses that are needed for the Phase I/II 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<sup>®</sup> is very stable in the formulation and is compatible with intravenous infusion systems. We have provided reports to the FDA in support of our clinical trials.

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

### **Phase II Clinical Trials**

On January 8, 2004, we announced the initiation of Phase II clinical trials of DAVANAT<sup>®</sup>-1 in refractory colorectal cancer patients. This trial is part of a multi-center, open-label, single dose level study in patients with metastatic colorectal cancer that have failed standard chemotherapeutic regimens. The study will evaluate the efficacy and safety of intravenous DAVANAT<sup>®</sup>-1 when administered in monthly cycles as third-line therapy for metastatic colorectal cancer. The objectives for the Phase II study are (i) to document the complete and partial response and the rate of stable disease with DAVANAT<sup>®</sup>-1 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<sup>®</sup>-1 in this population. Concurrent with the Phase II clinical study, we continue to enroll patients in our Phase I trial.

### **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 this research 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 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 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 targeting enhancement systems. 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.

## [Table of Contents](#)

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 in combination 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 researchers 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 \$1,950,299, \$1,483,027, \$893,457 and \$4,427,033 in 2003, 2002, 2001 and for the cumulative period from inception (July 10, 2000) through December 31, 2003, respectively.

### ***Manufacturing and Marketing***

We are a development company and do not have, or intend to obtain, internal facilities for the manufacture of any 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 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 based on monoclonal

## [Table of Contents](#)

antibodies being developed by companies such as Seattle Genetics, Inc., Immonogen, Inc. and Berna Biotech AG and Dendreon Corporation could be competitive with our carbohydrate-based system. A few companies are developing carbohydrate technologies to improve or develop new drugs. Neose Technologies, Inc. is seeking to improve the therapeutic profile of widely-used protein-based drugs and Optimer Pharmaceuticals, Inc. is developing carbohydrate technology for drug discovery and improvement. We believe we are the only company using carbohydrate-based technologies to reformulate widely-used chemotherapies thereby to enable targeted delivery of these toxic drugs.

Please see “Risk Factors That May Affect 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*

No drug may be marketed in the U.S. until the drug has received FDA approval. The steps required before a drug may be marketed in the U.S. include:

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.

## [Table of Contents](#)

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 facility or 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 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 intended to be acted upon more quickly than NDAs given standard review. The FDA’s current 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

## [Table of Contents](#)

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, 2004, we have five full-time employees comprised of our President and Chief Executive Officer, Chief Operating Officer, Vice President, Manufacturing and Product Development, Vice President of Investor Relations, and an operations administrator. Our Chief Financial Officer, Chief Scientist, and Medical Director (clinical trials) each provides 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.**, is our Chairman and Chief Executive Officer, 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 (re-named 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., has the title Chief Scientist. He is Vice President, Research & Development for Kadant Composites, Inc., a subsidiary of Kadant, Inc. (NYSE: KAI), where he has directed since 1996 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 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.; Nasdaq SmallCap: GLGS) 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.

## [Table of Contents](#)

**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 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.

**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 in the performance, evaluation and submission in over 1,800 pre-clinical studies, from protocol to final report. Dr. Christian is a member of 20 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.**, has been Executive Director of Business Development for Primedica Corporation, a contract research organization, since 1998. From 1995 to 1997, he was Director of Marketing at Genzyme Transgenics Corporation, and previously was Vice President of Marketing at BioDevelopment Laboratories (1993-1995) and TSI Corporation (1992-1993), both of which were acquired by Genzyme Transgenics. He also serves on the Scientific Advisory Boards of several biotechnology companies and is the author of over 100 technical publications. Dr. Esber received a B.S. degree in biology from the College of William and Mary, a M.S. degree in Medical Parasitology–Public Health 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 Studies, 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 organic 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.

## [Table of Contents](#)

### **Item 2. *Properties***

We entered into a 5-year sublease commencing 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, 2003 was approximately \$106,000 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. Our 2004 budget includes capital expenditures to add offices and upgrade certain equipment. We believe that upon completion our facilities will be suitable and adequate for the foreseeable future.

### **Item 3. *Legal Proceedings***

On May 14, 2003 a former employee, who was our Vice President of Investor Relations and Corporate Strategy, commenced a lawsuit in Massachusetts Superior Court against us 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 seeks monetary damages and reinstatement of her position. On August 25, 2003, the Department of Labor reported that its investigator found the Plaintiff's allegations are without merit and dismissed the complaint. The Plaintiff objected to the findings and requested a hearing by an Administrative Law Judge at the Department. Other than continuation of pre-trial discovery, there have been no material developments. On October 31, 2003, we received an informal inquiry from the Securities and Exchange Commission requesting information related to the foregoing. We timely responded in November and December 2003 and have not received a further communication from the SEC on this matter.

On February 13, 2004, we received an order from the Commonwealth of Massachusetts to provide information concerning our offerings of securities. We timely responded and believe our offerings comply with Massachusetts law. We believe the Massachusetts investigation may be related to the matters disclosed in the preceding paragraph.

Each of the foregoing matters is subject to various uncertainties, and it is possible one or more may be resolved unfavorably. Management believes that any liability that may ultimately result from the resolution of these matters will not have a material adverse effect on our financial position, results of operations or cash flows.

On January 29, 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 answer GlycoGenesys names 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. On March 19, 2004, we answered the counterclaim and denied any liability. 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.

### **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**

Since September 10, 2003, 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, were:

	<u>High</u>	<u>Low</u>
<b>Fiscal Year Ended December 31, 2003</b>		
September 10, 2003 to September 30, 2003	\$6.14	\$5.40
Fourth Quarter	\$5.29	\$3.11

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 each fiscal quarter since our stock commenced trading on September 9, 2002. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not necessarily represent actual transactions.

	<u>High Bid Quotation</u>	<u>Low Bid Quotation</u>
<b>Fiscal Year Ended December 31, 2003</b>		
First Quarter	\$ 3.14	\$ 2.41
Second Quarter	\$ 4.66	\$ 2.30
July 1, 2003 to September 9, 2003	\$ 4.85	\$ 3.60
<b>Fiscal Year Ended December 31, 2002</b>		
September 9, 2002 to September 30, 2002	\$ 4.00	\$ 2.00
Fourth Quarter	\$ 3.34	\$ 2.70

 **Holders of Common Stock**

As of March 23, 2004 there were approximately 398 holders of our common stock.

 **Use of Proceeds**

On December 31, 2003 we filed a registration statement on Form S-3, which became effective on January 26, 2004, to register for re-sale 9,639,742 shares of common stock held by certain stockholders who purchased the shares in certain of our prior private placements. The selling stockholders will receive all proceeds from the sales of such stock. We will not receive any proceeds from such sales.

 **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.

[Table of Contents](#)

**Item 6. Selected Consolidated Financial Data**

The following table sets forth financial data for the years ended December 31, 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, 2003. 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, 2003
	2003	2002	2001		
<b>Consolidated Statements of Operations Data:</b>					
Operating expenses:					
Research and development	\$ 1,950,299	\$ 1,483,027	\$ 893,457	\$ 100,250	\$ 4,427,033
General and administrative	2,987,867	1,804,192	1,288,634	66,700	6,147,393
Operating loss	(4,938,166)	(3,287,219)	(2,182,091)	(166,950)	(10,574,426)
Interest and other income	68,925	24,258	24,917	261	118,361
Interest and other expenses (1)	(3,880)	(415,416)	(1,813,099)	(17,893)	(2,250,288)
Net loss	\$ (4,873,121)	\$ (3,678,377)	\$ (3,970,273)	\$ (184,582)	\$ (12,706,353)
Net loss per share—basic and diluted	\$ (0.23)	\$ (0.22)	\$ (0.29)	\$ (0.01)	
Weighted average shares outstanding—basic and diluted (2)	21,360,572	16,374,524	13,601,795	12,354,670	

	As of December 31,			
	2003	2002	2001	2000
<b>Consolidated Balance Sheet Data:</b>				
Working capital	\$ 7,318,338	\$ 1,327,173	\$ 1,021,239	\$ 23,133
Total assets	8,001,975	2,283,167	1,766,547	227,940
Convertible notes payable (3)	—	—	195,000	79,245
Stockholders' equity	7,624,066	1,616,374	1,215,845	46,328

*Notes:*

- (1) Interest expense in 2001 includes \$1,241,357 relating to a beneficial conversion feature and \$503,019 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 \$205,255 at December 31, 2000.

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

**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 increase the efficacy, thereby creating a preferable treatment to existing first line oncology regimens. Our goal is to develop and commercialize a new generation of reformulated drugs enabling targeted delivery. For additional information, please see "Item 1. Business — Business of Pro-Pharmaceuticals".

All of our drug candidates are currently in preclinical and clinical development. To commercialize our drug candidates, we will be required to successfully complete preclinical 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 \$12,706,353 for the cumulative period from inception (July 10, 2000) through December 31, 2003. 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 \$17,131,735 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, 2003, we used cash of \$9,023,156 for our operations. At December 31, 2003, we had \$7,607,818 of cash and cash equivalents available to fund future operations, which our management believes is sufficient to fund our operations through at least April 30, 2005.

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.

**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, Financial Statement Schedules and Reports on Form 8-K". 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

## [Table of Contents](#)

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 Company’s 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 the Company’s stock, are subjective and may differ from period to period. Accordingly, changes in the value of the Company’s 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 2003 we awarded approximately 1,647,250 stock options to employees and non-employee members of our Board of Directors. 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 \$4,873,121 would have increased by \$2,824,135 to \$7,697,256 in 2003.

*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, 2003 Compared to Fiscal Year Ended December 31, 2002*

*Research and Development Expenses.* Research and development expenses were \$1,950,299 in 2003, or 32% higher than the \$1,483,027 incurred in 2002. Research and development expenses primarily represent costs of outside laboratories, clinical research organizations, data management services, medical consultants, drug manufacturing for clinical trials and salaries and other personnel-related expenses, including stock compensation. The increase reflects the costs to initiate and conduct the Phase I clinical trial of DAVANAT<sup>®</sup>-1, which began in February 2003. We expect the Phase I trial to be completed in 2004. In 2004, we began a concurrent Phase II clinical trial of DAVANAT<sup>®</sup>-1. 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 \$2,987,867 in 2003, or 66% higher than the \$1,804,192 incurred in 2002. General and administrative expenses primarily represent salaries and other personnel-related expenses, including stock compensation, legal and accounting fees, consultants, corporate governance, insurance, rent, depreciation and other office costs. 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 \$378,385 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.

*Interest and Other Income.* Interest and other income was \$68,925 in 2003 compared to \$24,258 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 \$9,959,442 in new financing in 2003 compared to \$3,636,941 in 2002. Average interest rates in 2003 were approximately 10 basis points below the average interest rates in 2002.

*Interest Expense.* Interest expense was \$3,880 in 2003 compared to \$415,416 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 \$406,612 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 \$195,000 of convertible notes as consideration for our extension of the maturity date beyond December 31, 2001.

### *Fiscal Year Ended December 31, 2002 Compared to Fiscal Year Ended December 31, 2001*

*Research and Development Expenses.* Research and development expenses were \$1,483,027 in 2002, or 66% higher than the \$893,457 incurred in 2001. The increase reflects the costs associated with hiring a Vice President – Product Development and Manufacturing, filing our Investigational New Drug (IND) application for DAVANAT<sup>®</sup> with the Food and Drug Administration, obtaining IND status for DAVANAT<sup>®</sup> in July 2002 and scaling-up manufacturing of the drug compound for purposes of the Phase I clinical trials. The costs in 2001 represent expenses incurred to conduct the required animal studies prior to filing the IND application.

*General and Administrative Expenses.* General and administrative expenses were \$1,804,192 in 2002, or 40% higher than the \$1,288,634 incurred in 2001. The increase was due primarily to the full year impact of a new office lease and related facility costs, several new employees, and the added costs associated with being a public company, including the purchase of directors' and officers' liability insurance.

## [Table of Contents](#)

*Interest and Other Income.* Interest and other income was \$24,258 in 2002 as compared to \$24,917 in 2001. Higher average cash balances in 2002 were offset by significantly lower yields as average interest rates were approximately 30 basis points below the average interest rates in 2001.

