

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**  
**FORM 10-KSB**

(Mark One)

- Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**  
for the fiscal year ended December 31, 2002
- Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number **000-32877**

**PRO-PHARMACEUTICALS, INC.**

(Name of Small Business Issuer in its Charter)

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

**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

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

Title of each class None	Name of each exchange on which registered Not Applicable
-----------------------------	---

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

**Common Stock, Par Value \$0.001**  
(Title of Class)

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 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

Check if disclosure of delinquent filers in response to Item 405 of Regulation S-B is not contained in this form, and no disclosure will 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-KSB or any amendment to this Form 10-KSB.

State issuer's revenues for its most recent fiscal year: The issuer is a development stage company and has no revenues to report at this time.

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 March 20, 2003 was: \$30,074,585

**(ISSUERS INVOLVED IN BANKRUPTCY  
PROCEEDINGS DURING THE PRECEDING FIVE YEARS)**

Check whether the issuer has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Exchange Act after the distribution of securities under a plan confirmed by a court. YES  NO

NOT APPLICABLE

**APPLICABLE ONLY TO CORPORATE REGISTRANTS**

The number of shares outstanding of the issuer's Common Stock, \$.001 par value, as of March 20, 2003 was 20,072,647.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the definitive Proxy Statement for the 2003 Annual Meeting of Stockholders Part III

Transitional Small Business Disclosure Format (check one): YES  NO

---

**TABLE OF CONTENTS**

**PART I**

Item 1.	<a href="#">Description of Business</a>	1
Item 2.	<a href="#">Description of Property</a>	19
Item 3.	<a href="#">Legal Proceedings</a>	19
Item 4.	<a href="#">Submission of Matters to a Vote of Security Holders</a>	20

**PART II**

Item 5.	<a href="#">Market for Common Equity and Related Stockholder Matters</a>	22
Item 6.	<a href="#">Plan of Operation</a>	23
Item 7.	<a href="#">Financial Statements</a>	25
Item 8.	<a href="#">Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</a>	26

**PART III**

Item 9.	<a href="#">Directors, Executive Officers, Promoters and Control Persons; Compliance with Section 16(a) of the Exchange Act</a>	27
Item 10.	<a href="#">Executive Compensation</a>	27
Item 11.	<a href="#">Security Ownership of Certain Beneficial Owners and Management</a>	27
Item 12.	<a href="#">Certain Relationships and Related Transactions</a>	27
Item 13.	<a href="#">Exhibits and Reports on Form 8-K</a>	27
Item 14.	<a href="#">Controls and Procedures</a>	27

## PART I

### Item 1. *Description of Business*

#### Forward-Looking Statements

This annual report on Form 10-KSB contains, in addition to historical information, forward-looking statements. 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.

#### Corporate Formation

We were incorporated as "DTR-Med Pharma Corp." under Nevada law in January 2001 for the purpose of acquiring all the outstanding stock of our predecessor, Pro-Pharmaceuticals, Inc., which was a Massachusetts corporation engaged in a drug-development business we desired to acquire. From our incorporation until just before the acquisition, we were a wholly-owned subsidiary of Developed Technology Resource, Inc., a Minnesota corporation whose common stock is publicly traded on the Over-the-Counter Bulletin Board. In exchange for 1,221,890 shares of our common stock, Developed Technology transferred to us certain contractual rights. As part of that process, Developed Technology distributed its holdings of our common stock to its shareholders of record as of May 7, 2001. In anticipation of the acquisition of the Massachusetts company, we changed our name to "Pro-Pharmaceuticals, Inc."

On May 15, 2001, we acquired all of the outstanding common stock of the Massachusetts corporation. We acquired these shares in exchange for 12,354,670 shares of our common stock. As a result, that corporation became our wholly owned subsidiary, and its shareholders through an exchange owned approximately 91% of the outstanding shares of our common stock, with the Developed Technology shareholders owning the remaining 9%. After the acquisition, we merged with the Massachusetts corporation and are the surviving corporation in the merger. The merger was treated as a capital transaction and was accounted for as a reverse merger in which Pro-Pharmaceuticals (Massachusetts) was the accounting acquirer.

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 [foley@pro-pharmaceuticals.com](mailto:foley@pro-pharmaceuticals.com), and our website address is [www.pro-pharmaceuticals.com](http://www.pro-pharmaceuticals.com).

#### Business of Pro-Pharmaceuticals

##### *Introduction*

We are a research and development 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 a number of specific carbohydrate compounds. Our fundamental objective is to increase the body's tolerance to the drugs by enabling delivery of the drugs while

---

## [Table of Contents](#)

protecting healthy tissue. This would also permit use of larger doses of the drugs, since current dosages are generally limited due to concerns relating to their toxic effects on healthy cells. Our carbohydrate-based drug delivery system may also have applications for drugs now 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 on the surface of cancer cells. Reformulation of chemotherapy drugs already approved by the U.S. Food and Drug Administration has the following benefits for our business:

- Our carbohydrate-based drug delivery system requires less time for development and FDA approval, and thus reaches the market sooner, because the active chemotherapy drugs are already approved and in widespread use for cancer treatment.
- We expect fewer risks in drug development because our carbohydrate-based compounds would be combined with drugs already in widespread use. Use of carbohydrate compounds with increased capacity to bind to receptors only on cancer cells and combining the drug with a harmless carbohydrate polymer will reduce the toxic effect on healthy cells and permit better calibration (including possible increase) of dosages to diseased tissue.
- We foresee a ready demand for chemotherapy that is less toxic and has greater efficacy. We believe the pharmaceutical industry would respond favorably to drug delivery systems that upgrade existing chemotherapy treatments which patients could tolerate more easily. The industry would likely also be receptive to patent-protected drug delivery systems that “attach” to existing chemotherapy drugs whose patent protection has expired.
- We believe that the development of drug delivery systems to upgrade these widely used drugs can be accomplished with much less investment compared to the typical expenditures made by large pharmaceutical companies for a new drug launch.

### ***Our Business Strategy and Initial Objectives***

The initial objectives of our business strategy are as follows:

- Verify and extend the carbohydrate-based drug enhancement concept utilizing our approach for developing novel cancer chemotherapy products.
- Expand and enhance clinical applications of at least five widely used chemotherapy drugs (5-Fluorouracil, Adriamycin®, Taxol®, Cytosan® and Cisplatin®) by combining them with our carbohydrate-based drug delivery system.
- Demonstrate the safety and efficacy of such product candidates by means of preclinical evaluation and submitting investigational new drug (“IND”) applications to the FDA.
- Accelerate commercialization by identifying products 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 carbohydrate-based drug enhancement technology by applying it to other FDA-approved drugs, including drugs for conditions or ailments other than cancer, that would benefit from reduced toxicity and/or greater efficacy. This strategy would enable us to increase the portfolio of drugs to which our technology may be applied without corresponding development risk and expense of creating new drugs.
- Apply our drug enhancement system with the aim of extending the patent life of current drugs, or as to drugs with expired patents, thus creating new patent protection.

### ***Limitations of Chemotherapy for Cancer Treatment***

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

The most widely used methods to treat cancer are surgery, radiation and chemotherapy. Cancer patients often receive a combination of these treatments, and about half of all patients receive chemotherapy. Both radiation and chemotherapy have significant limitations that often result in treatment failure. In the case of chemotherapy, these limitations include:

- ***Toxicity.*** Most chemotherapy agents kill cancer cells by disrupting the cell division 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, they also kill healthy non-cancerous cells as these cells undergo ordinary division. This is particularly apparent in fast-growing normal cells, such as blood cells forming bone marrow, in the digestive tract, 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 noncancerous 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.*** The administration of chemotherapy occurs in such a way that the drug reaches 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 impact the achievement of this ultimate goal are:

- ***Physical characteristics of a drug.*** These characteristics affect, among other things, the drug's interactions with the intended pharmacological target sites and undesired areas of toxicity; and
- ***Biological characteristics of the diseased area.*** These characteristics impact the ability of a drug to selectively interact with the intended target site to allow the drug to express the desired pharmacological activity.

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.

---

## [Table of Contents](#)

### *Our Focus: Carbohydrate-Based Drug Enhancement Technology*

We are attempting to develop a carbohydrate-based drug delivery 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 use. Carbohydrates are found in the structural elements of cell walls 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 drug enhancement technology is intended to take advantage of the following biological mechanisms to improve drug delivery:

- Disease-specific carbohydrate recognition; and
- Enhanced permeability and retention in tumors.

Our technology does not change the chemistry of the drugs themselves, but rather “attaches” cancer drugs to proprietary carbohydrate compounds, which interact with sugar-specific proteins on the surface of the tumor cell. Because of these cell surface interactions, we believe that these compounds will 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 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 be “risk-contained” in that it will focus on proven drugs for which there are already a great deal of 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 five widely used chemotherapy agents: 5-Fluorouracil, Adriamycin®, Taxol®, Cytosan® and Cisplatin®. Each of these drugs is among the most popular drugs used in cancer chemotherapy treatment in the United States, and for each of these drugs there is a strong need for improving their therapeutic efficacy and decreasing their toxicity.

- *5-Fluorouracil* (5-FU) is a fluorinated pyrimidine (a nucleic acid component). It interferes with the synthesis of DNA and inhibits the formation of RNA. Since DNA and RNA are essential for cell division and growth, the effect of 5-FU provokes unbalanced growth and death of the cell. The effect of DNA and RNA deprivation is most marked on those cells which grow more rapidly and which take up the 5-FU at a more rapid rate, such as cancer cells. 5-FU is effective against cancers of the colon, rectum, breast, stomach and pancreas. This drug is also toxic, resulting in side effects such as nausea, vomiting, mouth sores, gastrointestinal ulceration and bleeding, loss of hair, skin darkening and fatigue. 5-FU is manufactured by Roche Laboratories for intravenous administration. Originally patented in the late 1950s, its patent protection has expired.
- *Adriamycin*® (generic name — doxorubicin hydrochloride) 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. Adriamycin® is 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, its patent protection has expired.

---

## [Table of Contents](#)

- *Taxol*<sup>®</sup> (generic name — paclitaxel) is a relatively new anti-leukemic and anti-tumor agent, possessing a cytotoxic activity. It 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. Taxol<sup>®</sup> 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 CNS carcinoma. Taxol<sup>®</sup> is toxic, and patients receiving it often develop problems ranging from rashes, 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 Taxol<sup>®</sup>, and some patients experience severe hypersensitivity reactions to Taxol<sup>®</sup>. It is manufactured by Bristol-Myers-Squibb Company for intravenous administration. We believe that there are no patents covering the composition of Taxol<sup>®</sup> (paclitaxel).
- *Cytosan*<sup>®</sup> (generic name — cyclophosphamide) has action leading to cross-linking of RNA of tumor cells, and thereby interferes with the growth of susceptible rapidly proliferating malignant cells. It is effective against a range of cancers, such as malignant lymphomas, Hodgkin's disease, various leukemias, and cancer of the breast and ovaries. This drug is toxic, with side effects including nausea, vomiting, anorexia, diarrhea, skin rash and darkening and, in extreme cases, heart damage or failure, and secondary malignancies. It is manufactured by Bristol-Myers-Squibb Company for intravenous and oral administration. We believe that there are no patents covering the composition of Cytosan<sup>®</sup> (cyclophosphamide).
- *Cisplatin*<sup>®</sup> appears to act by inhibiting DNA synthesis. It is effective against metastatic testicular and ovarian tumors (typically in combination with other chemotherapeutic agents, such as Cytosan<sup>®</sup>, above), 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<sup>®</sup>.

### ***Preclinical 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 Adriamycin<sup>®</sup> in combination with each of two selected polysaccharide compounds. The results indicated that DAVANAT<sup>™</sup> might decrease the toxicity of Adriamycin<sup>®</sup>. 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 the DAVANAT<sup>™</sup> /5-FU combination on blood structure and survival of these animals. Preliminary results indicate that the DAVANAT<sup>™</sup> /5-FU combination 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 approved our commencement of Phase I clinical trials.

---

## [Table of Contents](#)

### *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™ in a combination with 5-FU, which had decreased toxicity of the drug in healthy animals. Results of the studies demonstrated that DAVANAT™ 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 the DAVANAT™/5-FU combination.

Two of our efficacy studies were conducted to evaluate the compatibility of DAVANAT™ with leucovorin, which is commonly used in cancer treatment with 5-FU. The studies showed that DAVANAT™ and leucovorin do not interfere with each other when administered following standard procedure, and that the DAVANAT™/5-FU combination is superior, compared to 5-FU/leucovorin when both are administered in tumor-bearing animals. Leucovorin is a folic 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 a DAVANAT™/5-FU combination compared to a 5-FU/leucovorin combination.

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

In addition to DAVANAT™-1, we are also conducting pre-clinical studies for doxorubicin and paclitaxel, both in combination with DAVANAT™ and other polysaccharide compounds.

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 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 as of 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 in order 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 approved the dose escalation schema which would allow assessment in clinical trials of DAVANAT™ doses anticipated to be in the range of those for which the pre-clinical studies suggested efficacy.

In Phase I we will evaluate the ability of cancer patients to tolerate increasing doses of DAVANAT™ while receiving a stable dose of 5-FU for treatment of a variety of solid tumors which have not responded to accepted therapies. The Phase I study has two primary objectives: (1) to determine the maximum dose of DAVANAT™ that can be tolerated when administered with a stable dose of 5-FU, and (2) to define the dose-limiting toxicities of DAVANAT™ in combination with 5-FU. We expect that up to 40 male and female patients suffering from advanced solid malignancies, who failed the accepted chemotherapeutic, radiation, and/or surgical treatments, will participate in the study.



---

## [Table of Contents](#)

We have identified three clinical sites and lead investigators in which to undertake our Phase I trials. Two of the sites are in a position to recruit patients. On February 10, 2003 we dosed the first patients at a private oncology treatment center in Howell, New Jersey, at which Dr. Kenneth E. Nahum serves as our lead investigator.

We have also engaged a professional consultant, affiliated with Harvard Medical School and Massachusetts General Hospital, to serve as Medical Director of our clinical trials.

The pharmaceutical company with which we contracted to produce DAVANAT™, a certified GMP facility, has manufactured sufficient quantities for the doses that will be needed for the human clinical trials.

We have engaged PRA International Inc. to serve as our independent Contract Research Organization (CRO) to manage and implement the clinical trials on our behalf, and Medidata Solutions Inc. to construct an on-line electronic data capture (EDC) method to collect and aggregate the clinical trial data. We expect that this will better enable us to manage clinical data and increase the speed at which such data is reported and compiled. We believe this may accelerate our commencement of Phase II clinical trials.

