Registration No. 333-150898

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

Post-Effective Amendment No. 2
on
FORM S-1
to
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

PRO-PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Nevada	**2834**	**04-3562325**
(State or other jurisdiction of incorporation or organization)	***(Primary SIC Number)***	***(I.R.S. Employer Identification No.)***

7 Wells Avenue
Newton, Massachusetts 02459
(617) 559-0033
(Address, including zip code, and telephone number, including area code, of principal executive offices)

Theodore D. Zucconi, Ph.D.
Chief Executive Officer and President
Pro-Pharmaceuticals, Inc.
7 Wells Avenue
Newton, Massachusetts 02459
(617) 559-0033
(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:

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If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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

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

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Pursuant to Rule 401(b) under the Securities Act of 1933, and in order to comply with Section 10(a)(3) of the Securities Act, the Registrant is filing this Post-Effective Amendment on Form S-1 because it is currently ineligible to file a registration statement on Form S-3. Pursuant to Rule 429 under the Securities Act,

the prospectus contained in this Post-Effective Amendment on Form S-1 shall serve as a combined prospectus that also relates to, and this Post-Effective Amendment on Form S-1 shall act, upon effectiveness, as a post-effective amendment to, the Registrant's previous Registration Statement on Form S-3, Registration
No. 333-148911.

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EXPLANATORY NOTE

The prospectus contained in this registration statement serves as a combined prospectus relating to two previously filed registration statements. Alternate versions of certain pages of the prospectus relating to registration statement No. 333-150898 appear following page F-49, and serve as replacement pages to form the prospectus relating to registration statement No. 333-148911 as follows: page A-1 replaces the prospectus cover page; page A-2 replaces page 3; and page A-3 replaces pages 12-18.

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The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject To Completion, Dated June 11, 2009

PROSPECTUS

PROLOR PHARMACEUTICALS, INC.

ADVANCING DRUGS THROUGH GLYCOSCIENCE®

16,211,106 Shares of Common Stock

This prospectus covers the offer and sale of up to 16,211,106 shares of our common stock from time to time by certain selling stockholders named in this prospectus. The shares of common stock being offered are issuable upon the exercise of outstanding warrants or the conversion of outstanding shares of Series A 12% Convertible Preferred Stock.

We are not offering any shares of common stock.

The selling stockholders will receive all of the net proceeds from sales of the common stock covered by this prospectus and will pay all underwriting discounts and selling commissions, if any, applicable to those sales. We will not receive any proceeds from sales of any of these shares. However, we will receive the exercise price of the warrants to the extent they are not exercised on a net or cashless exercise basis.

The selling stockholders may periodically sell the shares directly or through agents, underwriters or dealers. The shares may be sold:

- in the over-the-counter market, in privately negotiated transactions or otherwise;
- directly to purchasers or through agents, brokers, dealers or underwriters; and
- at market prices prevailing at the time of sale, at prices related to the prevailing market prices, or at negotiated prices.

If required, each time a selling stockholder sells shares of common stock, we will provide a prospectus supplement that will contain specific information about the terms of that transaction. We urge you to carefully read this prospectus and any accompanying prospectus supplement before you make an investment decision.

Investing in our securities involves a high degree of risk. As a result of our current lack of financial liquidity and negative stockholders' equity, our auditors have expressed substantial concern about our ability to continue as a "going concern." You should purchase these securities only if you can afford a complete loss of your investment. See "Risk Factors" on page 4 of this prospectus.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is [_____], 2009

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ABOUT THIS PROSPECTUS

Unless the context otherwise requires, all references to “Pro-Pharmaceuticals,” “we,” “us,” “our,” “our company,” or “the Company” in this prospectus refer to Pro-Pharmaceuticals, Inc., a Nevada corporation, and its subsidiaries, and their respective predecessor entities for the applicable periods, considered as a single enterprise.

You should rely only on the information contained in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. For further information, please see the section of this prospectus entitled “Where You Can Find More Information.” The selling stockholders are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

You should not assume that the information appearing in this prospectus is accurate as of any date other than the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

PROSPECTUS SUMMARY

This summary highlights important features of this offering and the information included in this prospectus. This summary does not contain all of the information that you should consider before investing in our securities. You should read this prospectus carefully as it contains important information you should consider when making your investment decision. See "Risk Factors" on page 4.

About Pro-Pharmaceuticals, Inc.

We are a development-stage company engaged in the discovery and development of carbohydrate-based therapeutics that we believe enhance existing cancer treatments. We believe our therapeutics could also be used in treatment of liver, microbial and inflammatory diseases. All of our products are presently in development, including pre-clinical and clinical trials.