*Interest Expense.* Interest expense was \$415,416 in 2002 compared to \$1,813,099 in 2001. As described above, interest expense in 2002 included approximately \$406,612 representing the fair value of warrants issued to placement agents in connection with the 2001 debt offering and the fair value of common stock issued to certain note holders to extend the maturity date beyond December 31, 2001. Interest expense in 2001 included \$1,241,357 for amortization of the debt discount on the convertible notes payable and \$503,019 representing the fair value of warrants issued in August 2001 to induce the holders to convert their notes to common stock prior to maturity. The balance of the reduction in interest expense in 2002 was primarily due to lower average debt balances as the holders of \$1,125,602 of such notes converted to common stock in August 2001.

### **Liquidity and Capital Resources**

As described above in the Overview 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 \$17,131,735 from these offerings and have \$7,607,818 of cash available at December 31, 2003.

Net cash used in operations increased to \$4,152,157 in 2003, from \$2,982,602 and \$1,799,309 in 2002 and 2001, respectively. The increased use of cash in operations is primarily related to clinical research and data management costs incurred in connection with our Phase I clinical trial of DAVANAT<sup>®</sup>-1, expansion of our business development activities and added costs associated with being a public company. In 2001, we initiated preclinical studies of DAVANAT<sup>®</sup>-1. In 2002, we completed the animal studies and filed an IND application, which was approved in June 2002. In February 2003, we began our Phase I clinical trials and expect to complete those trials in 2004. In January 2004, we initiated a concurrent Phase II clinical trial of DAVANAT<sup>®</sup>-1. Accordingly, we expect our research and development costs to continue to increase in 2004.

Net cash used in investing activities was \$105,700 in 2003, \$138,278 in 2002 and \$171,116 in 2001. The investing activities primarily consist of fixed assets purchases and patent costs. Fixed asset purchases were higher in 2001 and 2002 as we added staff and relocated to new offices. Expenditures in 2004 are expected to approximate \$75,000 as we build out the remaining work areas in the office. Patent costs increased in 2003 due to the continued development of our drug pipeline.

Net cash provided by financing activities was \$9,944,442 in 2003, \$3,550,941 in 2002 and \$3,256,852 in 2001. Net cash provided by financing activities in 2003 resulted from the sale of common stock and warrants in three private placements with net proceeds of \$9,944,442. 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 \$3,636,941. The net cash provided from financing activities in 2001 included \$2,220,750 in net proceeds from the sale of common stock and warrants, and \$1,036,102 from the sale of convertible notes. Except for \$86,000 of notes repaid in 2002, all convertible notes were converted into common stock and warrants in 2001 and 2002.

We believe that our cash on hand of \$7,607,818 at December 31, 2003 will be sufficient to enable us to meet our financing and operating obligations through at least April 30, 2005. We will require more cash to fund our operations over the long-term 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 on terms favorable to us.

## [Table of Contents](#)

### **Payments Due Under Contractual Obligations**

The following table summarizes the payments due under our contractual obligations at December 31, 2003, and the effect such obligations are expected to have on liquidity and cash flow in future periods:

<u>Contractual Obligations</u>	<u>Payments due by period</u>				
	<u>Total</u>	<u>Less than 1 year</u>	<u>1 - 3 years</u>	<u>3 - 5 years</u>	<u>More than 5 years</u>
Operating leases	\$262,000	\$107,000	\$155,000	\$—	\$ —

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 had on deposit with that bank. As of December 31, 2003, we held \$21,933 of restricted cash. The letter of credit expires on May 31, 2004, and we expect to renew the letter of credit for an additional 12 months prior to its expiration.

In addition to the contractual obligations described above, we have entered into contracts with a clinical research organization and a data management company in connection with our Phase I clinical trial of DAVANAT®-1. Our expenditure commitments under the two contracts represent 5% and 15% of the contracted budgetary amounts respectively. Although the two contracts are cancelable upon 30 days' notice, we intend to continue the services through completion of the Phase I clinical trials in 2004. Our remaining obligation under the two contracts at December 31, 2003 is approximately \$250,000.

### **Off-Balance Sheet Arrangements**

We have not created, and are not 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.

## 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 part or all of your investment.

### Risks Related to Pro-Pharmaceuticals

***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, 2003 was \$12,706,353, which includes approximately \$2,427,000 various non-cash charges related to certain equity transactions. 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 curtail operations significantly. 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 \$7,607,818 of available cash and cash equivalents as of December 31, 2003, we believe that we have sufficient capital to fund our operations through at least April 30, 2005.

***Our Product Candidates Will Be Based On Novel Unproven Technologies.*** Our product candidates will be based upon 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.

***We Have Only Recently Begun 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



## [Table of Contents](#)

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 no direct 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 no direct 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 Have Been Named 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 names 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. On March 19, 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 have recently been named as a counterclaim defendant in a lawsuit instituted by Dr. Platt. See “Risks Related to Pro-Pharmaceuticals” above.

***Our Products Could Infringe The Intellectual Property Rights Of 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.

## [Table of Contents](#)

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 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 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.

***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 47% of the outstanding shares of our common stock, and Dr. Platt and Mr. Czirr together own approximately 37%. 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 potential changes to currently accepted accounting practices, including the expensing of stock options, could adversely affect our reported financial results and negatively affect our reported price. Additional unanticipated expenses incurred to comply with new requirements could also negatively impact our results of operations.

## [Table of Contents](#)

### **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, 2003 and (ii) no change in internal control over financial reporting occurred during the quarter ended December 31, 2003 that has materially affected, or is reasonably likely to materially affect, such internal control over financial reporting.

**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 Securities and Exchange Commission in connection with our 2004 Annual Meeting of Stockholders to be held on May 25, 2004 (the "2004 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. This code is publicly available on our website at [www.pro-pharmaceuticals.com](http://www.pro-pharmaceuticals.com). Amendments to the code of ethics and any grant of a waiver from a provision of the code 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 2004 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 2004 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 2004 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 2004 Proxy Statement.

**Part IV****Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K**

## (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

<u>Exhibit Number</u>	<u>Description of Document</u>	<u>Note Reference</u>
3.1	Articles of Incorporation of the Registrant, dated January 26, 2001	1
3.2	Amended and Restated By-laws of the Registrant	2
10.1	Assignment and 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 Developed Technology Resource, Inc., DTR-Med Pharma Corp., Pro-Pharmaceuticals, Inc. (Massachusetts) 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 14, 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	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 between Pro-Pharmaceuticals, Inc. and Charles F. Harney	
10.13*	Employment Agreement, dated effective as of January 2, 2004, by and between Pro-Pharmaceuticals, Inc. and David Platt	
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

## Table of Contents

<u>Exhibit Number</u>	<u>Description of Document</u>	<u>Note Reference</u>
21.1*	Subsidiaries of the Registrant	
23.1*	Independent Auditors' Consent of Deloitte & Touche LLP	
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/A 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.

(b) Reports on Form 8-K

On October 6, 2003, we filed a Current Report on Form 8-K under Item 5 to report the completion of a private placement of 1,314,571 shares of common stock and 723,022 common stock warrants.

On November 14, 2003, we filed a Current Report on Form 8-K under Items 5 and 7 to report the issuance to the Company of two U.S patents by the U.S. Patent and Trademark Office.

On February 25, 2004, we filed a Current Report on Form 8-K under Item 5 which contained an exhibit of our press release dated such date in which we disclosed the counterclaim against us initiated by GlycoGenesys, Inc. and Dr. Platt's notice of intent to terminate his license with such company.

**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 March 30, 2004.

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/    DAVID PLATT</u> David Platt, Ph.D.	President, Chief Executive Officer and Director	March 30, 2004
<u>/s/    CHARLES F. HARNEY</u> Charles F. Harney	Chief Financial Officer (Principal Financial and Accounting Officer)	March 30, 2004
<u>/s/    EDGAR BEN-JOSEF</u> Edgar Ben-Josef, M.D.	Director	March 30, 2004
<u>/s/    MILDRED S. CHRISTIAN</u> Mildred S. Christian, Ph.D.	Director	March 30, 2004
<u>/s/    DALE H. CONAWAY</u> Dale H. Conaway, D.V.M.	Director	March 30, 2004
<u>/s/    BURTON C. FIRTEL</u> Burton C. Firtel	Director	March 30, 2004
<u>/s/    STEVEN PRELACK</u> Steven Prelack	Director	March 30, 2004
<u>/s/    JERALD K. ROME</u> Jerald K. Rome	Director	March 30, 2004
<u>/s/    DAVID H. SMITH</u> David H. Smith	Director	March 30, 2004



**Index to Consolidated Financial Statements**

	<b>Page</b>
1. <a href="#">Independent Auditors' Report</a>	F-1
2. <a href="#">Consolidated Balance Sheets as of December 31, 2003 and 2002</a>	F-2
3. <a href="#">Consolidated Statements of Operations for each of the three years in the period ended December 31, 2003, and for the cumulative period from inception (July 10, 2000) to December 31, 2003</a>	F-3
4. <a href="#">Consolidated Statements of Stockholders' Equity for each of the three years in the period ended December 31, 2003, and for the cumulative period from inception (July 10, 2000) to December 31, 2003</a>	F-4
5. <a href="#">Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2003, and for the cumulative period from inception (July 10, 2000) to December 31, 2003</a>	F-6
6. <a href="#">Notes to Consolidated Financial Statements</a>	F-7

**INDEPENDENT AUDITORS' REPORT**

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

We have audited the accompanying consolidated balance sheets of Pro-Pharmaceuticals, Inc. (a development stage company) (the "Company") as of December 31, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2003, and for the period from inception (July 10, 2000) to December 31, 2003. 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 auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2003 and 2002, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2003, and for the period from inception (July 10, 2000) to December 31, 2003 in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP  
Boston, Massachusetts  
March 30, 2004

[Table of Contents](#)**PRO-PHARMACEUTICALS, INC.**  
**(A Development-Stage Company)****CONSOLIDATED BALANCE SHEETS**  
DECEMBER 31, 2003 AND 2002

	<u>2003</u>	<u>2002</u>
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 7,607,818	\$ 1,921,233
Prepaid expenses and other current assets	88,429	72,733
<b>Total current assets</b>	<b>7,696,247</b>	<b>1,993,966</b>
<b>PROPERTY AND EQUIPMENT—NET</b>	<b>143,933</b>	<b>177,160</b>
<b>INTANGIBLE ASSETS—NET</b>	<b>134,844</b>	<b>85,090</b>
<b>DEPOSITS AND OTHER ASSETS</b>	<b>26,951</b>	<b>26,951</b>
<b>TOTAL ASSETS</b>	<b>\$ 8,001,975</b>	<b>\$ 2,283,167</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 143,749	\$ 279,686
Accounts payable—related party	22,306	23,213
Accrued expenses—related party	—	122,046
Other accrued expenses	211,854	67,598
Offering costs payable	—	174,250
<b>Total current liabilities</b>	<b>377,909</b>	<b>666,793</b>
<b>COMMITMENTS AND CONTINGENCIES (Note 9)</b>		
<b>STOCKHOLDERS' EQUITY:</b>		
Common stock, \$0.001 par value; 100,000,000 shares authorized; 5,000,000 undesignated shares; 24,079,300 and 19,034,647 shares of common stock issued and outstanding at December 31, 2003 and 2002, respectively	24,079	19,034
Additional paid-in capital	20,376,051	9,635,531
Stock subscriptions receivable	—	(150,000)
Deferred compensation	(69,711)	(54,959)
Deficit accumulated during the development stage	(12,706,353)	(7,833,232)
<b>Total stockholders' equity</b>	<b>7,624,066</b>	<b>1,616,374</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 8,001,975</b>	<b>\$ 2,283,167</b>

See notes to consolidated financial statements.