### ***Other Carbohydrate-Cancer Drug Formulations***

We have chemically synthesized four novel products that are carbohydrate derivatives of Adriamycin®, and have conducted preclinical animal experiments, studying both toxicity (on healthy animals) and efficacy (on cancer-carrying animals). Preliminary results of these experiments indicate that all four of the synthesized carbohydrate-Adriamycin® compounds, and particularly one, named Galactomycin, are significantly less toxic compared with the original Adriamycin®, and demonstrate therapeutic efficacy as well. In the case of Galactomycin, the preliminary results indicated a therapeutic efficacy higher than that for the parent Adriamycin®. These studies were conducted at the Academy of Medical Sciences, Moscow, Russia. 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 technologies” below.

### ***Patents and Proprietary Rights***

We have four regular utility patent applications pending in the United States, one of which has been allowed. The patent applications cover methods and compositions for reducing side effects in chemotherapeutic formulations, and improving efficacy and reducing toxicity of chemotherapeutic agents. In addition, international patent applications corresponding to two of our U.S. applications have been filed under the Patent Cooperation Treaty.

We filed with the U.S. Patent and Trademark Office (PTO) applications to register the following trademarks/service marks: ADVANCING DRUGS THROUGH GLYCOSCIENCE; GLYCO-UPGRADE; PRO-PHARMACEUTICALS, INC.; DAVANAT; UCLT; UNIVERSAL CARBOHYDRATE LINKER TECHNOLOGY and CARBOSOME. In February 2002, the PTO issued Notices of Allowance for the marks ADVANCING DRUGS THROUGH GLYCOSCIENCE and GLYCO-UPGRADE; in March 2002, the PTO issued a Notice of Allowance for the mark PRO-PHARMACEUTICALS, INC.; in October 2002, the PTO issued a Notice of Allowance for the mark DAVANAT; and in January 2003, the PTO issued Notices of Allowance for the marks UCLT and UNIVERSAL CARBOHYDRATE LINKER TECHNOLOGY. The mark CARBOSOME was published in the PTO's *Official Gazette* on March 11, 2003. If no objection to the mark CARBOSOME is timely filed, a Notice of Allowance will issue for the mark in due course. We filed for second extensions of time

---

## [Table of Contents](#)

to provide evidence of use for the marks ADVANCING DRUGS THROUGH GLYCOSCIENCE, GLYCO-UPGRADE, and PRO-PHARMACEUTICALS, INC. and we are awaiting approval of these extension requests. In order to obtain a registration for the DAVANAT, UCLT and UNIVERSAL CARBOHYDRATE LINKER TECHNOLOGY marks, we must file evidence of use or file for an extension of time to provide evidence of use by April 22, 2003, July 21, 2003 and July 28, 2003, respectively.

### ***Research***

We focus on the design and analysis of carbohydrate-based drug 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.

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. Dr. Mildred Christian, who became a director of Pro-Pharmaceuticals in October 2002, was until November 15, 2002 Executive Director of Research of Redfield Laboratories and of Argus Research, which is also a division of Charles River Laboratories. The contract research undertaken by Charles River Laboratories concluded before Dr. Christian became a director of Pro-Pharmaceuticals.

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 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.

As we develop products eligible for clinical trials, we intend to contract with an independent clinical research organization to design the trial protocols and arrange for and monitor the clinical trials. We also intend to 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 \$1,483,027 and \$893,457 in 2002 and 2001 respectively. These totals include amounts spent by Pro-Pharmaceuticals (Massachusetts) prior to our merger in May 2001.

### ***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 will initially 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. Later we would propose to have our products manufactured and marketed pursuant to licensing agreements as discussed below.

---

## [Table of Contents](#)

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,” below.

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 systems for the treatment of the same diseases being targeted by us. We believe we are the only company conducting research on carbohydrate-based targeted drug delivery. Our potential competition includes other companies developing drug delivery systems using other technologies, including systems based on other biochemical polymers. The principal competitors in the polymer area are Cell Therapeutics, Access Pharmaceuticals, Daiichi, Enzon and Pharmacia which are developing alternate drugs in combination with polymers.

We also face competition with technologies other than polymer-based delivery technologies. We believe that the principal current competitors to polymer-based targeting technology fall into two categories: monoclonal antibodies and liposomes. Several well-known companies are working on targeted monoclonal antibody therapy and on liposomal formulations, which are the major competing intravenous drug delivery formulations which deliver similar drug substances.

Please see “Risk Factors That May Affect Results -- We face intense competition in the biotechnology and pharmaceutical industries,” below, 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 Food and Drug Administration (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,” below, 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:

- preclinical laboratory tests, animal studies, and formulation studies,
- submission to the FDA of an investigational new drug application, or IND, for human clinical testing, which must become effective before human clinical trials may begin,

---

## Table of Contents

- adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for each indication,
- submission to the FDA of a New Drug Application, or NDA,
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current Good Manufacturing Procedures established by the FDA (“cGMP”),
- FDA review and approval of the NDA, and
- FDA review and approval of a trademark used in connection with a pharmaceutical.

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

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

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

Assuming successful completion of the required clinical testing, the results of the preclinical 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

---

## [Table of Contents](#)

NDA for a fast track product before the entire application is complete, thus potentially beginning the review process at an earlier time. We intend to 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 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 E.U.

### *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.

---

## [Table of Contents](#)

### *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 biopharmaceutical 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, 2003, we have six employees, all of whom are full time.

### *Scientific and Clinical Advisory Boards*

We continue to recruit members for a Scientific Advisory Board that will include 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 will meet with our management on a regular basis and in smaller groups or individually from time to time on an informal basis. The members will assist us in identifying scientific and product development opportunities, reviewing with management the progress of our specific projects and recruiting and evaluating our scientific staff. We may also have a Clinical Advisory Board that will assist us from time to time on clinical matters.

The initial members of our Scientific Advisory Board are: Dr. David Platt, our President and Chief Executive Officer and a director; Dr. Anatole A. Klyosov; Dr. Dale H. Conaway, a director; Dr. Edgar Ben-Josef, a director; Dr. Mildred Christian, a director; Dr. Henry Esber; and Dr. Irwin I. Goldstein. Additional information about the business and educational backgrounds of Dr. Klyosov, Dr. Esber and Dr. Goldstein is set forth below. Information as to Dr. Platt's business and educational background is included in "Executive Officers of Pro-Pharmaceuticals" in Part I of this Form 10-KSB. Information about the business and educational backgrounds of Dr. Conaway, Dr. Ben-Josef and Dr. Christian is included under the heading "Proposal No. 1 — Election of Directors" in our Proxy Statement to be filed with the SEC in connection with our 2003 Annual Meeting of Stockholders.

Dr. Klyosov is Manager, Research and Development, for Thermo Fibergen Inc. (AMEX: TFG), a biotechnology company that develops and manufactures products including biotechnological materials and fiber-based composites. He has served in this capacity since 1996. From 1990 to June 1998, Dr. Klyosov served as Professor of Biochemistry at Harvard Medical School, Center for Biochemical and Biophysical Sciences and Medicine, where he studied an enzyme involved in angiogenesis of cancer cells, glucocorticoid receptors, and biochemistry of alcohol abuse. Dr. Klyosov received a Ph.D. degree in Physical Chemistry from Moscow State University in 1972, and a D.Sc. degree in Physical Chemistry and Biochemistry from Moscow State University in 1977. Dr. Klyosov owns 50% of MIR International, Inc., which provides consulting services regarding our research and development.

Dr. Esber is Executive Director of Business Development for Primedica Corporation, a contract research organization. Dr. Esber has served in this capacity for more than five years. Dr. Esber is a co-founder and a director of BioQuant Corporation (formerly BioSignature Diagnostics, Inc.), a developer of immunochemistry

---

## [Table of Contents](#)

kits for diagnosis and assessment of immunological diseases. He is also a co-founder of Advanced Drug Delivery, Inc., a biotechnology company that focuses on development of drug delivery systems using co-polymers or other modifications for use in the area of cancer and other diseases. Dr. Esber serves on the Scientific Advisory Boards of several U.S. and non-U.S. biotechnology companies, including Celltek Biotechnologies, Inc., BioQuant Corporation and Delmont Laboratories. Dr. Esber received a B.S. degree in Biology from the College of William and Mary in 1961, an M.S. degree in Public Health and Parasitology from the University of North Carolina in 1963, and a Ph.D. degree in Immunology/Microbiology from West Virginia University Medical Center in 1967.

Dr. Goldstein 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. He received a B.A. degree in Chemistry from Syracuse University, and a Ph.D. in Biochemistry from the University of Minnesota, St. Paul—Minneapolis.

### ***Risk Factors That May Affect Results***

This annual report on Form 10-KSB contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this annual report on Form 10-KSB.

*We are at an early stage of development without operating history.*

We are a development-stage venture without 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, 2002 was approximately \$7,833,000, which includes approximately \$2,427,000 of various non-cash charges related to certain equity transactions. We will need to conduct significant research, development, testing and regulatory compliance activities that, together with projected general and administrative expenses, we expect will result in substantial and possibly increasing operating losses for at least the next several years. Accordingly, we will not be generating our own capital and will remain dependent on outside sources of financing during that time.

As of December 31, 2002, we had approximately \$1,921,000 in cash and cash equivalents. We have budgeted expenditures for the twelve-month period ending December 31, 2003 of approximately \$3,700,000. We attempted to fund these expenditures through proceeds of a private placement that we began in September 2002 and terminated as of January 14, 2003. We raised \$4,311,000 prior to termination, of which approximately \$3,223,000 was raised in 2002.

We will require substantial funds to continue our research and development programs, conduct preclinical studies and clinical trials. We may need to raise additional capital repeatedly in order to continue funding our operations. 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.

---

## [Table of Contents](#)

*Our product candidates will be based on novel technologies.*

Our product candidates will be based upon novel technologies that we plan to use to apply to drugs currently used in the treatment of cancer and other diseases. These technologies have not been proven. 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. Preclinical results in animal studies are not necessarily predictive of outcomes in human clinical trials. Our product candidates may not be proven safe or effective. If this technology does not work, our product candidates may not develop into commercial products.

*We will need regulatory approvals to commercialize our products.*

We do not have any product approved for sale in the U.S. or any foreign market. We must 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 drug products in other countries. We have not yet submitted any application for approval to the FDA. Once an application is submitted, the FDA could reject the 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.

The regulatory review and approval process is lengthy, expensive and uncertain. Extensive preclinical 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.

In addition to initial regulatory approval, our product candidates will be subject to extensive and rigorous ongoing domestic and foreign government regulation, as we discuss in more detail in “Government Regulation,” above. Any approvals, once obtained, may be withdrawn if compliance with regulatory requirements is not maintained or safety problems are identified. Failure to comply with these requirements may subject us to stringent penalties.

*Our product candidates may not be successfully commercialized.*

Even if our product candidates are successful in clinical trials, they may not be successfully commercialized. All of our compounds currently are in research or development, and none has been submitted for marketing approval. Prior to commercialization, each product candidate will require significant additional research, development and preclinical testing and extensive clinical investigation before submission of any regulatory application for marketing approval. Potential products may be found ineffective or cause harmful side effects during preclinical testing or clinical trials, 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.

*We have only recently begun clinical trials and results are uncertain.*

We have one product candidate in 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 in three phases (phases I, II, and III) to determine the safety and efficacy of the product candidates necessary for an approved drug. Many products in human clinical trials fail to demonstrate the desired safety and efficacy characteristics. Even if our products progress successfully through initial human testing, they may fail in later stages of development. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials, even after reporting promising results in earlier trials. In addition, data obtained from clinical trials are susceptible to varying interpretations. Government regulators and our collaborators may not agree with our interpretation of our future clinical trial results.



---

## [Table of Contents](#)

We will be dependent on others to conduct our clinical trials. We intend to 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. We will have less control over the timing and other aspects of these clinical trials than if we conducted them entirely on our own. We cannot assure you that these trials will commence or be completed as we expect or that they will be conducted successfully. Failure to commence or complete, or delays in, any of our planned clinical trials could delay or prevent the commercialization of our products and harm our business. The actual timing of clinical trials can vary dramatically due to factors such as delays, scheduling conflicts with participating clinicians and clinical institutions and the rate of patient accruals. We cannot assure you that clinical trials involving our product candidates will commence or be completed as forecasted.

*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 both in the United States and other countries
- protect trade secrets
- 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 the patent applications we intend to file. 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. If it allows broad claims, the number and cost of patent interference proceedings in the U.S. and the risk of infringement litigation may increase. If it allows narrow claims, the risk of infringement may decrease, but the value of our rights under our patents, licenses and patent applications may also decrease.

We cannot assure you that all of our patent applications in which we have rights 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. Litigation, interference proceedings or other governmental proceedings that we may become involved in with respect to our proprietary technologies or the proprietary technology of others could result in substantial cost to us. Patent litigation is widespread in the biotechnology industry, and any patent litigation could harm our business. Costly 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. An adverse outcome in litigation with respect to the validity of any of our patents could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using a product or technology.

Although we require our scientific and technical employees and consultants to enter into broad assignment of inventions agreements, we have not required Dr. Platt to do so. He has, however, assigned all his patents and patent applications of inventions related to our company's business. We also rely upon trade secrets, proprietary know-how and continuing technological innovation to remain competitive. Third parties may independently develop such know-how or otherwise obtain access to our technology. While our employees, consultants and corporate partners with access to proprietary information generally will be required to enter into confidentiality agreements, these agreements may not be honored.

---

## [Table of Contents](#)

Patents issued to third parties may cover our products as ultimately developed. We may need to acquire licenses to these patents or challenge the validity of these patents. We may not be able to license any patent rights on acceptable terms or successfully challenge such patents. The need to do so will depend on the scope and validity of these patents and ultimately on the final design or formulation of the products and services that we develop. We may not be able to meet our obligations under those licenses that we do enter into. If we enter into a license agreement for intellectual property underlying any of our products, and that license were to be terminated, we may lose our right to market and sell any products based on the licensed technology.

*Our products could infringe on the intellectual property rights of others.*

Although we attempt to monitor the patent filings of our competitors in an effort to guide the design and development of our products to avoid infringement, third parties may challenge the patents that have been issued or licensed to us. We may have to pay substantial damages, possibly including treble damages, for past infringement if it is ultimately determined that our products infringe a third party's patents. Further, we may be prohibited from selling our products before we obtain a license, which, if available at all, may require us to pay substantial royalties. Even if infringement claims against us are without merit, defending a lawsuit takes significant time, may be expensive and may divert management attention from other business concerns.

*Our lack of operating experience may cause us difficulty in managing our growth.*

We have limited or no 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 improve and 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.

*Our business is subject to technological obsolescence.*

Biotechnology and related pharmaceutical technology have undergone and are subject to rapid and significant change. We expect that the technologies associated with biotechnology research and development will continue to develop rapidly. Any compounds, products or processes that we develop may become obsolete before we recover any expenses incurred in connection with developing these products.