Since our inception on July 10, 2000, our primary focus has been the development of a new generation of anticancer treatments using carbohydrate polymers which are aimed at increasing survival and improving the quality of life for cancer patients. Our lead product candidate, DAVANAT ®, is a patented new chemical entity that we believe, when administered in combination with a chemotherapy, increases the efficacy while reducing adverse side effects of the chemotherapy. We hold the patent on DAVANAT ®, which was invented by company founders David Platt, Ph.D., our former Chief Executive Officer, and Anatole Klyosov, Ph.D., our Chief Scientist.

In 2002, the Federal Drug Administration or FDA granted us an Investigational New Drug application, or IND, for use of DAVANAT® in combination with 5-fluorouracil, or 5-FU, to treat late-stage cancer patients with solid tumors. 5-FU is FDA-approved and one of the most widely used chemotherapies for treatment of various types of cancer, including colorectal, breast and gastrointestinal. In September 2008, we submitted a clinical and pre-clinical package to the FDA in support of our DAVANAT ® New Drug Application, or NDA. The FDA reported to us in its minutes for the December 22, 2008 meeting that we will be required to conduct a Phase III trial to demonstrate superiority to the best standard of care for late stage colorectal cancer patients. We believe that using DAVANAT ® in combination with 5-FU enables greater absorption of the chemotherapy in cancer cells while reducing its toxic side effects.

We plan to submit an NDA, for co-administration of DAVANAT® with 5-FU for the indication of colorectal cancer.

We were incorporated under Nevada law on January 26, 2001 and in May of that year acquired a Massachusetts corporation (organized on July 10, 2000) engaged in the business we now undertake. We have a wholly-owned Delaware subsidiary that we formed in 2003 to hold our cash and cash equivalents. We also own 10% of a Nevada subsidiary that we formed in October 2008 for the development of our technology in cardiovascular treatments.

Principal Executive Offices

Our principal executive offices are located at 7 Wells Avenue, Newton, Massachusetts 02459. Our telephone number is (617) 559-0033, fax number is (617) 928-3450 and our website address is www.pro-pharmaceuticals.com. The information on our website is not incorporated by reference into this prospectus and should not be relied upon with respect to this offering.

The Offering

Securities Offered	16,211,106 shares of our common stock offered by selling stockholders
Use of Proceeds	We will not receive any proceeds from the sale of shares by the selling stockholders. To the extent that the warrants are exercised by the selling stockholders for cash, rather than by cashless exercise, we will receive proceeds constituting the exercise price of such warrants. Any such proceeds received by us through warrant exercises will be used for working capital.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference contain, in addition to historical information, forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements relate to future events or our future financial performance and can be identified by the use of forward-looking terminology such as "may," "could," "expect," "anticipate," "estimate," "continue" or other similar words. 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 these 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, those described in, or incorporated by reference into, the Risk Factors section of this prospectus. We cannot assure you that we have identified all the factors that create uncertainties. Readers should not place undue reliance on forward-looking statements. We undertake no obligation to publicly release the result of any revision of these forward-looking statements to reflect events or circumstances after the date they are made or to reflect the occurrence of unanticipated events.

RISK FACTORS

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

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

Risks Related to Our Company

We have incurred net losses to date and must raise additional capital by October 2009 in order to continue to operate.

We have incurred net losses in each year of operation since our inception in July 2000. Our accumulated deficit as of December 31, 2008 was approximately $38.6 million. We will need to continue to conduct significant research, development, testing and regulatory compliance activities that, together with projected general and administrative expenses, we expect will result in substantial operating losses for the next several years. Accordingly, we do not expect to be generating sales or other revenue and will remain dependent on outside sources of financing during that time. If we are unable to raise funds from outside sources for our continuing operations, we may be adversely affected.

We may raise capital through public or private equity financings, partnerships, debt financings, bank borrowings, or other sources. Additional funding may not be available on favorable terms or at all. If adequate funds are not otherwise available, we may need to significantly curtail operations. To obtain additional funding,

we may need to enter into arrangements that require us to relinquish rights to certain technologies, products and/or potential markets. To the extent that additional capital is raised through the sale of equity, or securities convertible into equity, our equity holders may experience dilution of their proportionate ownership of the company.

At March 31, 2009, we had approximately $861,000 of unrestricted cash and cash equivalents available to fund future operations. On May 13, 2009, we completed a closing for gross proceeds of $900,000 (net proceeds of approximately $801,000) on our offering of Series B-2 Redeemable Convertible Preferred Stock ("Series B-2"). With the completion of the closing of the Series B-2 offering, combined with cash on hand, we believe there is sufficient cash to fund operations into October 2009. We will require more cash to fund our operations and believe we will be able to obtain additional financing. However, there can be no assurance that we will be successful in obtaining such new financing or, if available, that such financing will be on terms favorable to us.