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

**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**YEARS ENDED DECEMBER 31, 2003, 2002 AND 2001, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2003**

	Years Ended December 31,			Cumulative Period from Inception (July 10, 2000) to December 31, 2003
	2003	2002	2001	
<b>OPERATING EXPENSES: (a)</b>				
Research and development	\$ 1,950,299	\$ 1,483,027	\$ 893,457	\$ 4,427,033
General and administrative	2,987,867	1,804,192	1,288,634	6,147,393
<b>Total operating expenses</b>	<b>(4,938,166)</b>	<b>(3,287,219)</b>	<b>(2,182,091)</b>	<b>(10,574,426)</b>
<b>INTEREST AND OTHER INCOME</b>	<b>68,925</b>	<b>24,258</b>	<b>24,917</b>	<b>118,361</b>
<b>INTEREST AND OTHER EXPENSES:</b>				
Amortization of debt discount on convertible notes	—	—	1,241,357	1,258,012
Debt conversion expense	—	—	503,019	503,019
Interest expense on convertible notes	—	415,416	68,723	485,377
Other interest expense	3,880	—	—	3,880
<b>Total interest and other expenses</b>	<b>(3,880)</b>	<b>(415,416)</b>	<b>(1,813,099)</b>	<b>(2,250,288)</b>
<b>NET LOSS</b>	<b>\$ (4,873,121)</b>	<b>\$ (3,678,377)</b>	<b>\$ (3,970,273)</b>	<b>\$ (12,706,353)</b>
<b>NET LOSS PER SHARE—BASIC AND DILUTED</b>	<b>\$ (0.23)</b>	<b>\$ (0.22)</b>	<b>\$ (0.29)</b>	
<b>WEIGHTED AVERAGE COMMON SHARES OUTSTANDING—BASIC AND DILUTED</b>	<b>21,360,572</b>	<b>16,374,524</b>	<b>13,601,795</b>	
<b>(a) The following summarizes the allocation of the stock-based compensation charge:</b>				
Research and development	\$ 135,152	\$ —	\$ —	\$ 135,152
General and administrative	483,714	105,329	147,317	736,360
<b>Total</b>	<b>\$ 618,866</b>	<b>\$ 105,329</b>	<b>\$ 147,317</b>	<b>\$ 871,512</b>

See notes to consolidated financial statements.

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

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**YEARS ENDED DECEMBER 31, 2003, 2002 AND 2001, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2003**

	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	\$ 12,355	\$ (3,355)	\$ —	\$ —	\$ —	\$ 9,000
Beneficial conversion feature and rights to common stock embedded in convertible note	—	—	221,910	—	—	—	221,910
Net loss	—	—	—	—	—	(184,582)	(184,582)
<b>BALANCE, DECEMBER 31, 2000</b>	<b>12,354,670</b>	<b>12,355</b>	<b>218,555</b>	<b>—</b>	<b>—</b>	<b>(184,582)</b>	<b>46,328</b>
Issuance of common stock and beneficial conversion feature related to convertible note	660,321	660	1,035,442	—	—	—	1,036,102
Issuance of common stock in connection with reverse merger of Pro-Pharmaceuticals-NV	1,221,890	1,222	105,778	—	—	—	107,000
Conversion of notes payable and accrued interest to common stock	598,229	598	1,125,004	—	—	—	1,125,602
Issuance of warrants to induce conversion of notes payable	—	—	503,019	—	—	—	503,019
Issuance of common stock and warrants (net of issuance costs of \$16,750)	689,300	689	2,220,061	—	—	—	2,220,750
Deferred compensation relating to issuance of stock options	—	—	238,892	—	(238,892)	—	—
Amortization of deferred compensation	—	—	—	—	147,317	—	147,317
Net loss	—	—	—	—	—	(3,970,273)	(3,970,273)
<b>BALANCE, DECEMBER 31, 2001</b>	<b>15,524,410</b>	<b>15,524</b>	<b>5,446,751</b>	<b>—</b>	<b>(91,575)</b>	<b>(4,154,855)</b>	<b>1,215,845</b>
Issuance of common stock (net of issuance costs of \$49,208)	185,999	186	601,603	—	—	—	601,789
Issuance of common stock related to 2002 private placement (net of issuance costs of \$212,458)	3,223,360	3,223	3,007,679	(150,000)	—	—	2,860,902
Conversion of notes payable and accrued interest to common stock	100,878	101	274,798	—	—	—	274,899
Stock compensation expense related to issuance of options to consultant	—	—	41,056	—	—	—	41,056
Issuance of warrants to purchase common stock in consideration for placement of convertible notes payable	—	—	235,987	—	—	—	235,987
Deferred compensation relating to issuance of stock options	—	—	10,901	—	(10,901)	—	—
Amortization of deferred compensation	—	—	—	—	47,517	—	47,517
Stock compensation expense related to fair market revaluation	—	—	16,756	—	—	—	16,756
Net loss	—	—	—	—	—	(3,678,377)	(3,678,377)

(Continued)

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

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**YEARS ENDED DECEMBER 31, 2003, 2002 AND 2001, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2003**

	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	19,034	9,635,531	(150,000)	(54,959)	(7,833,232)	1,616,374
Issuance of common stock to investors in 2002 Private Placement (net of issuance costs of \$17,500)	1,088,000	1,088	1,069,412	—	—	—	1,070,500
Issuance of common stock to consultants for services related to 2002 Private Placement	12,250	12	12,238	—	—	—	12,250
Receipt of subscription receivable	—	—	—	150,000	—	—	150,000
Conversion of accrued expenses to common stock and options	201,704	202	302,304	—	—	—	302,506
Issuance of common stock to investors in 2003 private placements (net of issuance costs of \$688,309)	3,719,070	3,719	7,028,726	—	—	—	7,032,445
Fair value of common stock warrants issued to investors in 2003 private placements	—	—	1,242,270	—	—	—	1,242,270
Fair value of common stock warrants issued to placement agents in 2003 private placements	—	—	451,977	—	—	—	451,977
Stock compensation expense related to issuance of common stock and options	7,000	7	148,739	—	—	—	148,746
Issuance of common stock options in consideration for investor relations services	—	—	29,280	—	—	—	29,280
Stock compensation expense related to accelerated option vesting	—	—	40,000	—	—	—	40,000
Cashless exercise of employee stock options	16,629	17	73,983	—	—	—	74,000
Deferred compensation relating to issuance of stock options	—	—	204,731	—	(204,731)	—	—
Amortization of deferred compensation	—	—	—	—	326,839	—	326,839
Deferred compensation expense related to fair market revaluation	—	—	136,860	—	(136,860)	—	—
Net loss	—	—	—	—	—	(4,873,121)	(4,873,121)
BALANCE, DECEMBER 31, 2003	24,079,300	\$ 24,079	\$ 20,376,051	\$ —	\$ (69,711)	\$ (12,706,353)	\$ 7,624,066

(Concluded)

See notes to consolidated financial statements.

[Table of Contents](#)

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

**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**YEARS ENDED DECEMBER 31, 2003, 2002 AND 2001, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2003**

	Years Ended December 31,			Cumulative Period from Inception (July 10, 2000) to December 31, 2003
	2003	2002	2001	
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>				
Net loss	\$ (4,873,121)	\$ (3,678,377)	\$ (3,970,273)	\$ (12,706,353)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	89,173	43,683	12,156	145,012
Stock-based compensation expense	618,866	105,329	147,317	871,512
Amortization of deferred extension costs through interest expense	—	167,497	—	167,497
Settlement of accrued interest through issuance of common stock	—	10,274	—	10,274
Amortization of debt discount on convertible notes	—	—	1,241,357	1,258,012
Writeoff of intangible assets	—	—	107,000	107,000
Debt conversion expense	—	—	503,019	503,019
Interest expense related to issuance of warrants to purchase common stock	—	235,987	—	235,987
Changes in current assets and liabilities:				
Prepaid expenses and other current assets	(15,696)	11,164	(80,769)	(85,301)
Deposits and other assets	—	—	(12,451)	(26,951)
Accounts payable and accrued expenses	28,621	121,841	253,335	497,136
Net cash used in operating activities	(4,152,157)	(2,982,602)	(1,799,309)	(9,023,156)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>				
Purchases of property and equipment	(39,360)	(109,303)	(123,696)	(272,359)
Increase in patents costs and other assets	(66,340)	(28,975)	(47,420)	(151,430)
Net cash used in investing activities	(105,700)	(138,278)	(171,116)	(423,789)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>				
Net proceeds from issuance of common stock and warrants	9,944,442	3,636,941	2,220,750	15,811,133
Net proceeds from issuance of convertible notes payable	—	—	1,036,102	1,320,602
Repayment of convertible notes payable	—	(86,000)	—	(86,000)
Proceeds from shareholder advances	—	—	—	9,028
Net cash provided by financing activities	9,944,442	3,550,941	3,256,852	17,054,763
NET INCREASE IN CASH AND CASH EQUIVALENTS	5,686,585	430,061	1,286,427	7,607,818
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	1,921,233	1,491,172	204,745	—
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 7,607,818	\$ 1,921,233	\$ 1,491,172	\$ 7,607,818
SUPPLEMENTAL DISCLOSURE – Cash paid for interest	\$ 490	\$ 17,051	\$ —	\$ 18,779
<b>NONCASH FINANCING ACTIVITIES</b>				
Issuance of warrants in connection with equity offerings	1,503,259	235,987	866,328	2,605,574
Conversion of accrued expenses into common stock	302,506	—	—	302,506
Cashless exercise of employee stock options	74,000	—	—	74,000
Conversion of convertible notes and accrued interest into common stock	—	94,000	1,125,602	1,219,602
Conversion of extension costs related to convertible notes into common stock	—	170,625	—	170,625
Issuance of warrants to induce conversion of notes payable	—	—	503,019	503,019
Issuance of stock to acquire Pro-Pharmaceuticals-NV	—	—	107,000	107,000

See notes to consolidated financial statements.

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

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

---

**1. NATURE OF BUSINESS AND BASIS OF PRESENTATION**

*Nature of Business* – Pro-Pharmaceuticals, Inc. (the “Company”) is a development stage life sciences company established in July 2000. The Company is in the process of developing technology that is intended to reduce toxicity and improve the efficacy of chemotherapy drugs by combining the drugs with a number of proprietary carbohydrate compounds. The carbohydrate-based drug delivery system may also have applications 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 trials in February 2003. This same product candidate began concurrent Phase II clinical trials in January 2004.

As shown in the consolidated financial statements, the Company incurred net losses of \$12,706,353 for the cumulative period from inception (July 10, 2000) through December 31, 2003. The Company expects to incur additional losses and use additional cash in its operations in the near future. To date, the Company has raised \$17,131,735 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, 2003, the Company used cash of \$9,023,156 in its operations. At December 31, 2003, the Company had \$7,607,818 of cash and cash equivalents available to fund future operations, which management believes is sufficient cash to fund its operations through at least April 30, 2005.

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:

<u>Asset Classification</u>	<u>Estimated Useful Life</u>
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 the estimated useful lives of the patents. As of December 31, 2002, all patents were pending and none of the costs had been amortized. During 2003, the Company was issued two patents and began amortizing the costs relating to the issued patents over their estimated useful lives of five years. Amortization expense in 2003 and accumulated amortization at December 31, 2003 totaled \$16,586.

*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 2003 and 2002, the Company recorded no adjustment to the carrying value of the long-lived assets. In 2001, the Company determined that the carrying amount of the contractual rights of its amortizing intangible assets exceeded the future undiscounted cash flows by approximately \$107,000, which the Company wrote off as of December 31, 2001.

## [Table of Contents](#)

*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, 2003, the Company has one equity incentive plan, which is 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.

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:

	2003	2002	2001	Cumulative Period from Inception (July 10, 2000) to December 31, 2003
Risk-free interest rate	1.51% - 2.45%	2.25% - 2.32%	3.91%	1.51% - 3.91%
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

Stock-based compensation expense totaled \$618,866, \$105,329 and \$147,317 in 2003, 2002, and 2001, respectively. In addition, the Company has issued warrants in connection with certain equity and debt financings. Based on the nature of the transactions, the fair value of these warrants has been recorded as offering costs or interest expense, as appropriate—see Note 7.

## [Table of Contents](#)

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:

	2003	2002	2001	Cumulative Period from Inception (July 10, 2000) to December 31, 2003
Net loss—as reported	\$(4,873,121)	\$(3,678,377)	\$(3,970,273)	\$ (12,706,353)
Add stock-based compensation expense included in reported net loss	114,000	—	—	114,000
Deduct stock-based compensation determined under the fair-value method	(2,938,135)	(354,160)	—	(3,292,295)
Net loss—pro forma	\$(7,697,256)	\$(4,032,537)	\$(3,970,273)	\$ (15,884,648)
Basic and diluted loss per share:				
As reported	\$ (0.23)	\$ (0.22)	\$ (0.29)	
Pro forma	\$ (0.36)	\$ (0.25)	\$ (0.29)	

*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, 2003, 2002 and 2001 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:

	2003	2002	2001
Shares for basic computation	21,360,572	16,374,524	13,601,795
Effect of dilutive stock options and warrants	—	—	—
Shares for dilutive computation	21,360,572	16,374,524	13,601,795

Anti-dilutive shares were not included in the per-share calculations for the years ended December 31, 2003, 2002 and 2001 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, 2003, 2002 and 2001 totaled approximately 4,434,890, 1,852,423 and 2,078,091, respectively.