*We face intense competition in the biotechnology and pharmaceutical industries.*

The biotechnology and pharmaceutical industries are intensely competitive. We have numerous competitors in the United States and elsewhere. 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 have become increasingly aware of the commercial value of their research findings. These institutions are now more likely to enter into exclusive licensing agreements with commercial enterprises, including our competitors, to market commercial products. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and established biotechnology companies. Many of these competitors have significant products that have been approved or are in development and operate large, well-funded research and development programs.

Our competitors may succeed in developing or licensing technologies and products that are more effective or less costly than any we are developing. Our competitors may succeed in obtaining FDA or other regulatory approvals for product candidates before we do. In particular, we face direct competition from many companies focusing on delivery technologies. Products resulting from our research and development efforts, if approved for sale, may not compete successfully with our competitors' existing products or products under development.

---

## [Table of Contents](#)

*We will depend on third parties to manufacture and market our products.*

We do not have, and do not intend to develop, internal facilities for the manufacture of any of our products for clinical or commercial production. Our Vice President of Manufacturing and Product Development designs and develops specifications for, and monitors the “out-sourced” manufacture of, compounds to be used in our pre-clinical studies, clinical trials and anticipated products. Accordingly, we will continue to need to develop relationships with third-party manufacturing resources, enter into collaborative arrangements with licensees or other parties which have established manufacturing capabilities or elect to have other third parties manufacture our products on a contract basis. We expect to be dependent on such collaborators or third parties to supply us in a timely way with products manufactured in compliance with standards imposed by the FDA and foreign regulators. The manufacturing facilities of contract manufacturers may not comply with applicable manufacturing regulations of the FDA nor meet our requirements for quality, quantity or timeliness.

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 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. We may not be able to obtain access to a marketing and sales force with sufficient technical expertise and distribution capability. Also, we will not be able to control the resources and effort that a third party will devote to marketing our products. If we are unable to develop and maintain relationships for the necessary marketing and sales capabilities, we may fail to gain market acceptance for our products, and our revenues could be impaired.

*We depend on key personnel to develop our products and pursue collaborations.*

We are highly dependent on Dr. David Platt, President and Chief Executive Officer; Dr. Anatole Klyosov; and Dr. Eliezer Zomer, Vice President of Manufacturing and Product Development. Dr. Klyosov is a member of our Scientific Advisory Board and he owns 50% of MIR International, Inc., which provides consulting services regarding our research and 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.

Recruiting and retaining qualified scientific personnel to perform research and development work are critical to our success. There is intense competition for qualified scientists and managerial personnel from numerous pharmaceutical and biotechnology companies, as well as from academic and government organizations, research institutions and other entities. In addition, we may face particular difficulties because there is a limited number of scientists specializing in carbohydrate chemistry, a principal focus of our company. We expect to rely on consultants and advisors, including our scientific and clinical advisors, to assist us in formulating our research and development strategy. Any of those consultants or advisors could be employed by other employers, or be self-employed, and might have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. Such other employment, consulting or advisory relationships could place our trade secrets at risk, even if we require non-disclosure agreements.

*Our insurance coverage may not be adequate in all circumstances.*

In the future, we may, in the ordinary course of business, be subject to substantial 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. A successful product liability claim in excess of our insurance

---

## [Table of Contents](#)

coverage could exceed our net worth. While we desire to reduce our risk by obtaining indemnity undertakings with respect to such claims from licensees and distributors of our products, we may not be able to obtain such undertakings and, even if we do, they may not be sufficient to limit our exposure to claims.

*Health care cost containment initiatives 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 or reduce the cost of health care. Governmental and other third-party payors increasingly are attempting to contain health care costs by challenging prices charged for health care products and services, and 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.

In addition, the trend toward managed health care in the United States, the growth of organizations such as health maintenance organizations, and legislative proposals to reform health care and government insurance programs could significantly influence the purchase of health care services and products, resulting in lower prices and reducing demand for our products.

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 ability to conduct animal testing could be limited in the future.*

Our research and development activities have involved, and will continue to involve, animal testing. Such activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal testing activities by pressing for legislation and regulation in these areas. To the extent the activities of these groups are successful, our business could be materially harmed.

*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.

Factors that may have a significant impact on the market price and marketability of our common stock include: announcements of technological innovations or new commercial therapeutic products; announcements of results of preclinical testing and clinical trials; developments or disputes concerning patent rights; adverse changes in governmental regulation and the status of our regulatory approvals or applications; and changes in health care policies and practices.

*Our stockholders' ability to trade our shares could be adversely affected, because our stock is not listed on any exchange or quoted on Nasdaq, and is a "penny stock."*

Currently, our shares are traded on the Over-the-Counter Bulletin Board (OTCBB) sponsored by the National Association of Securities Dealers. Trading in our shares is not consistent on a daily basis and our stockholders may be unable to sell their shares when they want or at a favorable price. We have not listed our

---

## [Table of Contents](#)

capital stock on any exchange and cannot assure that in the near term we would be able to meet the listing standards for any exchange or for the Nasdaq National Market or the Nasdaq SmallCap Market.

In addition, our stock is subject to SEC regulations that impose limitations upon the manner in which certain low priced equity securities, referred to as “penny stocks,” are publicly traded. Under these regulations, a penny stock is defined as any equity security that has a market price of less than \$5.00 per share, subject to certain exceptions, for which we do not now qualify. Regulations require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the associated risks. They also require certain broker-dealers who recommend penny stocks to persons other than established customers and certain accredited investors to make a special written suitability determination for the purchaser and receive the purchaser’s written agreement to a transaction prior to sale. These requirements make it more difficult to effect transactions in penny stocks as compared to other securities.

Since our stock currently trades below \$5.00 per share, our shares would be considered a “penny stock” and our stockholders’ ability to trade our shares could accordingly be adversely affected.

*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 65% of our outstanding shares of our common stock, and Dr. Platt and Mr. Czirr together own approximately 52%. Some or all of these stockholders, acting in concert, will be able to continue to elect the Board of Directors and take other corporate actions requiring stockholder approval, such as recapitalization or other fundamental corporate action, as well as dictate 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.

### **Item 2. Description of Property**

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 rent for the year 2003 is approximately \$106,000 (\$8,833 per month), 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.

We completed a build-out of our office space in 2002, at a cost of approximately \$104,000 before related expenditures such as office furnishings. We believe that our currently leased facilities, as modified by the buildout, are suitable and adequate to meet our requirements for the near term.

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

Pro-Pharmaceuticals is not a party to any litigation or legal proceedings.

Dr. Platt was subject to a non-competition covenant with a prior employer now known as GlycoGenesys, Inc. (Nasdaq SmallCap: GLGS). Although GlycoGenesys in a February 2001 letter alleged that Dr. Platt was not in compliance with the covenant, GlycoGenesys did not take further action. The non-competition covenant expired by its terms on June 30, 2002.

---

[Table of Contents](#)

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

No matters were submitted to a vote of our security holders, through solicitation of proxies or otherwise, during the last quarter of the year ended December 31, 2002.

**Executive Officers of Pro-Pharmaceuticals**

Information about the executive officers of Pro-Pharmaceuticals as of March 20, 2003, is set forth below:

<u>Name</u>	<u>Age</u>	<u>Position</u>
David Platt, Ph.D.	49	President, Chief Executive Officer, Treasurer, Secretary and Director
Maureen Foley	61	Chief Operating Officer
James Czirr	49	Executive Vice President of Business Development and Director
Eliezer Zomer, Ph.D.	56	Vice President of Manufacturing and Product Development

Dr. Platt has served as our President, Chief Executive Officer, Treasurer, Secretary and a director since May 15, 2001. Previously, he had been President, Chief Executive Officer, Treasurer, Clerk and a director of Pro-Pharmaceuticals (Massachusetts), the Company's predecessor, since its founding in July 2000. He was Chairman of the Board, Chief Executive Officer and Secretary of SafeScience Inc. (now known as GlycoGenesys, Inc.) (Nasdaq SmallCap: GLGS) (formerly IGG International, Inc.), a biotechnology company involved in research and development of products for treating cancer and immune system diseases, from December 1992 through May 2000. Dr. Platt had been Chairman of the Board, Chief Executive Officer and Secretary of Agricultural Glycosystems, Inc., a wholly owned subsidiary of SafeScience, from its inception in June 1995 through May 2000. Agricultural Glycosystems manufactures and markets complex carbohydrate compounds for use in agriculture. Dr. Platt received a Ph.D. in Chemistry from Hebrew University in Jerusalem, Israel, in 1988, and also earned an M.S. degree in 1983 and a B.S. degree in 1978 from Hebrew University. He earned a Bachelor of Engineering degree in 1980 from Technion in Haifa, Israel.

Ms. Foley has served as our Chief Operating Officer since October 2001 and prior to that time served as our Manager of Operations since January 2001. She has been involved in the start-up of several high tech companies, where she has been responsible for the establishment and administration of business operations including human resources and benefits, accounting and finance, marketing, product development, and project management. Her experience at start-up companies includes the following: From June 2000 to December 2000, she provided business operations services as described for eHealthDirect, Inc., a developer of medical records processing software. From October 1999 to May 2000 she provided business operations services for ArsDigita, Inc., a developer of business software and programs. From June 1996 to August 1999, Ms. Foley served with Thermo Fibergen Inc., a subsidiary of Thermo Electron Corporation, a paper waste processing developer. She is a director and Chairman of Tax/Eze, Inc. a tax preparation and financial services company, and a director of Stewart/Precision, Inc., a metal fabricator, and Ergonics, Inc., a project management firm. Ms. Foley is a graduate of The Wyndham School, Boston, Massachusetts, with a major in Mechanical Engineering.

Mr. Czirr has served as Executive Vice President of Business Development and a director since May 15, 2001. He had been a director of Pro-Pharmaceuticals (Massachusetts), our predecessor, since its founding in July 2000. He has been an independent corporate and public relations consultant for over ten years, working with various companies concerning business strategies, including issues such as organization of production, finance and capital programs, marketing strategies and incentive programs. He is a director of the following company that is subject to the reporting requirements of the Securities Exchange Act of 1934: NACO Industries Inc.,

---

[Table of Contents](#)

which manufactures polyvinyl chloride fittings for use in agriculture, municipal and industrial applications. Mr. Czirr received a B.B.A. degree from the University of Michigan in 1976, and has completed post-graduate courses at the University of Toledo School of Business Administration, and at the College for Financial Planning.

Dr. Eliezer Zomer has served as Vice President of Manufacturing and Product Development since May 1, 2002, and provided part-time consulting services to Pro-Pharmaceuticals since mid 2001. Before joining the company, Dr. Zomer had been the founder of Alicon Biological Control, an Israeli company, where he served from November 2000 to July 2002; Vice President of Product Development at SafeScience, Inc. (now known as GlycoGenesys, Inc.) (Nasdaq SmallCap: GLGS) from December 1998 to July 2000; and Vice-President of Research and Development at Charm Sciences, Inc. from June 1987 to November 1998. Dr. Zomer received a B.Sc. degree in industrial microbiology from the University of Tel Aviv in 1972, a Ph.D. in biochemistry from the University of Massachusetts in 1978, and undertook post-doctoral study at the National Institutes of Health.

The employment of our Vice President of Corporate Strategy and Investor Relations, whom we hired in October 2002, terminated as of March 7, 2003.

None of the persons specified above share any familial relationship. Other than the persons specified above, there are currently no significant employees that we expect to make a significant contribution to our business.

To the best of our knowledge, there are no material proceedings to which any of our directors (all of whom are current nominees) or executive officers is a party adverse to, or has a material interest adverse to, Pro-Pharmaceuticals. To the best of our knowledge, there have been no events under any bankruptcy act, no criminal proceedings and no judgments or injunctions that are material to the evaluation of the ability or integrity of any director, executive officer, promoter or control person of Pro-Pharmaceuticals during the past five years.

**PART II**

**Item 5. Market for Common Equity and Related Stockholder Matters**

**Market for Our Common Stock**

Our common stock trades under the symbol PROH on the Over-the-Counter Bulletin Board Electronic Quotation System maintained by the National Association of Securities Dealers, Inc. Our stock commenced trading on September 9, 2002. Approximately thirteen professional market makers hold themselves out as willing to make a market in our common stock. Following is information about the range of high and low bid prices for our common stock for each fiscal quarter since our stock commenced trading. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not necessarily represent actual transactions.

Quarter Ended	High Bid Quotation		Low Bid Quotation	
9/30/02	\$	4.00	\$	2.00
12/31/02	\$	3.34	\$	2.70

**Holder**

As of March 26, 2003, there were 331 holders of record of our common stock, although we believe that there are additional beneficial owners of our common stock who own their shares in "street name."

**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.

**Equity Compensation Plan Information**

The information in the table below is as of December 31, 2002. See also the Consolidated Financial Statements—Note 7.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders	345,000	\$ 3.50	1,655,000
Equity compensation plans not approved by security holders	224,000	\$ 3.50	N/A
<b>Total</b>	<b>569,000</b>		<b>1,655,000</b>



***Recent Sales of Unregistered Securities***

In September 2002, we began a 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, we had sold 3,223,360 shares for gross proceeds of \$3,223,360. This offering was closed on January 14, 2003. Subsequent to December 31, 2002 and prior to closing the offering, we sold an additional 1,088,000 shares for additional gross proceeds of \$1,088,000.

We agreed to compensate a registered investment adviser with respect to shares purchased by its clients based on the recommendation of the adviser. This adviser was entitled to receive 173,500 shares of common stock as of December 31, 2002, and an additional 2,500 subsequent to year-end, for a total of 176,000 shares as of the closing of the private placement. We also agreed to compensate a finder registered under applicable law, and such finder's agents, for identifying qualified investors. One of the finder's agents was entitled to receive 750 shares of common stock as of December 31, 2002, and the finder and another of its agents were entitled to receive in aggregate an additional 9,750 shares and \$2,750 in cash as of the closing.

We also agreed to compensate one of our officers for identifying qualified investors. As of December 31, 2002, the officer was entitled to receive 2,100 shares of common stock, and an additional 7,000 subsequent to year-end, for a total of 9,100 shares as of the closing. The shares due to the officer were accounted for as compensation, which was charged to general and administrative expenses in the statement of operations.

**Item 6. *Plan of Operation***

This Plan of Operation and other parts of this Form 10-KSB contain forward-looking statements that involve risks and uncertainties. All forward-looking statements included in this document are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of a number of factors, including those set forth in "Risk Factors That May Affect Results" and elsewhere in this Form 10-KSB.

We are a development-stage company and have not generated any revenues to date. We have raised funds primarily through private placements of convertible debt and shares of common stock, and a public offering of shares of common stock. Most recently, we raised a total of approximately \$4,311,000 in a private placement of common stock begun in September 2002 and completed in January 2003. See "Item 5. Recent Sales of Unregistered Securities." We intend to dedicate the proceeds of that private placement to research and development, including expenses of Phase I/II clinical trials of our drug candidate for which the FDA approved our investigational new drug application, and general and administrative expenses.