## [Table of Contents](#)

*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.

*Reclassifications* – Certain prior period amounts have been reclassified to conform to the current year presentation.

*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.

### 3. **PROPERTY AND EQUIPMENT**

Property and equipment consists of the following at December 31:

	<u>2003</u>	<u>2002</u>
Leasehold improvements	\$ 103,762	\$ 103,762
Computer and office equipment	100,850	76,675
Furniture and fixtures	67,747	52,562
	<u>          </u>	<u>          </u>
Total	272,359	232,999
Less accumulated depreciation	(128,426)	(55,839)
	<u>          </u>	<u>          </u>
Property and equipment—net	<u>\$ 143,933</u>	<u>\$ 177,160</u>

### 4. **OTHER ACCRUED EXPENSES**

Other accrued expenses consist of the following at December 31:

	<u>2003</u>	<u>2002</u>
Legal and accounting fees	\$ 141,814	\$ 22,457
Scientific and clinical fees	40,500	—
Accrued vacation	13,846	15,000
Other	15,694	30,141
	<u>          </u>	<u>          </u>
Total	<u>\$ 211,854</u>	<u>\$ 67,598</u>

**5. RELATED PARTY TRANSACTIONS**

For the period from inception (July 10, 2000) through December 31, 2000, the Company paid two of its stockholders \$25,000 and \$12,500, 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 \$8,000 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 \$162,000, \$202,000 and \$203,000 for 2003, 2002 and 2001, 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 \$122,000 as an accrued liability. The common stock has been valued at \$76,062, based on the closing price of the publicly traded shares of common stock on the date of grant. The options were valued at \$45,984 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 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 \$1,036,102 and \$284,500 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 \$1,125,602 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 \$503,019 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 \$195,000 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 \$170,625 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, \$80,000 in convertible notes payable and \$10,274 in related accrued interest was converted into 45,128 shares of common stock. In October 2002, the Company settled a convertible note payable of

\$100,000 through a cash payment of \$86,000 and conversion of the remaining \$14,000 of principal into 7,000 shares of common stock pursuant to the original terms of the note. In addition, \$17,051 of related accrued interest was repaid in cash.

During 2002, \$167,497 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 \$2,220,750, net of \$16,750 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 \$601,789, net of \$49,208 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 \$2,860,902, net of issuance costs of \$212,458 and stock subscription receivable of \$150,000, 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 1,088,000 shares for additional proceeds of \$1,070,500, net of \$17,500 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 \$2,500 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 \$17,500 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 \$6,300. 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 \$21,000 to general and administrative expenses in 2003 representing the fair value of the additional 7,000 shares.

## [Table of Contents](#)

*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 \$4,394,065, net of issuance costs of \$404,935. The issuance costs include \$260,989 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 (exercisable at \$5.29 per share) for proceeds of \$3,865,650, net of issuance costs of \$735,350. The issuance costs include \$190,988 related to the fair value of 65,729 common stock warrants (exercisable at \$6.86 per share) issued to the placement agent 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, 2003:

<u>Issued in Connection With</u>	<u>Number Issued</u>	<u>Exercise Price</u>	<u>Exercisable Date</u>	<u>Expiration Date</u>
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	5.29	October 2, 2003	October 2, 2008
Placement Agent	65,279	6.86	October 2, 2003	October 2, 2006
<b>Total</b>	<b>2,194,286</b>			

None of the above warrants have been exercised as of December 31, 2003.

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 \$886,328 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

\$1,125,602 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 \$503,019 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 \$235,987 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 \$260,989 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 exercise price of \$5.29 per share to the investors and 65,279 warrants with an exercise price of \$6.86 per share to its placement agent. 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. Accordingly, \$1,242,270 of the proceeds has been attributed to the warrants and recorded as an increase to additional paid-in capital. The \$190,988 fair value of the warrants issued to the placement agent has been recorded as offering costs and a corresponding increase to additional paid-in capital.

In 2004, the Company’s Board of Directors approved an increase, subject to stockholder approval, of 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 would be 10,000,000. The Company intends to present the matter to its stockholders for approval at the next meeting of stockholders.

## **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 two years, and expire 5 years to 10 years from the grant date. At December 31, 2003, there were 189,000 shares available for future grant under the Incentive Plan. In 2004, the Board approved an increase, subject to stockholder approval, of 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 following the effectiveness of such increase would be 5,000,000. The Company intends to present the matter to its stockholders for approval at the next meeting of stockholders.



## [Table of Contents](#)

In September 2003, the Company's Board of Directors adopted 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 Company intends to present the Director Plan for approval at the next meeting of its stockholders. The Board reserved 1,000,000 shares of common stock for issuance upon exercise of grants made under the Director Plan. No grants have been made 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, 2003.

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

	Shares	Exercise Price Per Share	Weighted Average Exercise Price
Outstanding, December 31, 2001	200,000	\$ 3.50	\$ 3.50
Granted	369,000	3.50	3.50
Exercised	—	—	—
Cancelled	—	—	—
	<hr/>	<hr/>	<hr/>
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
	<hr/>	<hr/>	<hr/>
Outstanding, December 31, 2003	2,225,604	\$ 2.92 – 4.05	\$ 3.76

The following tables summarize information about stock options outstanding at December 31, 2003:

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
\$ 2.92 – \$ 4.05	2,225,604	8.55	\$ 3.76	1,866,938	\$ 3.73

The 358,666 of unvested options at December 31, 2003 vest as follows: 325,333 in 2004 and 33,333 in 2005.

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 \$238,892 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 \$27,613 and \$16,756 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 \$71,671, \$64,273 and \$147,317, 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 \$41,056 charge to stock compensation expense related to the

## [Table of Contents](#)

20,000 options that vested during the year under the amended agreement. As of December 31, 2002, the Company had deferred compensation of \$10,901 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. During 2003, the Company recorded fair value adjustments of \$21,183 and stock compensation charges of \$39,692 related to the options that vested during the year under the agreement. As of December 31, 2002, the Company had deferred compensation of \$14,894 that related to the remaining unvested options, which will be recognized in 2004.

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. During 2003, the Company recorded fair value adjustments of \$82,327 and stock compensation charges of \$191,605 related to these options. As of December 31, 2003, the Company had deferred compensation of \$46,543 related to the unvested options, which will be recognized over the future vesting period.

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. During 2003, the Company recorded fair value adjustments of \$5,737 and stock compensation charges of \$12,970 related to these options. As of December 31, 2003, the Company had deferred compensation of \$8,274 related to the unvested options, which will be recognized over the future vesting period.

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 \$122,092 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 \$40,000 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 \$74,000 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 \$29,280 as stock compensation expense on the 15,000 options that vested as of December 31, 2003. The \$29,280 fair value was determined based on a fair market value of the Company's common stock when vested. The Company will record additional stock compensation expense of approximately \$23,000 in 2004 relating to the 10,000 options earned by such firm for services in January and February 2004.

## 9. COMMITMENTS AND CONTINGENCIES

*Research and Development Commitments* – During 2002, the Company entered into contracts with PRA International, Inc. (“PRA”), a clinical research organization, and Medidata, Inc. (“Medidata”), a data management company, the initial assignments under which are to assist with the Phase I clinical trials of the Company’s DAVANAT<sup>®</sup> product in combination with 5-Fluorouracil, a chemotherapy drug the Company designated DAVANAT<sup>®</sup>-1. PRA will serve as the overall manager of the clinical trials 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. Medidata was engaged for purposes of electronic collection, analysis and management of the data generated by the Company’s Phase I clinical trials. The Company’s expenditure commitment under its Medidata contract, terminable at any time upon 30 days’ notice, represents 15% 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 May 2004.

*Lease Commitments* – The Company leases its facility under a noncancelable 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, 2002 are approximately as follows:

<u>Year Ending December 31,</u>	
2004	107,000
2005	109,000
2006	46,000
<b>Total lease payments</b>	<b>\$262,000</b>

Rent expense under this operating lease was \$110,300, \$98,000, \$50,000 and \$258,300 for the years ended December 2003, 2002, 2001 and the cumulative period from inception (July 10, 2000) to December 31, 2003, respectively.

*Contingency* – On May 14, 2003, a former employee, who was the Company’s Vice President of Investor Relations and Corporate Strategy, commenced a lawsuit in Massachusetts 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 seeks monetary damages and reinstatement of her position. On August 25, 2003, the Department of Labor reported that its investigator found the Plaintiff’s allegations are without merit and dismissed the complaint. The Plaintiff objected to the findings and requested a hearing by an Administrative Law Judge at the Department. Other than continuation of pre-trial discovery, there have been no material developments. On October 31, 2003, the Company received an informal inquiry from the Securities and Exchange Commission requesting information related to the foregoing. The Company timely responded in November and December 2003 and has not received a further communication from the SEC on this matter. On February 13, 2004, the Company received an order from the Commonwealth of Massachusetts to provide information concerning its offerings of securities. The Company timely responded and believes its offerings comply with Massachusetts law. The Company believes the Massachusetts investigation may be related to the matters disclosed in the preceding paragraph.

Each of the foregoing matters is subject to various uncertainties, and it is possible one or more may be resolved unfavorably. Management believes that any liability that may ultimately result from the resolution of these matters will not have a material adverse effect on the financial position, results of operations or cash flows of the Company.

## [Table of Contents](#)

On January 29, 2004, Dr. Platt, the Company's Chairman and Chief Executive Officer filed a lawsuit in Massachusetts against GlycoGenesys, Inc. for various claims including breach of contract. In its answer GlycoGenesys names the Company as a counterclaim defendant alleging tortious interference and misappropriation of proprietary rights, and seeks monetary damages and injunctive relief related to the Company's intellectual property. On March 19, 2004, the Company answered these counterclaims and denied any liability. The Company and Dr. Platt intend to contest these counterclaims vigorously and believe they will 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.

### 10. INCOME TAXES

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

	2003	2002
Operating loss carryforwards	\$ 4,120,000	\$ 2,299,000
Tax credit carryforwards	250,000	138,000
Other temporary differences	(4,000)	(4,000)
	4,366,000	2,433,000
Less valuation allowance	(4,366,000)	(2,433,000)
Net deferred tax asset	\$ —	\$ —

As of December 31, 2003, the Company has federal and state net operating loss carryforwards totaling approximately \$9,600,000 and \$8,900,000, respectively, which expire beginning in 2022. In addition, the Company has federal and state research and development and investment tax credits of approximately \$165,000 and \$85,000, respectively, which expire beginning in 2018. 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, in each of the last two years, 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
<b>2003</b>				
Operating expenses	\$ 953,066	\$ 981,856	\$ 1,399,988	\$ 1,603,256
Net loss	(944,866)	(974,608)	(1,382,455)	(1,571,192)
Net loss per share:				
Basic	(0.05)	(0.05)	(0.06)	(0.07)
Diluted	(0.05)	(0.05)	(0.06)	(0.07)
<b>2002</b>				
Operating expenses	\$ 717,169	\$ 841,501	\$ 639,022	\$ 1,089,527
Net loss	(952,293)	(942,410)	(663,560)	(1,120,114)
Net loss per share:				
Basic	(0.06)	(0.06)	(0.04)	(0.06)
Diluted	(0.06)	(0.06)	(0.04)	(0.06)

\* \* \* \* \*

**Pro-Pharmaceuticals, Inc.**  
**CONSULTING AGREEMENT**

**THIS AGREEMENT** is made this 12<sup>th</sup> day of November 2003 by and among PRO-PHARMACEUTICALS, INC., a Nevada corporation having an address of 189 Wells Avenue, Newton, Massachusetts 02459 and its subsidiaries worldwide ("Pro-Pharmaceuticals"); The Harney Group, a Massachusetts Sole Proprietorship, having an address of 231 Main Street, Bolton, MA 01740-1144 ("Contractor"); and Charles F. Harney, an individual engaged by Contractor ("Consultant").

WHEREAS, Pro-Pharmaceuticals is currently engaged in the research and development of glycoscience-based oncologic therapeutics;

WHEREAS, Pro-Pharmaceuticals wishes to engage the services of Consultant, and Consultant desires to provide such services, upon the terms and conditions set forth herein; and

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

**1. Work and Payment.** The Contractor shall provide the services set forth in the statement of work attached hereto as Exhibit A (the "SOW"). Such services shall be performed, unless Pro-Pharmaceuticals otherwise consents, personally and exclusively by Consultant who shall report to the Chief Operating Officer. Pro-Pharmaceuticals shall compensate Contractor in the amount and manner stated in the SOW. The foregoing notwithstanding, Contractor may engage, or propose that Pro-Pharmaceuticals engage, one or more other persons to perform services contemplated by the SOW, provided, however, that (i) the Consultant shall directly supervise such services and (ii) the terms and conditions of any such engagement shall be set forth in a written agreement acceptable to Pro-Pharmaceuticals whether or not it is a party thereto.

**2. Nondisclosure and Trade Secrets.** (a) During the term of this Agreement and in the course of Contractor's performance hereunder, Contractor may receive and otherwise be exposed to Pro-Pharmaceuticals' confidential and proprietary information. Such confidential and proprietary information includes, without limitation, information supplied to Contractor with the legend "Confidential" or words of similar meaning, marketing and customer support strategies including, without limitation, website password and password-protected material, financial information, including without limitation, sales, costs, profits and pricing methods, internal organization information, employee information and customer lists, technology information, including without limitation, discoveries, inventions, research and development efforts, processes, hardware/software design and maintenance tools, samples, media and/or cell lines (and procedures and formulations for producing any such samples, media and/or cell lines), formulas, methods, product know-how and show-how, and all derivatives, improvements and enhancements to any of the above whether created or developed by Contractor under this Agreement or otherwise and information of third parties as to which Pro-Pharmaceuticals has an obligation of confidentiality (collectively referred to as "Confidential Information"); provided, however, that Confidential Information shall not include information which (a) is now or hereafter becomes, through no act or failure of any party hereto, generally known or available; (b) is known by the Contractor or Consultant at the time of receiving such information; (c) is hereafter furnished to the Contractor or Consultant as a matter of right and without restriction on disclosure; (d) is independently developed by the Contractor or Consultant without any breach of this Agreement; or (e) is the subject of written permission to disclose by Pro-Pharmaceuticals.

(b) Contractor acknowledges the confidential and secret character of the Confidential Information, and agrees that the Confidential Information is the sole, exclusive and extremely valuable property of

Pro-Pharmaceuticals. Accordingly, Contractor agrees (i) not to reproduce any of the Confidential Information without the prior written consent of Pro-Pharmaceuticals, (ii) not to use the Confidential Information except in the performance of this Agreement, and (iii) not to disclose all or any part of the Confidential Information in any form to any third party, either during or after the term of this Agreement. Upon termination of this Agreement for any reason, including expiration of term, Contractor agrees to cease using and return to Pro-Pharmaceuticals all whole and partial copies and derivatives of the Confidential Information, whether in Contractor's possession or under Contractor's direct or indirect control.

(c) Contractor shall not disclose or otherwise make available to Pro-Pharmaceuticals in any manner other than as is necessary in the course of providing services hereunder any confidential information of Contractor. Contractor shall not disclose or otherwise make available to Pro-Pharmaceuticals in any manner information received by Contractor from third parties as to which Contractor has an obligation of confidentiality.

**3. Non-Solicitation.** The Contractor shall not, directly or indirectly, entice, solicit or encourage any Pro-Pharmaceuticals employee to leave the employ of Pro-Pharmaceuticals, nor shall the Contractor, directly or indirectly, be involved in the recruitment of any Pro-Pharmaceuticals employee, within a period of one year after such person is no longer employed by Pro-Pharmaceuticals.

**4. Ownership of Work Product.** (a) Contractor and Consultant shall specifically describe and identify in Exhibit B to this Agreement all technology (i) which Contractor or Consultant intends to use in performing under this Agreement, (ii) which is either owned solely by Contractor or Consultant or licensed to Contractor or Consultant with a right to sublicense, and (iii) which is in existence in the form of a writing or working prototype prior to the effective date of this Agreement ("Background Technology").

(b) Contractor and Consultant agree that any and all ideas, improvements, inventions and works of authorship conceived, written, created or first reduced to practice in the performance of services under this Agreement shall be the sole and exclusive property of Pro-Pharmaceuticals and hereby assigns to Pro-Pharmaceuticals all their respective right, title and interest in and to any and all such ideas, improvements, inventions and works of authorship. Any works of authorship shall be deemed works made for hire under U.S. copyright law.

(c) Contractor and Consultant further agree that except for Contractor's or Consultant's rights in Background Technology, Pro-Pharmaceuticals is and shall be vested with all rights, title and interests including patent, copyright, trade secret and trademark rights in all Work Product (as defined herein below) under this Agreement.

(d) Contractor and /or Consultant shall execute all papers, including, without limitation, patent applications, invention assignments and copyright assignments, and otherwise shall assist Pro-Pharmaceuticals as reasonably required to perfect in Pro-Pharmaceuticals the rights, title and other interests in the Work Product (as defined hereinbelow) expressly granted to Pro-Pharmaceuticals under this Agreement. Costs related to such assistance, if required, shall be paid by Pro-Pharmaceuticals.

**5. Outside Employment.** Pro-Pharmaceuticals acknowledges that during the term of this Agreement Contractor may be engaged by one or more institutions and that Consultant may be assigned work with respect to such engagements. Contractor represents and warrants that neither it nor any of its employees or independent contractors engaged by it for the purposes of this Agreement is or shall become a party to any agreement that conflicts with the duties hereunder. Contractor shall use best efforts to segregate work done under this Agreement from work performed for any other institution, or performed with Government funding such that no obligations with regard to disclosure of Confidential Information or limitations on ownership by Pro-Pharmaceuticals of any Work Product (as defined below) will result. Pro-Pharmaceuticals may terminate this Agreement if in its sole opinion the performance of such work will conflict with its interests.

**6. Indemnification/Release.** Contractor warrants that it has good and marketable title to all of the inventions, information, material, or work product made, created, conceived, written, invented or provided by Contractor pursuant to the provisions of this Agreement (“Work Product”). Contractor further warrants that the Work Product shall be free and clear of all liens, claims, encumbrances or demands of third parties, including any claims by any third parties of any right, title or interest in or to the Work Product arising out of any trade secret, copyright or patent or otherwise. Contractor shall indemnify, defend and hold harmless Pro-Pharmaceuticals and its officers, agents, directors, employees, and customers from and against any claim, loss, judgment or expense (including reasonable attorneys’ and expert witnesses’ fees and costs) resulting from or arising in any way out of any such claims by any third parties which are based upon or are the result of any breach of the warranties contained in this Section 6. In the event of a breach or threatened breach of the foregoing warranty, Contractor shall, at no additional cost to Pro-Pharmaceuticals, replace or modify the Work Product with functionally equivalent and conforming Work Product, obtain for Pro-Pharmaceuticals the right to continue using the Work Product and, in all other respects, use its best efforts to remedy the breach. Contractor shall have no liability under this Section 6 for any Work Product created in accordance with detailed and specific design instructions provided to Contractor by Pro-Pharmaceuticals.

Should Pro-Pharmaceuticals permit Contractor to use any of Pro-Pharmaceuticals’ equipment, tools or facilities during the term of this Agreement, such permission will be gratuitous and Contractor shall indemnify and hold harmless Pro-Pharmaceuticals and its officers, agents, directors, and employees from and against any claim, loss, judgment, expense (including reasonable attorneys’ and expert witnesses’ fees and costs) and injury to person or property (including death) arising out of the use of any such equipment, tools or facilities, whether or not such claim is based upon its condition or on the alleged negligence of Pro-Pharmaceuticals in permitting its use.

**7. Termination.** Pro-Pharmaceuticals or Contractor may terminate for convenience with thirty (30) days’ written notice any services being performed pursuant to the SOW or otherwise. In such event, Contractor shall cease work immediately after receiving notice from Pro-Pharmaceuticals, unless otherwise advised by Pro-Pharmaceuticals, and shall notify Pro-Pharmaceuticals of costs incurred up to the termination date. Notwithstanding the termination of the Agreement for any reason, Sections 2, 3, 4, 5, 6, 8, 9, 10 and 11 hereof shall survive.

**8. Compliance with Applicable Laws.** Contractor warrants that all material supplied and work performed under this Agreement complies with or will comply with all applicable United States and foreign laws and regulations.

**9. Independent Contractor.** Each of Contractor and Consultant is an independent contractor, is not an agent or employee of Pro-Pharmaceuticals and is not authorized to act on behalf of Pro-Pharmaceuticals. Neither Contractor nor Consultant will be eligible for any employee benefits of Pro-Pharmaceuticals. Pro-Pharmaceuticals will not make deductions from any amounts payable to Contractor for taxes. Taxes shall be the sole responsibility of Contractor.

**10. Legal And Equitable Remedies.** Contractor hereby acknowledges and agrees that in the event of any breach of this Agreement by Contractor, including, without limitation, the actual or threatened disclosure of Information without the prior express written consent of Pro-Pharmaceuticals, Pro-Pharmaceuticals will suffer an irreparable injury, such that no remedy at law will afford it adequate protection against, or appropriate compensation for, such injury. Accordingly, Contractor hereby agrees that Pro-Pharmaceuticals shall be entitled to specific performance of Contractor’s obligations under this Agreement, as well as such further relief as may be granted by a court of competent jurisdiction.

**11. General.** The parties’ rights and obligations under this Agreement will bind and inure to the benefit of their respective successors, heirs, executors, and administrators and permitted assigns. This

Agreement and its Exhibits attached hereto and hereby incorporated herein constitute the parties' final, exclusive, and complete understanding and agreement with respect to the subject matter hereof, and supersede all prior and contemporaneous understandings and agreements relating to its subject matter. This Agreement may not be waived, modified, amended or assigned unless mutually agreed upon in writing by both parties. In the event any provision of this Agreement is found to be legally unenforceable, such unenforceability shall not prevent enforcement of any other provision of the Agreement. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts, excluding its conflicts of laws principles. Any notices required or permitted hereunder shall be given to the appropriate party at the address specified above or at such other address as the party shall specify in writing. Such notice shall be deemed given upon personal delivery, or sent by certified or registered mail, postage prepaid, three (3) days after the date of mailing.

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement as of the date first set forth above.

**PRO-PHARMACEUTICALS, INC.**

By:       /s/ Maureen Foley      

Title:       Chief Operating Officer      

**CONTRACTOR:**  
**THE HARNEY GROUP**

By:       /s/ Charles F. Harney      

Title:       President      

**CONSULTANT:**

      /s/ Charles F. Harney      

Charles F. Harney



## Exhibit A

### STATEMENT OF WORK

#### I. Consultant

**Work to be performed:** Review and advise as directed by Pro-Pharmaceuticals (PRW) on issues related to performing part-time Chief Financial Officer duties and related consulting services including, without limitation:

1. Attend Board of Directors meetings and provide updates to financial statements in accordance with generally accepted accounting principles in the United States and the rules of the Securities and Exchange Commission to management and the Board of Directors on a monthly, quarterly and annual basis as appropriate.
2. Complete PRW external financial reporting requirements to its shareholders, regulatory agencies and other third parties (i.e., Forms 10Q, 10K, Registration Statements, Quarterly/Annual Report to Shareholders, creditors, etc.).
3. Working closely with the COO, streamline the monthly and quarterly financial closing process to improve timeliness and reduce costs.
4. Provide necessary in-house accounting and financial expertise to manage audit functions and reduce dependence on independent auditors and outside accounting firm.
5. Review contracts from a financial and business perspective and advise management and Board of Directors as appropriate
6. Complete PRW budgets, forecasts and financial modeling as required.
7. Perform special projects as required (i.e., software accounting requirements, Sarbanes-Oxley requirements, etc.).

#### Rate of Payment:

#### II. General:

**Method of payment:** Invoices will be sent to Pro-Pharmaceuticals at the end of each month and will include dates of services and details of activities performed on those dates. Net payment due 30 days from receipt of invoice.

**Expenses to be paid/reimbursed:** Reasonable travel and accommodation expenses and miscellaneous expenses, such as telephone, courier, etc., in connection with the work performed under this Agreement.

All payments made pursuant to this Agreement shall be made to Contractor.

**EXHIBIT B**

**TO:** Pro-Pharmaceuticals, Inc.  
**FROM:** Charles F. Harney  
**DATE:**  
**SUBJECT:** Previous Inventions

1. Except as listed in Section 2 below, the following is a complete list of all inventions or improvements relevant to the subject matter of my consulting engagement by Pro-Pharmaceuticals, Inc. ("Pro-Pharmaceuticals") that have been made or conceived or first reduced to practice by me alone or jointly with others prior to my engagement by Pro-Pharmaceuticals:

- No inventions or improvements.
- See below:

---

---

---

Additional sheets attached.