As of December 31, 2002, we had \$1,921,233 in cash and working capital of \$1,327,173. Our budgeted expenditures for the year ending December 31, 2003, total \$3,700,000, including research and development expenditures of \$2,200,000 and general and administrative expenditures of \$1,500,000.

We plan to raise additional capital through private placements or of public offerings of equity securities in order to cover our budget. If we are limited to the capital we have raised to date, we may be unable to proceed with our current plan of operations and meet our obligations for the next twelve months. Given our current attempts to raise additional capital, we believe we will be able to proceed with our current plan of operations and meet our obligations for the next twelve months. If we do not raise the additional funds, we would slow or halt our research and development expenditures until adequate funding becomes available. Our business structure is somewhat flexible because we outsource most of our research and development.

Our financial statements have been presented on a going-concern basis, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. We are in the development stage, have

---

[Table of Contents](#)

incurred a net loss since inception of \$7,833,232 and expect to incur additional losses in the near future. These factors raise substantial doubt about our ability to continue as a going concern. Successful completion of our development program and, ultimately, the attainment of profitable operations is dependent upon future events, including maintaining adequate financing to fulfill our development activities and achieving a level of sales adequate to support our cost structure. We are actively seeking additional financing to fund future operations, but cannot assure we will be successful.

We have one product candidate in Phase I clinical trials. During the next twelve months, we anticipate that our research and development activities will include continuation of this Phase I first-in-man clinical trial as discussed above under “ — Research and Development — Phase I Clinical Trials,” as well as continuing preclinical animal experiments to study toxicity and efficacy of 5-FU and other cancer chemotherapies both in combination with our polysaccharide compounds and, in the case of Adriamycin, as chemically modified with sugar residues via “linkers” of a certain chemical structure that are our proprietary technology.

We do not anticipate building in-house research or development facilities, or hiring staff to conduct those activities. Consequently, we do not expect to make any purchases or sales of plant or significant equipment during the next twelve months. We currently have six employees, all full-time. We have hired a Chief Financial Officer whose employment commences as of April 1, 2003. We do not expect a substantial increase to our employee headcount.

---

[Table of Contents](#)

**Item 7. Financial Statements**

**Index to Financial Statements**

	<b>Page</b>
1. Independent Auditors' Report for the years ended December 31, 2002 and 2001	F-1
2. Independent Auditors' Report for the period from inception (July 10, 2000) through December 31, 2000	F-2
3. Balance Sheets as of December 31, 2002 and 2001	F-3
4. Statements of Operations for the years ended December 31, 2002 and 2001, for the period from inception (July 10, 2000) to December 31, 2000, and for the cumulative period from inception to December 31, 2002	F-4
5. Statements of Stockholders' Equity for the years ended December 31, 2002 and 2001, and for the period from inception (July 10, 2000) to December 31, 2000	F-5
6. Statements of Cash Flows for the years ended December 31, 2002 and 2001, for the period from inception (July 10, 2000) to December 31, 2000, and for the cumulative period from inception to December 31, 2002	F-6
7. Notes to Financial Statements for the years ended December 31, 2002 and 2001, and for the period from inception (July 10, 2000) to December 31, 2000	F-7

---

[Table of Contents](#)

**Item 8. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

The information below has been previously included in our Current Report on Form 8-K filed with the SEC on February 25, 2002, as amended and filed with the SEC as Form 8-K/A on March 8, 2002.

On February 15, 2002, we dismissed Scillia Dowling & Ntarelli LLC as our independent auditors. On February 22, 2002, we engaged Deloitte & Touche LLP as our independent auditors to audit our financial statements for the fiscal year ended December 31, 2001. The decision to dismiss Scillia Dowling & Ntarelli LLC and to retain Deloitte & Touche LLP was approved by our Board of Directors and Audit Committee.

The report of Scillia Dowling & Ntarelli LLC on our financial statements as of December 31, 2000, and for the period from July 10, 2000 (Inception) to December 31, 2000, and the review reports of Scillia Dowling & Ntarelli LLC on our financial statements as of June 30, 2001 and September 30, 2001 and for the three-month and year-to-date periods, did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles. We have only filed financial statements since our July 10, 2000 date of inception. On March 31, 2001, we engaged Scillia Dowling & Ntarelli LLC as our independent auditors to audit our financial statements for the period commencing July 10, 2000 (Inception) to December 31, 2000. From July 10, 2000 (Inception) through February 15, 2002, there were no disagreements between Scillia Dowling & Ntarelli LLC and us on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Scillia Dowling & Ntarelli LLC, would have caused it to make reference to the subject matter of the disagreement in connection with its reports on our financial statements. Prior to March 31, 2001, another independent auditor had opined on our financial statements. A discussion of this auditor's resignation can be seen under "Item 2. Plan of Operation — Business Combination and Ownership" in our Quarterly Report on Form 10-QSB for the quarterly period ended September 30, 2001, as filed with the SEC on November 14, 2001. No disagreements were reported therein.

From March 31, 2001, we did not consult with Deloitte & Touche LLP on items which involved (i) the application of accounting principles to a specified transaction, either completed or proposed, (ii) the type of audit opinion that might be rendered on our financial statements, or (iii) the subject matter of a disagreement or "reportable event."

Before we filed the Form 8-K in its original and amended versions in which the above matters were disclosed, we furnished Scillia Dowling & Ntarelli LLC with a copy of the above disclosure as included in each of the original and amended forms, respectively, and requested it in each case to furnish a letter addressed to the SEC stating whether Scillia Dowling & Ntarelli LLC agrees with the above statements. Copies of the letters are attached as Exhibit 16.1 and Exhibit 16.2 to the Form 8-K/A as filed with the SEC on March 8, 2002. A copy of the letter with respect to the original Form 8-K disclosure was also attached as Exhibit 16 to the Form 8-K as filed with the SEC on February 25, 2002.

**PART III**

**Item 9. *Directors, Executive Officers, Promoters and Control Persons; Compliance with Section 16(a) of the Exchange Act***

Information about our directors will be contained in our definitive Proxy Statement to be filed with the SEC in connection with our 2003 Annual Meeting of Stockholders to be held on May 28, 2003 (the "Proxy Statement") under the caption "Proposal No. 1 — Election of Directors" and is incorporated herein by reference.

Information concerning our executive officers is furnished in Part I of this Annual Report on Form 10-KSB under a separate unnumbered caption ("Executive Officers of Pro-Pharmaceuticals").

The remaining information required by this item is incorporated by reference from the information under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" contained in our Proxy Statement.

Peter Hauser, a director, resigned for personal reasons from our Board of Directors effective March 20, 2003.

**Item 10. *Executive Compensation***

The information required regarding executive compensation is incorporated by reference from the information under the captions "Executive Compensation" and "Compensation of Directors and Advisors" contained in the Proxy Statement.

**Item 11. *Security Ownership of Certain Beneficial Owners and Management***

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

**Item 12. *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 the Proxy Statement.

**Item 13. *Exhibits, Financial Data Schedules and Reports on Form 8-K***

(a) *Exhibits*

The Exhibits filed as part of this Form 10-KSB are listed on the Exhibit Index immediately preceding such Exhibits, which Exhibit Index is incorporated herein by reference.

(b) *Reports on Form 8-K*

We did not file any reports on Form 8-K during the three months ended December 31, 2002.

**Item 14. *Controls and Procedures***

(a) *Evaluation of disclosure controls and procedures.* Based on his evaluation as of a date within 90 days prior to the filing date of this Annual Report on Form 10-KSB, our principal executive officer and principal financial officer has concluded that our disclosure controls and procedures (as defined in Rules 13a-14(c) and 15d-14(c) under the Securities Exchange Act of 1934) are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

(b) *Changes in internal controls.* There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.



**CERTIFICATION**

I, David Platt, certify that:

1. I have reviewed this annual report on Form 10-KSB of Pro-Pharmaceuticals, Inc.;
2. Based on my knowledge, this annual 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 annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) designed such disclosure controls and procedures 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 annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated: March 26, 2003

/s/ DAVID PLATT

---

David Platt, Ph.D.  
President, Chief Executive Officer, Treasurer, Secretary and Director  
(Principal Executive, Financial and Accounting Officer)

---

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description of Document</u>	
3.1	Articles of Incorporation of the Registrant, dated January 26, 2001	*
3.2	Amended and Restated By-laws of the Registrant	**
10.1	Assignment and Assumption Agreement, dated April 23, 2001, by and between Developed Technology Resource, Inc. and DTR-Med Pharma Corp.	*
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)	*
10.3	Pro-Pharmaceuticals, Inc. 2001 Stock Incentive Plan	**
10.4	Consulting Agreement, dated as of March 14, 2002, as amended November 14, 2002, by and between Pro-Pharmaceuticals, Inc. and Burton Firtel	
10.5	Consulting Agreement, dated as of January 16, 2003, by and between Pro-Pharmaceuticals, Inc. and David H. Smith	
16	Letter from Scillia Dowling & Natarelli LLC to the Commission, dated February 25, 2002, concerning change in certifying accountant	***
21	Subsidiaries of the Registrant	None
24	Powers of Attorney	
99	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	

\* Incorporated by reference to the Registrant's Registration Statement on Form 10-SB, as filed with the Commission on June 13, 2001.

\*\* 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.

\*\*\* Incorporated by reference to the Registrant's Current Report on Form 8-K as filed with the Commission on February 25, 2002.



## **INDEPENDENT AUDITORS' REPORT**

To the Board of Directors and Stockholders of Pro-Pharmaceuticals, Inc. (a development stage company)  
Newton, Massachusetts

We have audited the accompanying balance sheets of Pro-Pharmaceuticals, Inc. (a development stage company) (the "Company") as of December 31, 2002 and 2001, and the related statements of operations, stockholders' equity, and cash flows for the years then ended, and for the period from inception (July 10, 2000) to December 31, 2002. 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. The Company's financial statements as of December 31, 2000, and for the period from inception (July 10, 2000) through December 31, 2000, were audited by other auditors, whose report, dated April 10, 2002, expressed an unqualified opinion on those statements. The financial statements for the period from inception (July 10, 2000) through December 31, 2000 reflect a cumulative net loss of \$184,582. The other auditors' report has been furnished to us, and our opinion, insofar as it relates to the amounts included for such prior periods, is based solely on the report of such other auditors.

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 and the report of the other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audit and the report of other auditors, the 2002 and 2001 financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2002 and 2001, and the results of its operations and its cash flows for the years then ended, and for the period from inception (July 10, 2000) to December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. The Company is a development stage enterprise engaged in developing technology that will reduce the toxicity and improve the efficacy of chemotherapy drugs. As discussed in Note 1 to the financial statements, the Company's net loss since inception and expectations of additional losses in the future raise substantial doubt about its ability to continue as a going concern. Management's plans concerning these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Deloitte & Touche LLP  
Boston, Massachusetts  
March 24, 2003

---

[Table of Contents](#)

**INDEPENDENT AUDITORS' REPORT**

To the Stockholders  
Pro-Pharmaceuticals, Inc.  
(A development stage company)  
Newton, Massachusetts

We have audited the accompanying statements of operations, stockholders' equity and cash flows of Pro-Pharmaceuticals, Inc. (the "Company") for the period from inception (July 10, 2000) through December 31, 2000. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit 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 audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of the Company for the period from inception (July 10, 2000) through December 31, 2000, in conformity with accounting principles generally accepted in the United States of America.

/s/ Scillia Dowling & Natarelli LLC  
Hartford, Connecticut  
April 10, 2002

[Table of Contents](#)

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

**BALANCE SHEETS**  
**DECEMBER 31, 2002 AND 2001**

ASSETS	2002	2001
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 1,921,233	\$ 1,491,172
Prepaid expenses and other current assets	72,733	11,561
Deferred offering costs	—	69,208
<b>Total current assets</b>	<b>1,993,966</b>	<b>1,571,941</b>
<b>PROPERTY AND EQUIPMENT—Net</b>	<b>177,160</b>	<b>111,540</b>
<b>INTANGIBLE ASSETS</b>	<b>85,090</b>	<b>56,115</b>
<b>DEPOSITS AND OTHER ASSETS</b>	<b>26,951</b>	<b>26,951</b>
<b>TOTAL ASSETS</b>	<b>\$ 2,283,167</b>	<b>\$ 1,766,547</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 302,899	\$ 236,223
Accrued expenses	174,644	119,479
Offering costs payable	174,250	—
Convertible notes payable	15,000	195,000
<b>Total current liabilities</b>	<b>666,793</b>	<b>550,702</b>
<b>COMMITMENTS AND CONTINGENCIES (Note 8)</b>		
<b>STOCKHOLDERS' EQUITY:</b>		
Common stock, \$0.001 par value; 100,000,000 shares authorized, 5,000,000 undesignated shares, 19,034,647 and 15,524,410 shares issued and outstanding at December 31, 2002 and 2001, respectively	19,034	15,524
Additional paid-in capital	9,635,531	5,446,751
Stock subscriptions receivable	(150,000)	—
Deferred compensation	(54,959)	(91,575)
Deficit accumulated during the development stage	(7,833,232)	(4,154,855)
<b>Total stockholders' equity</b>	<b>1,616,374</b>	<b>1,215,845</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 2,283,167</b>	<b>\$ 1,766,547</b>

See notes to financial statements.

[Table of Contents](#)**PRO-PHARMACEUTICALS, INC.**  
**(A Development Stage Company)****STATEMENTS OF OPERATIONS**YEARS ENDED DECEMBER 31, 2002 AND 2001, PERIOD FROM INCEPTION (JULY 10, 2000)  
TO DECEMBER 31, 2000, AND CUMULATIVE PERIOD FROM INCEPTION TO DECEMBER 31, 2002

	Year Ended December 31, 2002	Year Ended December 31, 2001	Period from Inception (July 10, 2000) to December 31, 2000	Cumulative Period from Inception (July 10, 2000) to December 31, 2002
<b>OPERATING EXPENSES:</b>				
Research and development	\$ 1,483,027	\$ 893,457	\$ 100,250	\$ 2,476,734
General and administrative (a)	1,804,192	1,288,634	66,700	3,159,526
Total operating expenses	(3,287,219)	(2,182,091)	(166,950)	(5,636,260)
INTEREST INCOME	24,258	24,917	261	49,436
<b>INTEREST AND OTHER EXPENSES:</b>				
Amortization of debt discount on convertible notes	\$ —	\$ 1,241,357	\$ 16,655	\$ 1,258,012
Debt conversion expense	—	503,019	—	503,019
Interest expense on convertible notes	415,416	68,723	1,238	485,377
Total interest and other expenses	(415,416)	(1,813,099)	(17,893)	(2,246,408)
NET LOSS	\$ (3,678,377)	\$ (3,970,273)	\$ (184,582)	\$ (7,833,232)
NET LOSS PER SHARE—Basic and diluted	\$ (0.22)	\$ (0.29)	\$ (0.01)	
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING—Basic and diluted	16,374,524	13,601,795	12,354,670	

(a) The following summarizes the allocation of the stock-based  
compensation charge:

General and administrative	\$ 105,329	\$ 147,317	\$ —	\$ 252,646
----------------------------	------------	------------	------	------------

See notes to financial statements.