2. Due to a prior confidentiality agreement, I cannot complete the disclosure under Section 1 above with respect to inventions or improvements generally listed below, the proprietary rights and duty of confidentiality with respect to which I owe to the following party(ies):

	Invention or Improvement	Party(ies)	Relationship
1.	<hr/>	<hr/>	<hr/>
2.	<hr/>	<hr/>	<hr/>
3.	<hr/>	<hr/>	<hr/>

Additional sheets attached.

## PRO-PHARMACEUTICALS, INC.

## EMPLOYMENT AGREEMENT

(David Platt)

EMPLOYMENT AGREEMENT, made this 2nd day of January, 2004 (the "Effective Date"), between Pro-Pharmaceuticals, Inc., a Nevada corporation having an address of 189 Wells Avenue, Newton, Massachusetts 02459 (the "**Company**"), and David Platt, an individual residing at 12 Appleton Circle, Newton, Massachusetts 02459 (the "**Executive**").

WHEREAS, the Executive is a founder of the Company and of its predecessor Massachusetts corporation of the same name and has been an employee of or otherwise engaged by the Company and its predecessor since the founding date of such Massachusetts corporation continuously until the Effective Date (such period of prior employment or engagement herein referred to as the "**Prior Engagement**");

WHEREAS, the Company recognizes that the Executive's talents and abilities are unique, and have been and will be integral to the success of the Company and thus the Company desires to secure the ongoing services of the Executive, on the terms and conditions set forth in this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the parties agree as follows:

**1. Employment.**

(a) The Company shall employ the Executive, and Executive agrees to be so employed, in the capacity of President and Chief Executive Officer of the Company. In such capacity, the Executive will have overall responsibility for the management of the Company. All employees will report directly to the Executive or his designee and the Executive will report directly to the Board of Directors of the Company (the "**Board**"). The Executive shall have the authority as Chief Executive Officer and President of the Company for all Company operational and strategic matters, subject to the general oversight of the Board. The Executive will render such business and professional services in the performance of his duties consistent with his position within the Company, as shall be assigned to the Executive by the Board.

(b) Executive's services shall be performed in the Company's Newton, Massachusetts offices, subject to such business travel as may be required from time to time.

(c) Executive shall serve as Chairman of the Board of Directors of the Company, subject to any required Board and/or shareholder approval.

**2. Term of Agreement.** This Agreement shall continue in full force and effect for the duration of Executive's employment with the Company, except as this Agreement may be amended or superceded by written agreement of the parties hereto.

### 3. Salary; Expenses; Bonus.

(a) Base Salary. The Executive's base salary for the period commencing on the date hereof will be not less than two hundred twenty thousand dollars (\$220,000) per year payable on the Company's regular payroll dates, less required withholdings. The Executive's base salary shall be reviewed at least annually and is subject to merit increases in connection therewith. Such salary as in effect from time to time is herein referred to as the "**Base Salary**".

(b) Bonus. The Executive shall be eligible for the following bonus compensation:

(i) Strategic Relationship. Upon consummation of a transaction with a pharmaceutical company expected to result in at least \$10,000,000 of equity investment or \$50,000,000 of royalty revenue to the Company or providing in the Board's determination some other substantial benefit to the Company, (A) a cash bonus of at least \$200,000, payable as the Board may determine, but not later than three (3) months after such consummation (a "Cash Bonus"), and (B) fully vested stock options to purchase at least 200,000 shares of the common stock of the Company ("**Common Stock**") exercisable for ten (10) years at a purchase price not less than the fair market value of the Common Stock determined in good faith by the Board as of the date of grant ("**Stock Options**").

(ii) IND. Upon approval by the Food and Drug Administration ("**FDA**") of each investigational new drug application ("**IND**") of the Company for commencement of human clinical trials, (A) a Cash Bonus of at least \$100,000 and (B) fully vested Stock Options to purchase at least 100,000 shares of the Common Stock;

(iii) NDA. Upon approval by the FDA of each new drug application ("**NDA**") for any drug or drug delivery candidate of the Company, (A) a Cash Bonus of at least \$400,000 and (B) fully vested Stock Options to purchase at least 400,000 shares of the Common Stock; and

(iv) Annual Management Bonus. The Executive shall be eligible to receive a Cash Bonus upon achievement of reasonable goals specified by the Board. Such goals shall be set forth in writing by the Board prior to the close of the first quarter of each fiscal year of the Company with fifty percent (50%) of such goals to be dependent of Executive's individual performance as an executive manager and/or scientist with respect to Subject Ideas and Inventions (as defined below) and fifty percent (50%) of such goals to be dependent on the Company's performance determined by reference to objective criteria such as the market price of the Common Stock or meeting budgets approved by the Board.

All of such bonus compensation shall be payable or issuable to Executive so long as his business relationship is continuing at the time that the event triggering his right to such bonus compensation shall occur. At the discretion of the Board, while the Company is a "development stage company" as stated in its audited financial reports, the Company, in order to conserve its working capital, may elect to pay any cash bonus in equal installments of principal over a term not to exceed twenty-four months bearing interest not in excess of the prime rate stated in the Wall Street Journal as of the date of the grant of such bonus, such obligation to be evidenced by a promissory note reasonably satisfactory to the Executive.

(c) **Automobile.** The Company shall provide Executive with an automobile, consistent with the practices of the Company immediately prior to the Effective Date.

(d) **Reimbursement of Expenses.** The Company shall reimburse the Executive for all reasonable and appropriate or necessary out-of-pocket expenses incurred in connection with the Executive's carrying out the Executive's duties under this Agreement, in conformity with such procedures as the Company may establish from time to time. In addition, the Company will reimburse Executive for reasonable legal fees and disbursements incurred in connection with the negotiation, preparation and execution of this Agreement, up to a maximum amount of \$10,000.

(e) **Vacation.** The Executive shall be entitled to six (6) weeks of vacation per year. Vacation not taken during the applicable fiscal year (but not in excess of three weeks) shall be carried over to the next following fiscal year.

**4. Benefits.** The Executive will be entitled to life, disability and health insurance, vacation and other benefits commensurate with the Executive's position in accordance with the Company's standard employee benefits policies as in effect from time to time. The Executive has received a summary of the Company's employee benefits as in effect as of the date hereof.

To the extent the Company obtains insurance with respect to (i) directors' and officers' liability, (ii) errors and omissions and (iii) general liability insurance, the Executive shall be covered by such insurance to the same extent as other senior executives and directors of the Company.

The Company reserves the right to cancel or change the benefit plan and programs it offers to its Executive at any time, provided that the Company shall not cancel or reduce the benefits offered Executive under this Agreement.

**5. Compliance with Company Policy.** During this agreement, the Executive shall observe all Company rules and policies, including such policies as are contained in the Company policy and procedures manual as from time to time amended. The Executive has received a copy of the Company's policy and procedures manual as in effect as of the date hereof.

**6. Conflicting Employment.** Executive may serve on corporate, civic, charitable boards, and engage in any other activities provided that such activities do not interfere or conflict with the performance of Executive's duties or obligations under this Agreement.

**7. Termination of Employment.**

(a) **Death.** If Executive's employment is terminated by reason of his death, the Executive's estate shall be entitled to prompt payment for the Base Salary pro-rated through the event of death and a pro-rated bonus payment, based on the highest bonus amount paid to the Executive in any prior year. For a period of two (2) years after the event of death, the Executive's spouse and eligible dependents shall be eligible for continued participation in the benefits to which the Executive and his eligible spouse and dependents were entitled pursuant to Section 4 hereof while the Executive was employed by the Company, and if the Company cannot include Executive's family in any health plan subsequent to the termination of his employment,

Company shall provide Executive's family, for not less than three (3) years following the effective date of his termination of employment, funding sufficient to obtain private health insurance coverage for Executive's family that is substantially equal to the benefits available under the Company's health insurance policy as in effect at the date of Executive's death.

(b) Disability. If, as a result of the Executive incapacity due to physical or mental illness as determined by a physician selected by the Executive, and reasonably acceptable to the Board, the Executive shall have been substantially unable to perform his duties hereunder for 90 days within any 180-day period, the Company shall have the right to terminate the Executive's employment hereunder for "disability". If Executive's employment is terminated by reason of his disability, the Executive shall be entitled to prompt payment for the Base Salary pro-rated through the termination date and a pro-rated bonus payment, based on the highest bonus paid to the Executive in any prior year. The Company shall also provide the Executive with the excess, if any, of his full Base Salary over the amount of any long-term disability benefits that he receives through the Company plans for a period of two years, payable in accordance with the normal payroll practices of the Company. In addition, for a period of three (3) years after the date of termination, the Executive and the Executive's spouse and eligible dependents shall be eligible for continued participation in the benefits to which the Executive and his eligible spouse and dependents were entitled pursuant to Section 4 hereof while the Executive was employed by the Company, and if the Company cannot include Executive in any health plan subsequent to the termination of his employment, Company shall provide Executive, for not less than three (3) years following the effective date of his termination of employment, funding sufficient to obtain private health insurance coverage for Executive and his family that is substantially equal to the benefits available under the Company's health insurance policy as in effect at the date of Executive's termination.

(c) For Cause. The Company shall have the right, upon written notice thereof to the Executive, to terminate the Executive's employment hereunder if

(i) the Executive

(A) in the determination of the Board by a vote of two-thirds of its members has engaged in gross negligence or willful gross misconduct in the performance of the Executive's duties hereunder and such conduct results in material and quantifiable damage to the Company;

(B) is convicted of a felony or other violation which in the reasonable judgment of by the Board could materially impair the Company from substantially meeting its business objectives; or

(C) is found by the primary auditor of the Company or other auditor engaged by the Audit Committee of the Board to have committed any act of fraud, misappropriation of funds or embezzlement with respect to the Company; and

(ii) except as to the matters referred to in clauses (B) or (C), within ninety (90) days (the "**Cure Period**") after delivery of written notice from the Board stating with specificity the nature of the reason for an anticipated for-cause termination, the Executive fails to cure, or if the matter is not curable within the Cure Period the Executive fails, in the judgment of the Board, within the Cure Period to undertake diligently to cure such failure, refusal or negligence.

In the event of termination pursuant to this Section 7(c), the Executive shall be entitled to the payments and benefits set forth in Sections 3 and 4 hereof through the end of the Cure Period.

(d) For Good Reason. The Executive may terminate his employment for “**Good Reason**” after giving the Company detailed written notice of his intention to terminate for Good Reason, if the Company shall have failed to cure the event or circumstance constituting “Good Reason” within twenty (20) business days after receiving such notice (which 20-day period may be extended by written consent of the parties). Good Reason shall mean the occurrence of any of the following without the written consent of the Executive or his approval in his capacity as the Chairman of the Board (which approval may be evidenced by written consent of the Board or minutes of a meeting at which the Executive was present and voted in favor of such minutes):

(i) the assignment to the Executive of duties inconsistent with this Agreement or a change in his titles or authority;

(ii) any failure of the Company to comply with subsections (a) or (b) of Section 3 hereof in any material way;

(iii) a relocation of Executive’s principal office to a location more than twenty-five (25) miles from 189 Wells Avenue, Newton, Massachusetts;

(iv) the Company changes its line of business such that it is no longer principally engaged in activities related to development, manufacture, licensing or related commercialization of technology or drugs using carbohydrate chemistry to improve the efficacy and reduce the toxicity of drugs;

(v) any material breach of this Agreement by the Company; or

(vi) any failure by the Company to obtain the assumption of this Agreement by any successor or assign of the Company.

(e) Without Cause. In the event the employment of the Executive is terminated by the Company for any reason other than as stated in Section 7(a)-7(c), any such termination will be deemed for the purposes hereof to be “without cause”; provided, however, that voluntary resignation by the Executive for reasons other than Good Reason shall not constitute an event that entitles him to the severance set forth in subsection (f) below.

(f) Effect of Termination by Company Without Cause, or by Executive for Good Reason or After Change of Control. If the Executive’s employment is terminated by the Company without cause or by Executive for Good Reason or, in the event of any Change in Control, the Executive’s employment is terminated for any reason within twelve (12) months after such Change in Control (as hereinafter defined),

(i) the Executive shall be paid a lump sum equal to the sum of his Base Salary and accrued vacation pay through the effective date of such termination;

(ii) the Executive shall be paid (in accordance with the Company's customary payroll practices for senior management) the Executive's Base Salary for two (2) years after the effective date of such termination;

(iii) the Executive shall be paid the higher of \$1,000,000, or three times the highest bonus amount paid to Executive during any prior fiscal year, such amount paid pursuant to this clause (iii) not to exceed \$2,000,000;

(iv) the Executive shall be reimbursed for all expenses pursuant to Section 3 incurred through such effective date;

(v) the Executive shall continue to have during such post-employment period, to the extent permitted by law, the benefits to which the Executive and his eligible spouse and dependents were entitled pursuant to Section 4 hereof while the Executive was employed by the Company, and if the Company cannot include Executive and his family in any health plan subsequent to the termination of his employment, Company shall provide Executive, for not less than two (2) years following the effective date of his termination of employment, funding sufficient to obtain private health insurance coverage for himself and his family that is substantially equal to the benefits available under the Company's health insurance policy as in effect at the date of Executive's termination;

(vi) the Company shall provide at its expense a fully furnished office suitable for professionals for Executive's exclusive use during such two-year post-employment period at a location not more than five (5) miles from the Executive's residence;

(vii) the Company shall provide the automobile provided to the Executive prior to the effective date of the termination during such two-year post-employment period;

(viii) to the extent shares of the capital stock of the Company held by Executive are subject to repurchase rights by the Company, such right of repurchase will immediately be extinguished and Executive shall hold such shares free of any right by the Company to repurchase them; and

(ix) any option or other right to acquire securities of the Company, to the extent not fully vested, shall accelerate so that such option or other rights are immediately exercisable upon Executive's termination.

For purposes of this Agreement, a Change of Control means the occurrence of any the following in connection with which the Executive has not in his sole discretion consented in writing to waive any or all of the severance provisions stated in subsection (f) above: (i) any sale, merger, consolidation, tender offer or similar acquisition of shares, or other transaction or series of related transactions (each a "Transaction"), other than any Transaction the substantial purpose of which in the reasonable determination of the Board is equity or debt finance of the Company, as a result of which at least a majority of the voting power of the Company is not held,



directly or indirectly, by the persons or entities who held the Company's securities with voting power before such Transaction (provided, however, that any person who acquired voting securities of the Company in contemplation of the Transaction and who immediately after such Transaction possesses direct or indirect ownership of at least ten percent (10%) of the securities of the Company or the surviving entity (or if the Company or the surviving entity is a controlled affiliate of another entity, then of such controlling entity) shall not be included in the group of those persons or entities who held the Company's securities with voting power before such Transaction); (ii) a sale or other disposition of all or a substantial part of the Company's assets, whether in one transaction or a series of related transactions; or (iii) individuals who on the Effective Date constitute the Board and together with any individual who becomes a director after such date (other than a director designated by a person or entity who has entered into an agreement to effect a transaction described in clause (i) or (ii) above) whose nomination and/or election to the Board was approved by a vote of at least a majority of the directors then still in office who either were members of the Board on the Effective Date or whose election or nomination for election after the Effective Date was previously so approved, cease for any reason to constitute a majority of the Board.

(g) Gross-Up Payment for Golden Parachute Taxes. If it is determined that any payment by the Company to or for the benefit of Executive, under the employment agreement or otherwise, would be subject to the federal excise taxes imposed on golden parachute payments, the Company will make an additional payment to Executive (the "Gross-Up Payment") in an amount sufficient to cover (a) any golden parachute excise tax payable by Executive, (b) all taxes on the Gross-Up Payment, and (c) all interest and/or penalties imposed with respect to such taxes.

(h) Survival of Obligations. The obligations of the Company and the Executive set forth in Section 3(b) (reimbursement of expenses), in this Section 7, Section 8 (indemnification), Section 9 (confidentiality), Section 10 (assignment of inventions), Section 11 (return of property), Section 12 (non-solicitation), Section 13 (scientific collaboration), Section 14 (non-competition), and Section 15 (publications) will survive the termination of Executive's employment hereunder, whether with or without cause or for Good Reason.

## **8. Indemnification.**

(a) The Company agrees that if the Executive is made a party, or is threatened to be made a party, to any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**"), by reason of the fact that he is or was a director, officer or employee of the Company or is or was serving at the request of the Company as a director, officer, member, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, whether or not the basis of such Proceeding is the Executive's alleged action in an official capacity while serving as a director, officer, member, employee or agent, the Executive shall be indemnified and held harmless by the Company to the fullest extent legally permitted or authorized by the Company's certificate of incorporation or bylaws or resolutions of the Board or, if greater, by the laws of The Commonwealth of Massachusetts, against all cost, expense, liability and loss (including, without limitation, reasonable attorneys' fees and disbursements, judgments, fines, ERISA excise taxes or other liabilities or penalties and amounts paid or to be paid in settlement) reasonably incurred or

suffered by the Executive in connection therewith, and such indemnification shall continue as to the Executive even if he has ceased to be a director, member, employee or agent of the Company or other entity, with respect to acts or omissions which occurred prior to his cessation of employment with the Company, and shall inure to the benefit of the Executive's heirs, executors and administrators. The Company shall advance to the Executive all reasonable costs and expenses incurred by him in connection with a Proceeding within 20 business days after receipt by the Company of a written request for such advance. Such request shall include an undertaking by the Executive to repay the amount of such advance if it shall ultimately be determined that he is not entitled to be indemnified against such costs and expenses.

(b) Neither the failure of the Company (including its Board, independent legal counsel or stockholders) to have made a determination prior to the commencement of any Proceeding concerning payment of amounts claimed by the Executive under Section 8(a) above that indemnification of the Executive is proper because he has met the applicable standard of conduct, nor a determination by the Company (including its board of directors, independent legal counsel or stockholders) that the Executive has not met such applicable standard of conduct, shall create a presumption that the Executive has not met the applicable standard of conduct.

(c) The Company agrees to continue and maintain a directors' and officers' liability insurance policy covering the Executive to the extent the Company provides such coverage for its other executive officers.

#### **9. Confidential Information.**

(a) Company Information. The Executive agrees at all times during the term of the Executive's employment or other involvement with the Company and thereafter for ten (10) years to hold in strictest confidence, and not to use, except for the benefit of the Company, or to disclose to, or permit the use by, any person, firm or corporation without written authorization of the Board, any Confidential Information of the Company. The Executive understands that "**Confidential Information**" means any Company proprietary information, technical data, trade secrets or know-how or other business information disclosed to the Executive by the Company, including information acquired during or prior to the Executive's Prior Engagement and disclosed to Executive, either directly or indirectly in writing, orally or by drawings or inspection of parts or equipment, including, but not limited to:

(i) medical and drug research and testing results and information, research and development techniques, processes, methods, formulas, trade secrets, patents, patent applications, computer programs, software, electronic codes, mask works, inventions, machines, innovations, ideas, designs, creations, writings, books and other works of authorship, discoveries, improvements, data, formats, projects and research projects;

(ii) information about costs, profits, markets, sales, contracts and lists of customers, and distributors, business, marketing, and strategic plans; forecasts, unpublished financial information, budgets, projections, and customer identities, characteristics and agreements as well as all business opportunities, conceived, designed, devised, developed, perfected or made by the Executive, whether alone or in conjunction with others, and related in any manner to the business of the Company; and

(iii) employee personnel files and compensation information.

The Executive further understands that Confidential Information does not include any of the foregoing items which (A) has become publicly known or made generally available to the public through no wrongful act of the Executive, (B) has been disclosed to the Executive by a third party having no duty to keep Company matters confidential, (C) has been developed by the Executive independently of employment by the Company, (D) has been disclosed by the Company to a third party without restrictions on disclosure, or (E) has been disclosed with the Company's written consent. The Executive further agrees that all Confidential Information shall at all times remain the property of the Company.

(b) Third Party and Former Employer Information. The Executive agrees that the Executive will not improperly use or disclose any proprietary information or trade secrets of any former employer or other person or entity with which the Executive has an agreement or duty to keep in confidence information acquired by the Executive and that the Executive will not bring onto the premises of the Company any unpublished document or proprietary information belonging to any such employer, person or entity unless consented to in writing by such employer, person or entity.

(c) Future Third Party Confidential Information. The Executive recognizes that the Company has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. The Executive agrees to hold all such confidential or proprietary information in the strictest confidence and not to disclose it to any person, firm or corporation or to use it except as necessary in carrying out the Executive's work for the Company consistent with the Company's agreement with such third party.

(d) Prior Actions and Knowledge. The Executive represents and warrants that from the time of the Executive's first contact with the Company the Executive has held in strict confidence all Confidential Information and has not disclosed any Confidential Information, directly or indirectly, to anyone outside the Company, or used, copied, published, or summarized any Confidential Information, except to the extent otherwise permitted in this Agreement.

#### **10. Inventions**

(a) Inventions Retained and Licensed. Attached hereto, as Exhibit A, is a list describing all ideas, processes, trademarks, service marks, inventions, designs, technologies, computer hardware or software, original works of authorship, formulas, discoveries, patents, copyrights, copyrightable works, products, marketing and business ideas, and all improvements, know-how, data, rights, and claims related to the foregoing, whether or not patentable, registrable or copyrightable, which were conceived, developed or created by the Executive prior to the Executive's employment or first contact with the Company (collectively referred to as "**Prior Inventions**"), (A) which belong to the Executive, (B) which may relate to the Company's current or contemplated business, products or research and development, and (C) which are not assigned to the Company hereunder. If there is no Exhibit A or no items thereon, the Executive represents that there are no such Prior Inventions. If in the course of the Executive's employment with the

Company, the Executive incorporates or embodies into a Company product, service or process a Prior Invention owned by the Executive or in which the Executive has an interest, the Company is hereby granted and shall have a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, use and sell such Prior Invention as part of or in connection with such product, service or process.

(b) Assignment of Subject Ideas and Inventions. All right, title and interest in and to all Subject Ideas and Inventions, including but not limited to all registrable and patent rights which may subsist therein, shall be held and owned solely by the Company, and where applicable, all Subject Ideas and Inventions shall be considered works made for hire. The Executive shall take all actions deemed necessary by the Company to protect the Company's rights therein. In the event that the Subject Ideas and Inventions shall be deemed not to constitute works made for hire, or in the event that the Executive should otherwise, by operation of law, be deemed to retain any rights (whether moral rights or otherwise) to any Subject Ideas and Inventions, the Executive shall assign to the Company, without further consideration, his entire right, title and interest in and to each and every such Subject Idea and Invention. For purposes of this Agreement, the term "**Subject Ideas and Inventions**" includes any and all ideas, processes, trademarks, service marks, inventions, designs, technologies, computer hardware or software, original works of authorship, formulas, discoveries, patents, patent applications, copyrights, copyrightable works, products, marketing and business ideas, to the extent that any of the same would be Competing Products (as defined below) if owned by any third person or organization, and all improvements, know-how, data, rights, and claims related to the foregoing, whether or not patentable, registrable or copyrightable, which the Executive may, during the Prior Engagement, on or after the Effective Date until the date of the termination of employment hereunder and for the period in which the Company pays any Base Salary in connection with a termination described in Section 7 hereof, solely or jointly with others conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during the period of time the Executive is in the employ of the Company, to the extent that any of the same would be Competing Products if owned by any third person or organization. Notwithstanding the foregoing, nothing in this paragraph shall assign, or offer to assign, any of Executive's rights in any invention developed entirely by Executive on his own time without using the Company's equipment, supplies, facilities, or trade secret information.

(c) Maintenance of Records. The Executive agrees to keep and maintain adequate and current written records of all Subject Ideas and Inventions made by the Executive (solely or jointly with others) during the term of the Executive employment with the Company. The records will be in the form of notes, sketches, drawings, and any other format that may be specified by the Company. The records will be available to, and remain the sole property of, the Company at all times.

(d) Disclosures. During the term of his employment, Executive shall disclose (such disclosure to be received in confidence) all information and records pertaining to any and all ideas, processes, trademarks, service marks, inventions, designs, technologies, computer hardware or software, original works of authorship, formulas, discoveries, patents, patent applications, copyrights, copyrightable works, products, marketing and business ideas ("**Intellectual Property Items**") that Executive believes are not Subject Ideas and Inventions, but that Executive has conceived, developed, or reduced to practice during the term of his

employment. If, after examination of the information, the Company has a good faith belief that the Intellectual Property Items are Subject Ideas and Inventions, the Company shall have the right to ask the Company's Scientific Advisory Board to make a determination as to whether the Intellectual Property Items are Subject Ideas and Inventions. If the Scientific Advisory Board determines that the Intellectual Property Items are Subject Ideas and Inventions, the Executive shall have the right to refer the dispute to an outside arbitrator with suitable scientific expertise, with such arbitrator's decision to be binding on both parties. If the parties cannot agree on an arbitrator, each party shall select one arbitrator who will select a third-party arbitrator to make the determination.