[Table of Contents](#)

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

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

	Common Stock						Total Stockholders' Equity
	Number of Shares	\$0.001 Par Value	Additional Paid-in Capital	Subscription Receivable	Deferred Compensation	Deficit Accumulated During the Development Stage	
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 extension costs related to convertible notes to common stock	48,750	49	170,576	—	—	—	170,625
Conversion of notes payable and accrued interest to common stock	52,128	52	104,222	—	—	—	104,274
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)
<b>BALANCE, DECEMBER 31, 2002</b>	<b>19,034,647</b>	<b>\$ 19,034</b>	<b>\$ 9,635,531</b>	<b>\$ (150,000)</b>	<b>\$ (54,959)</b>	<b>\$ (7,833,232)</b>	<b>\$ 1,616,374</b>

See notes to financial statements.

[Table of Contents](#)

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

**STATEMENTS OF CASH FLOWS**

YEARS ENDED DECEMBER 31, 2002 AND 2001, THE PERIOD FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2000, AND CUMULATIVE PERIOD FROM INCEPTION TO DECEMBER 31, 2002

	Year Ended December 31, 2002	Year Ended December 31, 2001	Period from Inception (July 10, 2000) to December 31, 2000	Cumulative Period from Inception (July 10, 2000) to December 31, 2002
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>				
Net loss	\$(3,678,377)	\$(3,970,273)	\$ (184,582)	\$ (7,833,232)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation	43,683	12,156	—	55,839
Stock based compensation expense	105,329	147,317	—	252,646
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	16,655	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 and other expenses	11,164	(80,769)	—	(69,605)
Deposits and other assets	—	(12,451)	(14,500)	(26,951)
Accounts payable	66,676	157,094	70,101	293,871
Accrued expenses	55,165	96,241	23,238	174,644
Net cash used in operating activities	(2,982,602)	(1,799,309)	(89,088)	(4,870,999)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>				
Purchases of property and equipment	(109,303)	(123,696)	—	(232,999)
Increase in patents costs and other assets	(28,975)	(47,420)	(8,695)	(85,090)
Net cash used in investing activities	(138,278)	(171,116)	(8,695)	(318,089)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>				
Net proceeds from issuance of common stock and warrants	—	2,220,750	9,000	2,229,750
Net proceeds from issuance of common stock	3,636,941	—	—	3,636,941
Net proceeds from issuance of convertible notes payable	—	1,036,102	284,500	1,320,602
Repayment of convertible notes payable	(86,000)	—	—	(86,000)
Proceeds from shareholder advances	—	—	9,028	9,028
Net cash provided by financing activities	3,550,941	3,256,852	302,528	7,110,321
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>430,061</b>	<b>1,286,427</b>	<b>204,745</b>	<b>1,921,233</b>
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	1,491,172	204,745	—	—
CASH AND CASH EQUIVALENTS, END OF PERIOD	1,921,233	1,491,172	204,745	1,921,233
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION – Cash paid for interest</b>	<b>\$ 17,051</b>	<b>\$ —</b>	<b>\$ 1,238</b>	<b>\$ 18,289</b>
<b>NONCASH FINANCING ACTIVITIES:</b>				
Deferred stock compensation expense	\$ 10,901	\$ —	\$ —	\$ 10,901
Conversion of convertible notes and accrued interest to common stock	\$ 94,000	\$ 1,125,602	\$ —	\$ 1,219,602
Offering costs payable	\$ 174,250	\$ —	\$ —	\$ 174,250
Issuance of warrants to induce conversion of notes payable	\$ —	\$ 503,019	\$ —	\$ 503,019
Issuance of common stock and warrants	\$ —	\$ 866,328	\$ —	\$ 1,102,315
Conversion of convertible notes and accrued interest to common stock	\$ 170,625	\$ 1,125,602	\$ —	\$ 866,328
Issuance of stock to acquire Pro-Pharmaceuticals-NV	\$ —	\$ 107,000	\$ —	\$ 107,000



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

**NOTES TO FINANCIAL STATEMENTS  
YEARS ENDED DECEMBER 31, 2002 AND 2001, AND THE PERIOD FROM INCEPTION  
(JULY 10, 2000) TO DECEMBER 31, 2000**

---

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

*Nature of Business* – Pro-Pharmaceuticals, Inc. (the “Company”), was established in July 2000. The Company is in the development stage and is in the process of developing technology that is intended to reduce toxicity and improve the efficacy of currently existing chemotherapy drugs by combining the drugs with a number of specific carbohydrate compounds. The carbohydrate-based drug delivery system may also have applications for drugs now used 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.

- One of its product candidates began Phase I clinical trials in January 2003.
- To date the Company has raised \$7,187,000 in capital principally through the issuance of convertible notes, the sale of common stock through public offering and the sale of common stock through private placements.

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.

The Company’s financial statements have been presented on a going-concern basis, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company is in the development stage, has incurred a net loss since inception of \$7,833,232 and expects to incur additional losses in the near future. These factors raise substantial doubt about the Company’s ability to continue as a going concern. 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. The Company will seek additional financing to fund future operations and future significant investments in the business. However, there can be no assurance that the Company will be able to obtain financing on acceptable terms, or at all.

*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. Information concerning common stock in 2000 has been restated on an equivalent-share basis.



## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

*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 assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

*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.

*Deferred Offering Costs* – At December 31, 2001 deferred offering costs of \$69,208 consisted of legal and other direct costs pertaining to a public offering of the Company’s stock, which began on December 15, 2001. No proceeds related to the public offering were raised during 2001; therefore, these costs were offset against proceeds of \$650,998 raised in 2002.

*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 Company periodically evaluates the recoverability of its long-lived tangible assets based on the expected undiscounted cash flows and recognizes impairments, if any, based on expected discounted future cash flows. The estimated useful lives 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, which consist primarily of related legal fees, are capitalized as incurred and are amortized over the estimated useful life of the patents. As of December 31, 2002 and 2001, all patents were pending and none of the costs have been amortized. In accordance with SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets”, the Company reviews all amortizing intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of such assets may not be recoverable. Recoverability of these assets is determined by comparing the forecasted undiscounted net cash flows of the operation to which the assets relate to the carrying amount.

In 2001, the Company evaluated its amortizing intangible assets for impairment and determined that the carrying amount of contractual rights exceeded the future undiscounted cash flows by approximately \$107,000, which the Company properly wrote off as of December 31, 2001. In 2002, the Company determined that the carrying value of its amortizing intangible assets had not been impaired.

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

*Research and Development Expenses* – Costs associated with research and development are expensed as incurred.

*Stock-Based Compensation* – As allowed by Statement of Financial Accounting Standards (“SFAS”) No. 123, “Accounting for Stock-Based Compensation”, the Company has elected to account for stock-based compensation at intrinsic value with disclosure of the effects of fair value accounting on net loss and net loss per share on a pro forma basis. At December 31, 2002, the Company had one stock incentive plan, which is described more fully in Note 7. The Company accounts for awards issued to employees under the

## Table of Contents

plan under the recognition and measurement principles of Accounting Principles Board (“APB”) Opinion No. 25, “Accounting for Stock Issued to Employees,” and the related interpretations. No stock-based employee compensation cost is reflected in net income, as all options granted under the plan had an exercise price equal to the market value of the underlying common stock on the date of grant. Since the Company adopted its stock incentive plan in 2001, fiscal year 2000 is not presented below. In addition, the Company did not grant options to employees during 2001; therefore, no adjustment is made between the reported and pro-forma net income. The following table illustrates the effect on net loss and net loss per share if the Company had applied the fair value recognition provisions of SFAS No. 123:

	2002	2001
Net loss, as reported	\$ (3,678,377)	\$ (3,970,273)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(354,160)	—
Net loss, pro forma	\$ (4,032,537)	\$ (3,970,273)
Net loss per share:		
Basic and diluted-as reported	\$ (0.22)	\$ (0.29)
Basic and diluted pro forma	\$ (0.25)	\$ (0.29)

Stock options granted to non-employees are accounted for in accordance with SFAS No. 123 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, which generally requires the value of options to be periodically remeasured and charged to expense as they are earned over the performance period. The fair value of the options is determined using the Black-Scholes model. Compensation expense for non-employee options recorded in the accompanying financial statements was \$105,329 and \$147,317 for the years ended December 31, 2002 and 2001, respectively.

*Income Taxes* – Deferred income tax assets and liabilities are determined based on the differences between the financial reporting and tax bases of assets and liabilities and are measured using the expected tax rates estimated to be in effect when such basis differences reverse. A valuation allowance is provided for the amount of deferred tax assets that, based on currently available evidence, are not expected to be realized.

*Net Loss per Share* – Basic and diluted net loss per share is presented in conformity with SFAS No. 128, “Earnings per Share”; for all periods presented. In accordance with SFAS No. 128, basic and diluted net loss per common share was determined by dividing net loss applicable to common stockholders by the weighted-average common shares outstanding during the period, less shares subject to repurchase. Diluted weighted-average shares are the same as basic weighted-average shares since the inclusion of 1,852,423 and 2,078,091 shares at December 31, 2002 and 2001, respectively, issuable pursuant to the exercise of stock options and warrants and conversion of convertible debt would have been antidilutive.

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

*Fair Value of Financial Instruments* – Financial instruments consist of cash equivalents, accounts payable and convertible notes payable. The estimated fair value of these financial instruments approximates their carrying value due to the short-term nature of these instruments.

---

## [Table of Contents](#)

*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 reclassifications have been made to the 2000 and 2001 financial statements in order to conform to the 2002 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.

*Recent Accounting Pronouncements*—In December 2002, the FASB issued SFAS No. 148, “Accounting for Stock-Based Compensation-Transition and Disclosure, an amendment of FASB Statement No. 123”, to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, this statement amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. Management has determined that it will continue to account for stock-based compensation to employees under the provisions of APB No. 25 and it will make all disclosures in its financial reports. The amendments to SFAS No. 123 provided for under SFAS No. 148 are effective for financial statements for fiscal years ending after December 15, 2002. The disclosure requirements of SFAS No. 148 have been implemented in Note 2, “Significant Accounting Policies” and the interim disclosure requirements will be adopted by the Company in the first quarter of 2003.

### 3. PROPERTY AND EQUIPMENT

Property and equipment consists of the following at December 31:

	2002	2001
Leasehold improvements	\$ 103,762	\$ 27,269
Computer and office equipment	76,675	56,681
Furniture and fixtures	52,562	39,746
Total	232,999	123,696
Less accumulated depreciation	(55,839)	(12,156)
Property and equipment—net	\$ 177,160	\$ 111,540

### 4. 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. Included in convertible notes payable for the year ended December 31, 2000 was \$7,000 due to this same individual.

During 2001, the Company had 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, director and officer of the Company for financing and business development services, subsequently

---

## [Table of Contents](#)

terminated when such person became an employee of the Company (ii) a corporation controlled by a person who is a stockholder and officer of the Company for research and development services, including reimbursable expenses and (iii) an individual who is a stockholder of the Company for management and consultant services. The Company had related party consulting expenses and related reimbursement expenses of \$202,000, \$203,000 and \$77,000 for 2002, 2001 and 2000, respectively related to these three individuals.

During 2002, a board member and stockholder of the Company provided consulting services to the Company. In 2003, such individual agreed to receive compensation for such services in the form of 25,324 shares of common stock and 25,324 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 \$121,956 as an accrued liability. The common stock has been valued at \$75,972, 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, based on a deemed fair value of the Company's common stock of \$3.00 per share, an assumed volatility of 95%, a risk-free interest rate of 2.91%, a weighed average expected life of three years, and a dividend rate of 0.0%.

### **5. 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 6, 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 \$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 are 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 note 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.

As of December 31, 2002, one convertible note payable of \$15,000, which will mature in April 2003, remained outstanding, and \$3,128 in related extension costs remained unamortized. During 2002, \$167,497 of the deferred convertible notes payable costs were amortized to expense.

### **6. 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 (the "2001 Private Placement") of securities. Each share sold in the 2001 Private Placement included a warrant to purchase common stock of the Company. These warrants are described below.

---

## [Table of Contents](#)

*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 \$0.001 par value 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 gross proceeds of \$1,088,000.

The Company agreed to compensate a registered investment advisor with respect to shares purchased by its clients. As of December 31, 2002, the advisor was entitled to received 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 advisor 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 advisor, finder and finder’s agent were accounted for as offering costs and valued at \$1.00 per share, consistent with the price paid for 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.

During 2002, the Company also agreed to issue an employee 2,100 shares of common stock 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.

*Warrants* – In connection with the 2001 Private Placement, the Company issued 339,200 and 550,100 warrants to purchase common stock at \$6.50 and \$5.00 per share, respectively. All of the warrants are exercisable immediately and expire through December 2005. 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 using the Black-Scholes option pricing model, based on a deemed fair market value of the Company’s common stock of \$2.28 per share, an assumed volatility of 95%, a risk-free interest rate of 3.91%, a weighted-average expected life of three years, and a dividend rate of 0.0%.

As described in Note 5, 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

[Table of Contents](#)

price of \$6.50 per share and are immediately exercisable. The warrants expire on October 1, 2005, however, 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 using the Black-Scholes option-pricing model, based on a deemed fair market value of the Company’s common stock of \$2.28 per share, an assumed volatility of 95%, a risk-free interest rate of 3.91%, a weighted-average expected life of three years, and a dividend rate of 0.0%. The value of the warrants has been recorded as a debt conversion expense.

In 2001, the Company incurred a liability of \$50,000 to finders in connection with the 2001 debt offering. In March 2002, the Company settled this liability by issuing 110,000 warrants. 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 and recorded such value as interest expense in the statement of operations for the year ended December 31, 2002. The Company valued the warrants 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, an assumed volatility of 95%, a risk-free interest rate of 3.91%, a weighted average expected life of three years and a dividend rate of 0.0%.