(e) **Patent and Copyright Registrations.** The Executive agrees to assist the Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in the Subject Ideas or Inventions and any copyrights, patents, mask work rights or other intellectual property rights relating thereto in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto and the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns and nominees the sole and exclusive rights, title and interest in and to such Subject Ideas and Inventions, and any copyrights, patents, mask work rights or other intellectual property rights relating thereto.

(f) **Right of Reversion.** At Executive's reasonable discretion, the Executive with written notice identifying the invention may require the Company to assign all rights, title and interest in and to any invention within the Subject Ideas and Inventions back to Executive at any time after three (3) years after date of the assignment to the Company if the Company fails to exploit such invention. For purposes of this paragraph, Company shall be deemed to have exploited an invention if Company files, or in the reasonable determination of the Board has undertaken substantial effort to file, an investigational new drug application ("IND") using such invention or if it enters into a strategic relationship with another entity that depends on such invention.

(g) **No Use of Name.** The Executive shall not at any time use the Company's name or any of the Company trademark(s), service mark(s) or trade name(s) in any advertising or publicity without the prior written consent of the Company.

**11. Return of Company Property.** The Executive agrees that, at any time upon request of the Company, and in any event at the time of leaving the employ of the Company, the Executive will deliver to the Company (and will not keep in the Executive's possession or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any of the aforementioned items, containing Confidential Information or otherwise belonging to the Company, its successors or assigns, whether prepared by the Executive or supplied to the Executive by the Company.

**12. Non-Solicitation.** The Executive agrees that the Executive shall not during the Executive's employment or other involvement with the Company and for a period of twelve (12) months immediately following the termination of the Executive for any reason, or for such longer period, if applicable, during which the Company pays Base Salary pursuant to Section 7(f)(ii) in

connection with employment termination described in Section 7(f), (i) either directly or indirectly solicit or take away, or attempt to solicit or take away employees of the Company, either for the Executive's own business or for any other person or entity, or (ii) either directly or indirectly recruit, solicit or otherwise induce or influence any proprietor, partner, stockholder, lender, director, officer, employee, sales agent, joint venturer, investor, lessor, supplier, customer, agent, representative or any other person which has a business relationship with the Company to discontinue, reduce or modify such employment, agency or business relationship with the Company.

**13. Scientific Collaboration.** Nothing in this Agreement shall prohibit Executive from collaborating with Anatole A. Klyosov, Maureen Foley or Eliezer Zomer regarding scientific research as long as such collaboration does not relate to Competing Products, whether or not Executive is currently employed by the Company, provided such collaboration is off-site of any Company premises and outside normal business hours. Company further agrees that, in consideration of the promises of Executive set forth in paragraph 12, it will not in any way limit the rights of Anatole A. Klyosov, Maureen Foley or Eliezer Zomer to collaborate or otherwise engage in scientific research with Executive should Executive leave or be terminated by the Company for any reason, so long as such collaboration or research does not relate to Competing Products and is off-site of any Company premises and outside normal business hours.

**14. Covenants Against Competition.**

(a) Definitions. For the purposes of this Section:

(i) "Competing Product" means any product, process, or service of any

person or organization other than the Company, in existence or under development, which to a significant degree directly competes with the Company's current or contemplated business or activities or the Company's actual or demonstrably anticipated research or development involving carbohydrate compounds enabling targeted drug delivery.

(ii) "Competing Organization" means any person or organization, including the Executive, engaged in, or about to become engaged in, research on or the acquisition, development, production, distribution, marketing, or providing of a Competing Product.

(b) Non-Competition. As a material inducement to the Company to employ or continue the employment of the Executive, and in order to protect the Company's Confidential Information and good will, the Executive agrees to the following stipulations:

(i) For (A) a period of six (6) months after termination of the Executive's employment with the Company by the Company with cause or (B) for the period during which the Company pays post-employment Base Salary pursuant to Section 7(f)(ii) in connection with employment termination described by Section 7(f), the Executive will not directly or indirectly solicit or divert or accept business relating in any manner to Competing Products or to products, processes or services of the Company, from any of the customers or accounts of the Company with which the Executive had any contact as a result of the Executive's employment.

(ii) For (A) a period of six (6) months after termination of the Executive's employment with the Company by the Company with cause or (B) for the period during which the Company pays post-employment Base Salary pursuant to Section 7(f)(ii) in connection with employment termination described by Section 7(f), the Executive will not (A) render services directly or indirectly, as an employee, consultant or otherwise, to any Competing Organization in connection with research on or the acquisition, development, production, distribution, marketing or providing of any Competing Product, or (B) own any interest in any Competing Organization other than up to one percent of the outstanding securities that are not "restricted securities" (as defined in Rule 144 under the Securities Act of 1933) of a publicly-traded Competing Organization.

(c) **Modification of Restrictions.** The Executive agrees that the restrictions set forth in this Section are fair and reasonable and are reasonably required for the protection of the interests of the Company. However, should an arbitrator or court nonetheless determine at a later date that such restrictions are unreasonable in light of the circumstances as they then exist, then the Executive agrees that this Section shall be construed in such a manner as to impose on the Executive such restrictions as may then be reasonable and sufficient to assure Company of the intended benefits of this Section.

**15. Publications.** The Executive agrees that the Executive will not less than twenty (20) business days in advance of submission of information related to carbohydrate chemistry for publication provide the Company with copies of all writings and materials which the Executive proposes to publish during the term of the Executive's employment and for two years thereafter. The Executive also agrees that the Executive will, at the Company's request, cause to be deleted from such writings and materials any information disclosing Confidential Information. The Company's good faith judgment in these matters will be final. At the Company's sole discretion, the Executive will also, at the Company's request, cause to be deleted any reference whatsoever to the Company from such writings and materials.

**16. Equitable Remedies.** The Executive agrees that it would be impossible or inadequate to measure and calculate the Company's damages from any breach of the covenants set forth in Sections 9, 10, 11, 12 and 14 herein. Accordingly, at the sole discretion of the Company, the Executive agrees that if the Executive breaches any of such Sections, the Company will have, in addition to any other right or remedy available, the right to obtain an injunction from a court of competent jurisdiction restraining such breach or threatened breach and to specific performance of any such provision of this Agreement and, if it prevails in such a proceeding, the right to recover from the Executive the costs and expenses thereof, including reasonable attorneys' fees.

**17. Representations and Warranties of Executive.** The Executive represents and warrants as follows: (i) that the Executive has no obligations, legal or otherwise, inconsistent with the terms of this Agreement or with the Executive's undertaking a relationship with the Company; and (ii) that the Executive has not entered into, nor will the Executive enter into, any agreement (whether oral or written) in conflict with this Agreement.

## 18. Miscellaneous.

(a) Entire Agreement. This Agreement contains the entire understanding of the parties with respect to the subject matter. It may not be changed orally but only by an agreement in writing signed by the party against whom enforcement of any waiver, change, modification, extension or discharge is sought.

(b) No Waiver. The failure of either party to require strict compliance with the terms of this agreement in any instance or instances will not be deemed a waiver of any such term of this Agreement or of that party's right to require strict compliance with the terms of this Agreement in any other instance.

(c) Successors and Assigns. This Agreement shall be binding on and inure to the benefit of the successors in interest of the parties, including, in the case of the Executive, the Executive's heirs, executors and estate. The Executive may not assign the Executive's obligations under this Agreement. The Company may not assign its obligations under this Agreement, except with the prior written consent of the Executive.

(d) Notices. Any notices or other communications provided for hereunder may be made by telecopier, first class mail or express courier services provided that the same are addressed to the party required to be notified at its address first written above, or such other address as may hereafter be established for notices, and any notices or other communications sent by first class mail shall be considered to have been made when posted. The parties telecopier numbers are as follows: Company - (617) 928-3450; Executive - (617) 928-3450.

(e) Severability. If any term or condition of this Agreement shall be invalid or unenforceable to any extent or in any application, then the remainder of this Agreement, and such term or condition except to such extent or in such application, shall not be affected thereby, and each and every term and condition of this Agreement shall be valid and enforceable to the fullest extent and in the broadest application permitted by law.

(f) Captions; Interpretation. Captions of sections herein are for convenience only and are not intended to cover all matters therein. Any pronoun or other gender-linked term shall in each case refer, as applicable, to the masculine, feminine or neuter. Any defined term shall include its singular or plural form or other part of speech.

(g) Governing Law. This Agreement shall be construed and enforced in accordance with the laws of The Commonwealth of Massachusetts without giving effect to its principles on conflict of laws.



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

PRO-PHARMACEUTICALS, INC.

By: /s/ Charles F. Harney

\_\_\_\_\_  
Charles F. Harney  
Chief Financial Officer

Witness:

/s/ Maureen Foley

/s/ David Platt

\_\_\_\_\_  
David Platt

## Exhibit A

### List of Prior Inventions and Original Works of Authorship

<u>Title</u>	<u>Date</u>	<u>Identifying Number or Brief Description</u>
* Composition and Method For Controlling Fungal Disease in Plants	9/12/97	08/928,370
* Tumor Derived Carbohydrate Binding Protein	8/6/97	08/908,145
* Modified Pectin	3/1/93	09/024,487
* Immunotherapeutic Agent	8/1/93	08/087,628
* Pectin Derived Therapeutic Material	3/18/97	08/819,356
* Enhancement of Delivery of Radioimaging And Radio Protective Agents	10/7/98	09/167,685
* Reagent For Tumor Therapy And/or Imaging	11/18/98	09/195,341
* Delivery System for Gene Therapy	2/2/99	60/118,244
** Tumor Derived Carbohydrate Binding Protein	10/28/97	5,681,923
** Immunotherapeutic Agent	6/18/96	5,527,770
** Immunotherapeutic Agent	6/2/98	5,759,992
** Composition and Method for Treating Fungal Disease in Animals	4/6/99	5,891,861
<hr/>		
* As listed in Appendix A - Second Amendment to the License Agreement, dated January 7, 1994, between International Gene Group, Inc., a Michigan corporation and Dr. David Platt (the "IGG License Agreement") listing pending patent applications.		
** As listed in Appendix A - Second Amendment to the IGG License Agreement listing granted U.S. patents.		

**Exhibit 21.1**

**SUBSIDIARIES OF REGISTRANT**

The following is a list of the Corporation's subsidiaries as of December 31, 2003. The Corporation owns, directly or indirectly, 100% of the voting securities of each subsidiary, unless noted otherwise.

<b><u>NAME</u></b>	<b><u>STATE OR JURISDICTION OF ORGANIZATION</u></b>
Pro-Pharmaceuticals Securities Corp.	Delaware

**INDEPENDENT AUDITORS' CONSENT**

We consent to the incorporation by reference in Registration Statement Nos. 333-109887 and 333-111650 on Form S-3, and Registration Statement No. 333-109893 on Form S-8, of Pro-Pharmaceuticals, Inc. of our report dated March 30, 2004, appearing in this Annual Report on Form 10-K of Pro-Pharmaceuticals, Inc. for the year ended December 31, 2003.

DELOITTE & TOUCHE LLP  
Boston, Massachusetts  
March 30, 2004

## Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934

I, David Platt, certify that:

1. I have reviewed this 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(s) 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 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) 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
  - (c) 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(s) 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.

Dated: March 30, 2004

/s/ DAVID PLATT

---

Name: David Platt  
Title: President and Chief Executive Officer  
(Principal Executive Officer)

## Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934

I, Charles F. Harney, certify that:

1. I have reviewed this 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(s) 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 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) 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
  - (c) 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(s) 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.

Dated: March 30, 2004

/s/ CHARLES F. HARNEY

---

Name: Charles F. Harney  
Title: Chief Financial Officer  
(Principal Financial and Accounting Officer)

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

In connection with the Annual Report of Pro-Pharmaceuticals, Inc. (the "Company") on Form 10-K for the period ended December 31, 2003 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: March 30, 2004

/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.

**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, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Charles F. Harney, 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: March 30, 2004

/s/ Charles F. Harney

---

Name: Charles F. Harney  
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.