**7. STOCK INCENTIVE PLAN**

In October 2001, the Company’s Board of Directors adopted the Pro-Pharmaceuticals, Inc. 2001 Stock Incentive Plan (the “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 under the Plan. Options granted under the Plan generally have a vesting period ranging from immediately to over a period of 2 years and expire 5 years to 10 years from the grant date. At December 31, 2002 and 2001, 1,431,000 and 1,800,000 shares were available for future grant under the Plan, respectively. Information about options granted and outstanding during these periods is as follows:

	Shares	Exercise Price Per Share	Weighted Average Exercise Price
Outstanding, December 31, 2000	—	\$ —	\$ —
Granted	200,000	3.50	3.50
Exercised	—	—	—
Cancelled	—	—	—
Outstanding, December 31, 2001	200,000	3.50	3.50
Granted	369,000	3.50	3.50
Exercised	—	—	—
Cancelled	—	—	—
Outstanding, December 31, 2002	569,000	\$ 3.50	\$ 3.50

The following tables summarize information about stock options outstanding at December 31, 2002:

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
\$3.50	569,000	9.45	\$ 3.50	365,086	\$ 3.50

---

[Table of Contents](#)

SFAS No. 123, "Accounting for Stock-Based Compensation", requires the measurement of the fair value of stock options to be included in the statement of income or disclosed in the notes to the financial statements. The Company has determined that it will continue to account for stock-based compensation for employees under APB Opinion No. 25, "Accounting for Stock Issued to Employees", and elect the disclosure-only alternative under SFAS No. 123.

The Company has computed the pro forma disclosures required under SFAS No. 123 for its stock compensation plan for employees during the years ended December 31, 2002 and 2001 using the Black-Scholes option pricing model under the fair value method as prescribed by SFAS No. 123. The assumptions used for the years ended December 31, 2002 and 2001 are as follows:

	2002	2001
Dividend yield	0%	0%
Expected volatility	95%	95%
Risk-free interest rate	2.25% - 2.32%	—
Expected life	3 years	3 years

The pro forma results are presented in Note 2 to these financial statements.

During 2001, the Company entered into a consulting agreement with a non-employee, who was also a Board member and 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. As the time of issuance, these options were valued at \$238,892 using the Black-Scholes option pricing model, based on a deemed fair market value of the Company's common stock of \$2.28 per share, an assumed volatility of 95%, a risk-free interest rate of 3.91%, a weighted average expected life of three years, and a dividend rate of 0.0%. A portion of these options vested during fiscal years 2001 and 2002, and the remainder will vest during 2003. Consulting expense is estimated based on fair value pursuant to SFAS No. 123 and EITF No. 96-18 until the final measurement date, which is the earlier of performance completion or vesting. Under Financial Accounting Standards Board Interpretation ("FIN") No. 28, "Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans, an interpretation of APB Opinions No. 15 and 25", compensation related to stock appreciation rights and other variable stock option or award plans should be measured at the end of each period. Fluctuations in the quoted market value of the Company's stock covered by the option grant should be reflected as an adjustment of deferred compensation and compensation expense over the periods the related service is performed. Accordingly, the Company recorded a charge to compensation expense related to the fair value adjustment of \$16,756 related to the unvested consultant options during 2002. Total expense for the years ended December 31, 2002 and 2001 related to these options was \$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, 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, an assumed volatility of 95%, a risk-free interest rate range of 3.91%, a weighted average expected life of three years, and a dividend rate of 0.0%. During 2002, the Company recorded a \$41,056 charge to stock compensation expense related to the 20,000 options that vested during the year under the amended agreement. As of December 31, 2002, the Company had deferred compensation of \$10,901 that related to the remaining unvested options, which will be recognized in 2003.

**8. COMMITMENTS AND CONTINGENCIES**

*Research and Development Commitments* – During 2002, the Company entered into contracts with a clinical research organization (a “CRO”) and a data management company, the initial assignments under which will be to assist with the Phase I clinical trials, expected to extend through 2003, of the Company’s Davanat product in combination with 5-Fluorouracil (“5-FU”), a chemotherapy drug. The Company hired PRA Interntional, Inc. (“PRA”), a CRO, to serve as the overall manager of the clinical trials, for which PRA will provide assistance in design, management and implementation. The Company’s expenditure commitments under its PRA contract, terminable at any time on 30 days’ notice, represents 5% of the contracted budgetary amounts. The projected target date of completion of this engagement with PRA is November 2004. The Company hired Medidata Solutions, Inc. for purposes of electronic collection, analysis and management of the data generated by the Company’s clinical trials. The Company’s expenditure commitment under its Medidata contract, terminable at any time on 30 days’ notice, represents 15% of the contracted budgetary amounts, less fees previously paid or payable.

*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 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:

Year Ending December 31,		
2003	\$	106,000
2004		107,000
2005		109,000
2006		46,000
<b>Total lease payments</b>	<b>\$</b>	<b>368,000</b>

Rent expense under this operating lease was approximately \$98,000 and \$50,000 for the years ended December 31, 2002 and 2001, \$0 for the period ended December 31, 2000 and \$148,000 for the cumulative period from inception (July 10, 2000) through December 31, 2002.

**9. INCOME TAXES**

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

	2002	2001
Operating loss carryforwards	\$ 2,299,000	\$ 909,000
Tax credit carryforwards	138,000	86,000
Temporary differences	(4,000)	(2,000)
	2,433,000	993,000
Less valuation allowance	(2,433,000)	(993,000)
<b>Net deferred tax asset</b>	<b>\$ —</b>	<b>\$ —</b>

As of December 31, 2002, the Company has federal net operating loss carryforwards totaling approximately \$5,434,000 and research and development and investment tax credits of approximately \$100,000 which expire between 2022 and 2023. 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.



PRO-PHARMACEUTICALS, INC.

CONSULTING AGREEMENT  
(Burton Firtel)

CONSULTING AGREEMENT entered into as of March 1, 2002 (the "Effective Date"), by and between Pro-Pharmaceuticals, Inc., a Nevada corporation having an address of 189 Wells Avenue, Newton, Massachusetts 02459 (the "Company") and Burton Firtel, an individual having an address at 555 Sherman Avenue, Hamden, Connecticut 06518 ("Consultant").

WHEREAS, the Company has requested that the Consultant provide certain consulting services in connection with the business development and financing of the Company, and other professional tasks for the Company as it may request (the "Services"); and

WHEREAS, the Consultant is willing to provide Services to the Company in connection with the terms and conditions herein set forth;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Provision of Services. The Consultant agrees to provide Services as stated above and as directed by the Company.

2. Compensation. In consideration of the Services, the Company shall grant to the Consultant, pursuant to a non-qualified stock option agreement, substantially in the form attached hereto as Exhibit A, with respect to each month of Services, options to purchase 2,000 shares the Company's common stock, exercisable at \$3.50 per share.

3. Expenses. The Company shall reimburse the Consultant for out-of-pocket expenses reasonably incurred by the Consultant in the course of performing the Services, provided Consultant delivers vouchers or other documentation evidencing such expenses to the satisfaction of the Company.

4. Termination.

(a) Without Cause. This Consulting Agreement has no defined term and may be terminated by either party for any reason and without cause upon thirty (30) days' prior written notice.

(b) Termination for Cause. The Company shall have the right, upon written notice thereof to the Consultant, to terminate immediately the Consultant's engagement pursuant to this Agreement (such termination, for "cause") if the Consultant (i) is grossly negligent in the performance of Services and other duties hereunder, (ii) is convicted of a felony or other violation which in the reasonable judgment of the Company' senior management could materially impair the Company from substantially meeting its business objectives, (iii) has in the reasonable judgment of such management breached Section 5, 6 or 7 hereof, or (iv) is found to have committed any act of fraud, misappropriation of funds or embezzlement with respect to the Company.

-1-

(c) Effect of Termination. No termination of this Consulting Agreement shall affect the obligations, promises or covenants contained herein which are expressly made to extend beyond the term of this Consulting Agreement, including, without limitation, as set forth under Section 5, 6 or 7 hereof. The effective date of termination of this Consulting Agreement is referred to as the "Termination Date".

5. Property; Confidentiality.

(a) Definitions. For the purposes of this Consulting Agreement the following terms shall have the meanings set forth below:

"Confidential Information" shall mean all information related to the business, operations, products or services of the Company, and all reports, presentations, drawings, know-how, data, inventions, discoveries, improvements, ideas, plans, analysis, memoranda and other information or materials provided to Consultant by or on behalf of the Company and/or its subsidiaries and other affiliates, collectively and individually, or developed by Consultant in connection with Consultant's engagement by the Company (including, without limitation, the Work) or arising out of the Work, or preparation for it or other related activities.

"Work" shall mean all designs, plans, presentations, reports, know-how, data, inventions, discoveries, improvements, ideas, trademarks, copyrights, and other works of authorship, and all other materials, information, work or other intangible or intellectual property, collected, prepared, developed or edited by Consultant in the performance of or in connection with the Services.

For the purpose of this Section 5, the term "Company" shall include the Company and its respective subsidiaries and other affiliates, collectively and individually.

(b) Intellectual Property Rights. The parties acknowledge and agree that any Work being created at the instance of the Company will be deemed work made for hire under the United States copyright laws. The Company shall have the right to use all or any portion of the Work as it sees fit. The Company may alter the Work, add to it, or combine it with any other work or works, in its sole discretion. All rights in and to the Work and all material submitted by Consultant to the Company as part of the Work or part of the process of creating the Work, will be the property of the Company whether or not ultimately used by the Company. No rights in or to the Work are reserved to Consultant.

(c) Assignment of Property. This Consulting Agreement shall operate as a perpetual, unlimited, and irrevocable assignment by Consultant to the Company of the copyright and any and all other proprietary or other intellectual property rights or interests, in or to any Work, held by or on behalf of Consultant (including, without limitation, any such interest arising as a result of a determination that the Work does not constitute a work made for hire under the United States copyright laws). In the event of any dispute arising out of or concerning this Consulting Agreement, no acts of the Company undertaken for the purpose of prosecuting, registering or preserving any patent or copyright in the Work shall be considered in determining the character of the Work as a work made for hire. Consultant shall execute such documents and do such further acts as Company may request reasonably (and subject to Company's reimbursement of Consultant's out of pocket expense of doing so) to perfect Consultant's rights in the Work and said intellectual property rights and aid in enforcement and exploitation of such rights and the assignment of the Consultant's rights to the Company.

-2-

(d) Confidentiality. Consultant agrees to (i) refrain from using the Confidential Information for any purpose that would be adverse to the interests of the Company, and (ii) hold the Confidential Information strictly confidential and not disclose it to any person or entity other than the Company's employees or representatives. The foregoing obligations shall not apply to any information that (i) is publicly known at the time of its disclosure, (ii) is lawfully received by Consultant from a third party not under an obligation of confidentiality to the Company, (iii) is published or otherwise made known to the public by the Company, or (iv) was generated independently by Consultant without reference to or the use of Confidential Information. Consultant's obligation under this subsection shall survive any termination of this Consulting Agreement.

(e) Return of Confidential Information. Consultant shall deliver promptly to the Company after the Termination Date, and at any other time as the Company may request, all Confidential Information, which shall at all times be and remain the property of the Company.

6. Non-Competition. The Consultant agrees that during the period in which he provides Services and for one (1) year after the Termination Date, without prior written permission from the Company, the Consultant will not use the Confidential Information, Work or other results of the Services in any

manner which could directly or indirectly compete with the business of the Company. For purposes of the foregoing, the Consultant shall not, directly or indirectly, be engaged by or invest in any entity involved in the application of carbohydrate-based chemistry as a technique to reduce toxicity of, or increase efficacy of, pharmaceuticals (a "Competitive Entity"), whether by way of becoming an agent, employee, director, officer, partner, stockholder, consultant or otherwise; provided, however, that the foregoing shall not prohibit the Consultant from merely investing in any entity competitive with the Company whose securities are listed on a national securities exchange, or traded in any established over-the-counter securities market.

7. Non-Solicitation. During the period in which Services are rendered and for a period of two (2) years immediately after the Termination Date, the Consultant shall not (i) either directly or indirectly solicit or take away, or attempt to solicit or take away employees of the Company, either for the Consultant'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.

8. Injunctive Relief. The Consultant acknowledges that a violation of Sections 5, 6 or 7 of this Consulting Agreement would cause irreparable harm to the Company for which no adequate remedy at law exists and the Consultant therefore acknowledges and agrees that, in addition to any other remedies available, the Company shall be entitled to injunctive relief to enforce the terms of this Consulting Agreement, without waiving available damages, remedies or other relief.

9. Waiver of Liability. The Consultant acknowledges that the Company shall bear no liability for (a) bodily and/or personal injury or death or property damage caused to the Consultant, its employees or agents, or others by the Consultant in the performance of the Services, (b) medical expenses or injuries sustained by the Consultant, its employees or agents in the performance of the Services, or (c) any professional liability of the Consultant.

-3-

10. Independent Contractor. The Consultant is an independent contractor, and is not, and shall not be considered (by virtue of this Consulting Agreement or otherwise) an employee, agent, partner or joint venturer of the Company, whether for tax purposes or any other purpose. The Consultant is not authorized to act on behalf of the Company, and shall not have the right to bind the Company to any agreement with a third party or to incur any obligation or liability on behalf of the Company.

11. Dispute Resolution.

The parties shall follow the following dispute resolution processes in connection with any and all disputes, controversies or claims arising out of this Consulting Agreement:

(i) The Company and the Consultant (collectively, the "Parties" and individually, a "Party") shall attempt to settle any disputes through good faith negotiations between and among them.

(ii) If the Parties should fail to resolve the dispute within 30 days after the date of the initial demand for negotiation, then the Parties shall refer the matter to mediation conducted by JAMS/Endispute, Boston, Massachusetts office, or such other mediation service as the Parties may mutually agree upon, and shall attempt in good faith to settle the dispute before such mediation agency. Each Party shall bear its own expenses in connection with the mediation, and shall equally share the filing and other administrative fees of the mediation service. The Parties shall be represented in the mediation by representatives having final settlement authority over the matter in dispute.

(iii) Any dispute not finally resolved within 90 days after the initial demand for negotiation shall be referred to the American Arbitration Association, Boston, Massachusetts Office ("AAA") for binding arbitration. Selection of one neutral arbitrator by the Parties shall be from the panel list

provided by the AAA and in accordance with the appointment rules of the AAA. Each Party shall bear its own expenses in connection with any arbitration and the Parties shall equally share the filing and other administrative fees of the AAA and the expenses of the arbitrator; provided, however, that the prevailing Party shall be entitled to receive from the non-prevailing Party reimbursement of all expenses, including without limitation reasonable attorneys' fees, incurred in connection with any such arbitration proceeding.

12. Compliance by Consultant Personnel. Consultant represents and warrants that (i) it has informed and will inform such of its employees, agents or other personnel, if any, who perform Services as to the requirements of this Consulting Agreement and (ii) such employees, agents or other personnel shall have entered into such written agreements with Consultant in order to assure that the Company shall have the benefits of the rights and obligations under Sections 5, 6 and 7 hereof.

13. Miscellaneous.

(a) Entire Agreement; Amendment. This Consulting Agreement constitutes the entire understanding of the parties with respect to its subject matter, may be modified only in a writing signed by both parties, and shall supersede any and all other agreements between them regarding such subject matter.

(b) No Assignment. This Consulting Agreement shall not be transferred or assigned by either party without the prior written consent of the other party.

-4-

(c) Waiver. Any waiver of a violation of this Consulting Agreement shall only constitute a waiver of that particular violation and shall not constitute a waiver of any different or continuing default. The exercise of any right or remedy provided in this Consulting Agreement shall be without prejudice to the right to exercise any other right or remedy provided by law or equity.

(d) Modification of Invalid Provisions. If any provision of this Consulting Agreement is found to be invalid, illegal or unenforceable, a modified provision shall be substituted which carries out as nearly as possible the original intent of the parties and the remaining provisions shall in not be affected by such modification.

(e) Notices. Any notice or other communication required or permitted to be made under this Consulting Agreement shall be sufficiently made or given on (i) date of personal delivery if delivered in person, (ii) the next day after sending if sent by fax or next-day courier service, or (iii) the third day after mailing if sent certified or registered mail or air mail, postage prepaid, and addressed to the other party at the address set forth on the first page of this Consulting Agreement or to any other address designated by the other party in writing.

(f) Governing Law. This Consulting Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts, without giving effect to its principles on conflict of laws.

[Remainder of Page Intentionally Left Blank]

-5-

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

PRO-PHARMACEUTICALS, INC.

By: /s/ David Platt  
-----  
David Platt, Ph.D.  
President

/s/ Burton Firtel  
-----  
Burton Firtel

-6-

Exhibit A

PRO-PHARMACEUTICALS, INC.

NON-QUALIFIED STOCK OPTION AGREEMENT

Non-Qualified Stock Option Agreement dated as of March 1, 2002 (the "Effective Date") by and between Pro-Pharmaceuticals, Inc., a Nevada corporation, (the "Company"), and Burton Firtel (the "Optionee").

The parties agree as follows:

1. Grant and Exercise Rights. In consideration of the services provided to the Company by the Optionee pursuant to the Consulting Agreement, dated as of March 1, 2002, by and between the Company and the Optionee (the "Consulting Agreement"), the Company hereby grants to the Optionee, with respect to each month of such services beginning March 2002, an option (the "Option") exercisable for \$3.50 per share to purchase two thousand (2,000) shares of common stock, par value \$.001 per share, of the Company (the "Common Stock"). Each such Option shall be immediately exercisable upon the first day of the following month in which such services were provided.

2. Relationship to Plan. The Option is not granted pursuant to the Company's 2001 Stock Incentive Plan (the "Plan").

3. Termination of Option. Exercise rights with respect to each monthly Option shall terminate on the tenth anniversary of its date of grant unless the Optionee's death occurs prior to such date in which event the termination date shall be the first anniversary of the date of death.

4. "Lock-Up" Agreement. The Optionee agrees that upon the Company's request at any time, whether before or after the exercise of the Option, the Optionee shall enter into an agreement pursuant to which, if the Company deems it necessary or desirable to make any public offering of shares of Common Stock, then without the prior written consent of the Company or the managing underwriter, if any, of any such offering, the Optionee shall not sell, make any short sale of, loan, grant any option for the purchase of, pledge, or otherwise encumber or otherwise dispose of any shares of Common Stock issued or issuable pursuant to the Option, during such period (not to exceed 210 days) commencing on the effective date of the registration statement relating to such offering as the Company may request.

5. Methods of Exercise. In the event that the Optionee's service as a consultant under the Consulting Agreement has not been terminated and except as contained in this ss.5 or as may otherwise be agreed by the Optionee and the Company, the Option shall be exercisable only by a written notice in form and substance acceptable to the Company (the "Election Notice"), specifying the number of shares to be purchased and accompanied by payment in cash of the aggregate purchase price for the shares for which the Option is being exercised; provided, that the Optionee shall be entitled to pay the Exercise Price for the shares of Common Stock for which the Option is being exercised by surrendering a number of such shares having a Fair Market Value equal to the Exercise Price required to be paid. Thereupon, the Company shall issue to the Optionee such number of fully paid and nonassessable shares of Common Stock as is computed using the following formula:

-1-

$$X = Y (A-B)$$

-----

A

Where X = the number of shares of Common Stock to be issued to the Optionee pursuant to this ss.5;

Y = the number of shares of Common Stock issuable under this Option;

A = the Fair Market Value for the Common Stock as of the date of the exercise; and

B = the Exercise Price in effect under this Option at the time the exercise is made pursuant to this ss.5.

6. Characterization of Option for Tax Purposes. The Option is intended not to qualify as an "incentive stock option" under the Internal Revenue Code of 1986, as amended, and shall be subject to different tax treatment than that accorded incentive stock options (including the possibility of income tax withholding in accordance with the Plan).

7. Withholding. At the request of the Company, the Optionee agrees to remit to the Company an amount sufficient to satisfy any federal, state, local or other withholding tax requirements (whether so required to secure for the Company an otherwise available tax deduction or otherwise) if and to the extent required by law prior to the delivery of any certificate or certificates representing shares of Common Stock to be issued upon exercise of the Option.

8. Compliance with Laws. The obligations of the Company to sell and deliver Shares upon exercise of the Option are subject to all applicable laws, rules, and regulations, including all applicable federal and state securities laws, and the obtaining of all such approvals by government agencies as may be deemed necessary or appropriate by the Board of Directors of the Company (the "Board") or the relevant committee of the Board. If so required by the Board or such committee, no shares shall be delivered upon the exercise of the Option until the Optionee has given the Company a satisfactory written statement that he is purchasing such shares for investment, and not with a view to the sale or distribution of any such shares, and with respect to such other matters as the Board may deem advisable in order to assure compliance with applicable securities laws. All shares issued upon exercise of the Option shall bear appropriate restrictive legends.

9. General. The Optionee may not transfer, assign, or encumber any of his or her rights under this Agreement without the prior written consent of the Company, and any attempt to do so shall be void. This Agreement shall be governed by and interpreted and construed in accordance with the internal laws of the Commonwealth of Massachusetts (without reference to principles of conflicts or choice of law). The captions of the sections of this Agreement are for reference only and shall not affect the interpretation or construction of this Agreement. This Agreement shall bind and inure to the benefit of the parties and their respective successors, permitted assigns, heirs, devisees, and legal representatives.

IN WITNESS WHEREOF, the Company and the Optionee have executed and delivered this Agreement, which may be in counterpart originals, intending it to be effective as an agreement under seal as of the Effective Date.

PRO-PHARMACEUTICALS, INC.

By: \_\_\_\_\_  
Name:  
Title:

Optionee:

-----  
Burton Firtel

-3-

PRO-PHARMACEUTICALS, INC.

Amendment No. 1 to  
CONSULTING AGREEMENT  
(Burton Firtel)

AMENDMENT NO. 1, dated as of November 14, 2002, to the Consulting Agreement entered into as of March 1, 2002 (the "Consulting Agreement"), by and between Pro-Pharmaceuticals, Inc., a Nevada corporation having an address of 189 Wells Avenue, Newton, Massachusetts 02459 (the "Company") and Burton Firtel, an individual having an address of 555 Sherman Avenue, Hamden, Connecticut 06518 (the "Consultant").

WHEREAS, the Company and the Consultant desire to amend the Consulting Agreement on the terms and conditions hereinafter set forth;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. All capitalized terms used herein shall have the respective meanings ascribed to them in the Consulting Agreement, unless otherwise defined herein.

2. Section 2 is hereby deleted and replaced in its entirety, to read in its amended form as follows:

2. Compensation. In consideration of the Services, the Company shall grant to the Consultant, pursuant to a non-qualified stock option agreement as amended effective as of the date hereof, substantially in the form attached hereto as Exhibit A, on an annual basis commencing as of the effective date of this Consulting Agreement, an option to purchase 24,000 shares of the Company's common stock, exercisable at \$3.50 per share. Such option will vest in twelve (12) equal monthly installments of 2,000 shares, in each case as of the first day of the following month in which such Services were provided.

3. The Consulting Agreement as amended hereby shall remain in full force and effect.

This Amendment may be executed in one or more counterparts, each of which shall be deemed an original, and both of which together shall be considered one and the same agreement.

[Remainder of Page Intentionally Left Blank]

-1-

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Consulting Agreement as of the date first written above.

PRO-PHARMACEUTICALS, INC.

By: /s/ David Platt

-----  
David Platt, Ph.D.  
President

/s/ Burton Firtel

-----  
Burton Firtel

Exhibit A

PRO-PHARMACEUTICALS, INC.

Amendment No. 1 to  
NON-QUALIFIED STOCK OPTION AGREEMENT  
(Burton Firtel)

AMENDMENT NO. 1, dated as of November 14, 2002, to the Non-Qualified Stock Option Agreement dated as of March 1, 2002 (the "Stock Option Agreement"), by and between Pro-Pharmaceuticals, Inc., a Nevada corporation (the "Company"), and Burton Firtel (the "Optionee").

WHEREAS, the Company and the Optionee desire to amend the Stock Option Agreement on the terms and conditions hereinafter set forth;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. All capitalized terms used herein shall have the respective meanings ascribed to them in the Stock Option Agreement, unless otherwise defined herein.

2. Section 1 is hereby deleted and replaced in its entirety, to read in its amended form as follows:

1. Grant and Exercise Rights. In consideration of the services provided to the Company by the Optionee pursuant to the Consulting Agreement, dated as of March 1, 2002, by and between the Company and the Optionee, as amended by Amendment No. 1 dated as of the date hereof (as so amended, the "Consulting Agreement"), the Company hereby grants to the Optionee, as of March 1, 2002, an option (the "Option") exercisable for \$3.50 per share to purchase twenty-four thousand (24,000) shares of common stock, par value \$.001 per share, of the Company (the "Common Stock"). The Option will vest in twelve (12) equal monthly installments of 2,000 shares, in each case as of the first day of the following month in which such services were provided.

3. Section 3 is amended by deleting the words "each monthly" in the first line thereof and replacing such words with "the".

4. Section 5 is amended by deleting in its entirety the definition for the variable "Y" and replacing it with the following definition: "the number of shares of Common Stock currently being exercised under this Option".

5. The Stock Option Agreement as amended hereby shall remain in full force and effect.

This Amendment may be executed in one or more counterparts, each of which shall be deemed an original, and both of which together shall be considered one and the same agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Non-Qualified Stock Option Agreement as of the date first written above.

PRO-PHARMACEUTICALS, INC.

By: \_\_\_\_\_  
David Platt, Ph.D.  
President

Optionee:



-----  
Burton Firtel

-2-

PRO-PHARMACEUTICALS, INC.

CONSULTING AGREEMENT  
(David H. Smith)

CONSULTING AGREEMENT entered into as of January 16, 2003 (the "Effective Date"), by and between Pro-Pharmaceuticals, Inc., a Nevada corporation having an address of 189 Wells Avenue, Newton, Massachusetts 02459 (the "Company") and David H. Smith, an individual having an address of 34 Shorehaven Road, Norwalk, Connecticut 06855 ("Consultant").

WHEREAS, the Company has requested that the Consultant provide certain consulting services in connection with the business development and related financial services for the Company, and other professional tasks for the Company as it may request (the "Services"); and

WHEREAS, the Consultant is willing to provide Services to the Company in connection with the terms and conditions herein set forth;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Provision of Services. The Consultant agrees to provide Services as stated above and as directed by the Company.
2. Compensation. In consideration of the Services, the Company shall grant to the Consultant, pursuant to a non-qualified stock option agreement, substantially in the form attached hereto as Exhibit A, an option to purchase 100,000 shares of the Company's common stock, exercisable at \$3.50 per share, with such option to vest as follows: 33,334 as of the option grant date, 33,333 on the first anniversary of the grant date, and 33,333 on the second anniversary of the grant date, provided that the Consultant continues to be a director of the Company on each applicable vesting date. If the Consultant ceases to be a director before the option is fully vested, the option will vest, for the year in which such termination occurs, pro rata as of the termination date based on the amount that would have otherwise vested for the full year.
3. Expenses. The Company shall reimburse the Consultant for out-of-pocket expenses reasonably incurred by the Consultant in the course of performing the Services, provided Consultant delivers vouchers or other documentation evidencing such expenses to the satisfaction of the Company.
4. Termination.

(a) Without Cause. This Consulting Agreement has no defined term and may be terminated by either party for any reason and without cause upon thirty (30) days' prior written notice.

(b) Termination for Cause. The Company shall have the right, upon written notice thereof to the Consultant, to terminate immediately the Consultant's engagement pursuant to this Agreement (such termination, for "cause") if the Consultant (i) is grossly negligent in the performance of Services and other duties hereunder, (ii) is convicted of a felony or other violation which in the reasonable judgment of the Company' senior

-1-

management could materially impair the Company from substantially meeting its business objectives, (iii) has in the reasonable judgment of such management breached Section 5, 6 or 7 hereof, or (iv) is found to have committed any act of fraud, misappropriation of funds or embezzlement with respect to the Company.

(c) Effect of Termination. No termination of this Consulting Agreement shall affect the obligations, promises or covenants contained herein which are expressly made to extend beyond the term of this Consulting Agreement, including, without limitation, as set forth under Section 5, 6 or 7 hereof. The effective date of termination of this Consulting Agreement is referred to as the "Termination Date".

## 5. Property; Confidentiality.

(a) Definitions. For the purposes of this Consulting Agreement the following terms shall have the meanings set forth below:

"Confidential Information" shall mean all information related to the business, operations, products or services of the Company, and all reports, presentations, drawings, know-how, data, inventions, discoveries, improvements, ideas, plans, analysis, memoranda and other information or materials provided to Consultant by or on behalf of the Company and/or its subsidiaries and other affiliates, collectively and individually, or developed by Consultant in connection with Consultant's engagement by the Company (including, without limitation, the Work) or arising out of the Work, or preparation for it or other related activities.

"Work" shall mean all designs, plans, presentations, reports, know-how, data, inventions, discoveries, improvements, ideas, trademarks, copyrights, and other works of authorship, and all other materials, information, work or other intangible or intellectual property, collected, prepared, developed or edited by Consultant in the performance of or in connection with the Services.

For the purpose of this Section 5, the term "Company" shall include the Company and its respective subsidiaries and other affiliates, collectively and individually.

(b) Intellectual Property Rights. The parties acknowledge and agree that any Work being created at the instance of the Company will be deemed work made for hire under the United States copyright laws. The Company shall have the right to use all or any portion of the Work as it sees fit. The Company may alter the Work, add to it, or combine it with any other work or works, in its sole discretion. All rights in and to the Work and all material submitted by Consultant to the Company as part of the Work or part of the process of creating the Work, will be the property of the Company whether or not ultimately used by the Company. No rights in or to the Work are reserved to Consultant.

(c) Assignment of Property. This Consulting Agreement shall operate as a perpetual, unlimited, and irrevocable assignment by Consultant to the Company of the copyright and any and all other proprietary or other intellectual property rights or interests, in or to any Work, held by or on behalf of Consultant (including, without limitation, any such interest arising as a result of a determination that the Work does not constitute a work made for hire under the United States copyright laws). In the event of any dispute arising out of or concerning this Consulting Agreement, no acts of the Company undertaken for the purpose of prosecuting, registering or preserving any patent or copyright in the Work shall be considered in determining the character of the Work as a work made for hire. Consultant shall execute such documents and do such further acts as Company may request

-2-

reasonably (and subject to Company's reimbursement of Consultant's out of pocket expense of doing so) to perfect Consultant's rights in the Work and said intellectual property rights and aid in enforcement and exploitation of such rights and the assignment of the Consultant's rights to the Company.

(d) Confidentiality. Consultant agrees to (i) refrain from using the Confidential Information for any purpose that would be adverse to the interests of the Company, and (ii) hold the Confidential Information strictly confidential and not disclose it to any person or entity other than the Company's employees or representatives. The foregoing obligations shall not apply to any information that (i) is publicly known at the time of its disclosure, (ii) is lawfully received by Consultant from a third party not under an obligation of confidentiality to the Company, (iii) is published or otherwise made known to the public by the Company, or (iv) was generated independently by Consultant without reference to or the use of Confidential Information. Consultant's obligation under this subsection shall survive any termination of this Consulting Agreement.

(e) Return of Confidential Information. Consultant shall deliver promptly to the Company after the Termination Date, and at any other time as the Company may request, all Confidential Information, which shall at all times be and remain the property of the Company.

6. Non-Competition. The Consultant agrees that during the period in which he provides Services and for one (1) year after the Termination Date, without prior written permission from the Company, the Consultant will not use the Confidential Information, Work or other results of the Services in any manner which could directly or indirectly compete with the business of the Company. For purposes of the foregoing, the Consultant shall not, directly or indirectly, be engaged by or invest in any entity involved in the application of carbohydrate-based chemistry as a technique to reduce toxicity of, or increase efficacy of, pharmaceuticals (a "Competitive Entity"), whether by way of becoming an agent, employee, director, officer, partner, stockholder, consultant or otherwise; provided, however, that the foregoing shall not prohibit the Consultant from merely investing in any entity competitive with the Company whose securities are listed on a national securities exchange, or traded in any established over-the-counter securities market.

7. Non-Solicitation. During the period in which Services are rendered and for a period of two (2) years immediately after the Termination Date, the Consultant shall not (i) either directly or indirectly solicit or take away, or attempt to solicit or take away employees of the Company, either for the Consultant'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.

8. Injunctive Relief. The Consultant acknowledges that a violation of Sections 5, 6 or 7 of this Consulting Agreement would cause irreparable harm to the Company for which no adequate remedy at law exists and the Consultant therefore acknowledges and agrees that, in addition to any other remedies available, the Company shall be entitled to injunctive relief to enforce the terms of this Consulting Agreement, without waiving available damages, remedies or other relief.

9. Waiver of Liability. The Consultant acknowledges that the Company shall bear no liability for (a) bodily and/or personal injury or death or property damage caused to

-3-

the Consultant, its employees or agents, or others by the Consultant in the performance of the Services, (b) medical expenses or injuries sustained by the Consultant, its employees or agents in the performance of the Services, or (c) any professional liability of the Consultant.

10. Independent Contractor. The Consultant is an independent contractor, and is not, and shall not be considered (by virtue of this Consulting Agreement or otherwise) an employee, agent, partner or joint venturer of the Company, whether for tax purposes or any other purpose. The Consultant is not authorized to act on behalf of the Company, and shall not have the right to bind the Company to any agreement with a third party or to incur any obligation or liability on behalf of the Company.

11. Dispute Resolution.

The parties shall follow the following dispute resolution processes in connection with any and all disputes, controversies or claims arising out of this Consulting Agreement:

(i) The Company and the Consultant (collectively, the "Parties" and individually, a "Party") shall attempt to settle any disputes through good faith negotiations between and among them.

(ii) If the Parties should fail to resolve the dispute within 30 days after the date of the initial demand for negotiation, then the Parties shall refer the matter to mediation conducted by JAMS/Endispute, Boston, Massachusetts office, or such other mediation service as the Parties may mutually agree upon, and shall attempt in good faith to settle the dispute before such mediation agency. Each Party shall bear its own expenses in connection with the mediation, and shall equally share the filing and other administrative fees of the mediation service. The Parties shall be represented in the mediation by

representatives having final settlement authority over the matter in dispute.

(iii) Any dispute not finally resolved within 90 days after the initial demand for negotiation shall be referred to the American Arbitration Association, Boston, Massachusetts Office ("AAA") for binding arbitration. Selection of one neutral arbitrator by the Parties shall be from the panel list provided by the AAA and in accordance with the appointment rules of the AAA. Each Party shall bear its own expenses in connection with any arbitration and the Parties shall equally share the filing and other administrative fees of the AAA and the expenses of the arbitrator; provided, however, that the prevailing Party shall be entitled to receive from the non-prevailing Party reimbursement of all expenses, including without limitation reasonable attorneys' fees, incurred in connection with any such arbitration proceeding.

12. Compliance by Consultant Personnel. Consultant represents and warrants that (i) it has informed and will inform such of its employees, agents or other personnel, if any, who perform Services as to the requirements of this Consulting Agreement and (ii) such employees, agents or other personnel shall have entered into such written agreements with Consultant in order to assure that the Company shall have the benefits of the rights and obligations under Sections 5, 6 and 7 hereof.

13. Miscellaneous.

(a) Entire Agreement; Amendment. This Consulting Agreement constitutes the entire understanding of the parties with respect to its subject matter, may be modified only in a writing signed by both parties, and shall supersede any and all other agreements between them regarding such subject matter.

-4-

(b) No Assignment. This Consulting Agreement shall not be transferred or assigned by either party without the prior written consent of the other party.

(c) Waiver. Any waiver of a violation of this Consulting Agreement shall only constitute a waiver of that particular violation and shall not constitute a waiver of any different or continuing default. The exercise of any right or remedy provided in this Consulting Agreement shall be without prejudice to the right to exercise any other right or remedy provided by law or equity.

(d) Modification of Invalid Provisions. If any provision of this Consulting Agreement is found to be invalid, illegal or unenforceable, a modified provision shall be substituted which carries out as nearly as possible the original intent of the parties and the remaining provisions shall in not be affected by such modification.

(e) Notices. Any notice or other communication required or permitted to be made under this Consulting Agreement shall be sufficiently made or given on (i) date of personal delivery if delivered in person, (ii) the next day after sending if sent by fax or next-day courier service, or (iii) the third day after mailing if sent certified or registered mail or air mail, postage prepaid, and addressed to the other party at the address set forth on the first page of this Consulting Agreement or to any other address designated by the other party in writing.

(f) Governing Law. This Consulting Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts, without giving effect to its principles on conflict of laws.

[Remainder of Page Intentionally Left Blank]

-5-

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

PRO-PHARMACEUTICALS, INC.

By: /s/ David Platt  
-----  
David Platt, Ph.D.  
President

/s/ David H. Smith  
-----  
David H. Smith

-6-

Exhibit A

PRO-PHARMACEUTICALS, INC.

NON-QUALIFIED STOCK OPTION AGREEMENT

Non-Qualified Stock Option Agreement dated as of January 16, 2003, by and between Pro-Pharmaceuticals, Inc., a Nevada corporation, (the "Company"), and David H. Smith (the "Optionee").

The parties agree as follows:

1. Grant. In consideration of the services provided to the Company by the Optionee pursuant to the Consulting Agreement, dated as of January \_\_, 2003, by and between the Company and the Optionee (the "Consulting Agreement"), the Company hereby grants, effective as of the date hereof (the "Effective Date"), to the Optionee, an option (the "Option") exercisable for \$3.50 per share to purchase one hundred thousand (100,000) shares of common stock, par value \$.001 per share, of the Company (the "Common Stock"), subject to the following terms and conditions.

2. Vesting and Exercise Rights. The Option shall vest and become exercisable only as follows, provided, in each case, that the Optionee continues to be a director of the Company on each applicable vesting date:

Date	Number of Shares for which Option Exercisable
----	-----
Effective Date	33,334
First year anniversary of the Effective Date	33,333
Second year anniversary of the Effective Date	33,333

If the Consultant ceases to be a director before the option is fully vested, the option will vest, for the year in which such termination occurs, pro rata as of the termination date based on the amount that would have otherwise vested for the full year.

3. Relationship to Plan. The Option is not granted pursuant to the Company's 2001 Stock Incentive Plan (the "Plan").

4. Termination of Option. Exercise rights with respect to the Option shall terminate on the tenth year anniversary of its date of grant unless the Optionee's death occurs prior to such date in which event the termination date shall be the first anniversary of the date of death.

5. "Lock-Up" Agreement. The Optionee agrees that upon the Company's request at any time, whether before or after the exercise of the Option, the Optionee shall enter into an agreement pursuant to which, if the Company deems it necessary or desirable to make any public offering of shares of Common Stock, then without the prior written consent of the Company or the managing underwriter, if any, of any such offering, the Optionee shall not sell, make any short sale of, loan, grant any option for the purchase of, pledge, or otherwise

encumber or otherwise dispose of any shares of Common Stock issued or issuable pursuant to the Option, during such period (not to exceed 210 days) commencing on the effective date of the registration statement relating to such offering as the Company may request.

6. Methods of Exercise. In the event that the Optionee's service as a consultant under the Consulting Agreement has not been terminated and except as contained in this ss.6 or as may otherwise be agreed by the Optionee and the Company, the Option shall be exercisable only by a written notice in form and substance acceptable to the Company (the "Election Notice"), specifying the number of shares to be purchased and accompanied by payment in cash of the aggregate purchase price for the shares for which the Option is being exercised; provided, that the Optionee shall be entitled to pay the Exercise Price for the shares of Common Stock for which the Option is being exercised by surrendering a number of such shares having a Fair Market Value equal to the Exercise Price required to be paid. Thereupon, the Company shall issue to the Optionee such number of fully paid and nonassessable shares of Common Stock as is computed using the following formula:

$$X = \frac{Y (A-B)}{A}$$

Where X = the number of shares of Common Stock to be issued to the Optionee pursuant to this ss.6;

Y = the number of shares of Common Stock currently being exercised under this Option;

A = the Fair Market Value for the Common Stock as of the date of the exercise; and

B = the Exercise Price in effect under this Option at the time the exercise is made pursuant to this ss.6.

7. Characterization of Option for Tax Purposes. The Option is intended not to qualify as an "incentive stock option" under the Internal Revenue Code of 1986, as amended, and shall be subject to different tax treatment than that accorded incentive stock options.

8. Withholding. At the request of the Company, the Optionee agrees to remit to the Company an amount sufficient to satisfy any federal, state, local or other withholding tax requirements (whether so required to secure for the Company an otherwise available tax deduction or otherwise) if and to the extent required by law prior to the delivery of any certificate or certificates representing shares of Common Stock to be issued upon exercise of the Option.

9. Compliance with Laws. The obligations of the Company to sell and deliver Shares upon exercise of the Option are subject to all applicable laws, rules, and regulations, including all applicable federal and state securities laws, and the obtaining of all such approvals by government agencies as may be deemed necessary or appropriate by the Board of Directors of the Company (the "Board") or the relevant committee of the Board. If so required by the Board or such committee, no shares shall be delivered upon the exercise of the Option until the Optionee has given the Company a satisfactory written statement that he is purchasing such shares for investment, and not with a view to the sale or distribution of any such shares, and with respect to such other matters as the Board may deem advisable in order to assure compliance with applicable securities laws. All shares issued upon exercise of the Option shall bear appropriate restrictive legends.

10. General. The Optionee may not transfer, assign, or encumber any of his or her rights under this Agreement without the prior written consent of the Company, and any attempt to do so shall be void. This Agreement shall be governed by and interpreted and construed in accordance with the internal laws of the Commonwealth of Massachusetts (without reference to principles of conflicts or choice of law). The captions of the sections of this Agreement are

for reference only and shall not affect the interpretation or construction of this Agreement. This Agreement shall bind and inure to the benefit of the parties and their respective successors, permitted assigns, heirs, devisees, and legal representatives.

IN WITNESS WHEREOF, the Company and the Optionee have executed and delivered this Agreement, which may be in counterpart originals, intending it to be effective as an agreement under seal as of the Effective Date.

PRO-PHARMACEUTICALS, INC.

By: \_\_\_\_\_  
Name:  
Title:

Optionee:  
  
\_\_\_\_\_  
David H. Smith



POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David Platt and Maureen Foley, and each of them, his/her true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him/her and in his/her name and/or his/her behalf, to do any and all acts and things and to execute any and all instruments which said attorney-in-fact and agent may deem necessary or advisable to enable Pro-Pharmaceuticals, Inc. to comply with the Securities Exchange Act of 1934, as amended (the "Act"), and any rules, regulations or requirements of the Securities and Exchange Commission in respect thereof, including, without limitation, the power and authority to sign his/her name in any and all capacities (including his capacity as a Director and/or Officer of Pro-Pharmaceuticals, Inc.) to the Annual Report on Form 10-KSB of Pro-Pharmaceuticals, Inc. for the fiscal year ended December 31, 2002 and the undersigned hereby ratifies and confirms all that said attorneys-in-fact and agents, or any of them, or any substitute or substitutes for any or all of them, shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned have subscribed these presents on the dates stated.

Signature -----	Title -----	Date ----
/s/ David Platt ----- David Platt, Ph.D.	President, Chief Executive Officer, Treasurer, Secretary and Director (Principal Executive, Financial and Accounting Officer)	March 25, 2003
/s/ James Czirr ----- James Czirr	Executive Vice President of Business Development and Director	March 26, 2003
/s/ Burton C. Firtel ----- Burton C. Firtel	Director	March 22, 2003

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

[CONTINUATION OF POWER OF ATTORNEY SIGNATURE PAGE]

/s/ Dr. Dale H. Conaway ----- Dale H. Conaway, D.V.M.	Director	March 24, 2003
/s/ David H. Smith ----- David H. Smith	Director	March 26, 2003
----- Edgar Ben-Josef, M.D.	Director	March __, 2003
/s/ Mildred Christian ----- Mildred Christian, Ph.D.	Director	March 21, 2003

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER  
AND CHIEF FINANCIAL OFFICER  
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-KSB for the year ended December 31, 2002, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officer of the Company does hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

By: /s/ David Platt, Ph.D.

---

Name: David Platt, Ph.D.  
Title: President, Chief Executive Officer, Treasurer  
and Secretary (Principal Executive, Financial and  
Accounting Officer)