We are at an early stage of development and have not generated any revenue.

We are a development-stage company with a limited operating history, and we have not generated any revenues to date. We have no products available for sale, and none are expected to be commercially available for several years, if at all. We may never obtain FDA approval of our products in development and, even if we do so and are also able to commercialize our products, we may never generate revenue sufficient to become profitable. Our failure to generate revenue and profit would likely lead to loss of your investment in our company.

We are a counterclaim defendant in a lawsuit instituted by our former Chief Executive Officer that relates to certain of our intellectual property.

In January 2004, David Platt, our former Chief Executive Officer, filed a lawsuit in Massachusetts against GlycoGenesys, Inc. for claims including breach of contract. GlycoGenesys subsequently named us as a counterclaim defendant alleging, among other things, tortious interference and misappropriation of proprietary rights, and sought monetary damages and injunctive relief related to our intellectual property. We and Dr. Platt are contesting these counterclaims vigorously. In October 2006, Marlborough Research and Development, Inc. (now known as Prospect Therapeutics, Inc.) purchased certain assets including this lawsuit from the GlycoGenesys bankruptcy estate and continue prosecuting the counterclaims against us and Dr. Platt. Concluding that certain disputes of fact could not be resolved as a matter of law, the court on May 27, 2008 denied our motion for summary judgment. Prospect Therapeutics informed the Court that it does not seek monetary damages other than recovery of attorney fees. On December 12, 2008, in response to a motion for withdrawal by counsel in this case, the court amended its order dated October 6, 2008 to state that by January 9, 2009, a default judgment will be entered against us if new defense counsel has not entered an appearance on our behalf or we have not restored our relationship with our current counsel. On January 7, 2009, our successor counsel entered a notice of appearance to represent us at trial which commenced on March 10, 2009. If we do not prevail at trial, we could be prevented from the exclusive use of the intellectual property that is the subject of the litigation and accordingly there could be a material adverse impact on our financial position, results of operations and cash flows.

We are involved in litigation with Summer Street Research Partners.

On January 30, 2008, Custom Equity Research, Incorporated (d/b/a Summer Street Research Partners) filed a lawsuit against us in the Superior Court of the Commonwealth of Massachusetts, alleging claims for breach of contract, declaratory judgment and unjust enrichment arising out of an engagement letter under which Summer Street agreed to provide institutional investment placement services to us. Summer Street claims it is entitled to a placement fee for each placement made during the term of the agreement and for each issuance of securities made or agreed to be made by us from October 17, 2007 through November 16, 2008. We initially responded to the lawsuit with a motion to dismiss, which the Court denied on June 23, 2008, finding that the letter agreement was ambiguous with respect to Summer Street's entitlement to compensation. The Court also denied Summer Street's motion for a prejudgment attachment and trustee process, preliminarily finding that Summer Street was not likely to prevail on any of its claims. On July 3, 2008, we filed our answer, denying Summer Street's material allegations. The parties are currently engaged in discovery and no trial date has been set for this matter. We believe the lawsuit is without merit and intend to contest it vigorously. However, if we were to receive an adverse decision, we might be required to pay cash damages to Summer Street which would have would have a material adverse effect on our financial position.

Our drug candidates are based on novel unproven technologies.

Our drug candidates in development are based on novel unproven technologies using proprietary carbohydrate compounds in combination with FDA approved drugs currently used in the treatment of cancer and other diseases. Carbohydrates are difficult to synthesize, and we may not be able to synthesize carbohydrates that would be usable as target delivery vehicles for the anti-cancer drugs we are working with or other therapeutics we intend to develop.

We have one drug candidate in clinical trials and results are uncertain.

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

We may be unable to commercialize our product candidates.

Even if our current and anticipated product candidates achieve positive results in clinical trials, we may be unable to commercialize them. Potential products may fail to receive necessary regulatory approvals, be difficult to manufacture on a large scale, be uneconomical to produce, fail to achieve market acceptance, or be precluded from commercialization by proprietary rights of third parties. Our inability to commercialize out products would substantially impair the viability of our company.

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

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

We will depend on third parties to manufacture and market our products and to design trial protocols, arrange for and monitor the clinical trials, and collect and analyze data.

We do not have, and do not now intend to develop, facilities for the manufacture of any of our products for clinical or commercial production. In addition, we are not a party to any long-term agreement with any of our suppliers, and accordingly, we have our products manufactured on a purchase-order basis from one of two primary suppliers. We will need to develop relationships with manufacturers and enter into collaborative arrangements with licensees or have others manufacture our products on a contract basis. We expect to depend on such collaborators to supply us with products manufactured in compliance with standards imposed by the FDA and foreign regulators.

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

Moreover, as we develop products eligible for clinical trials, we may contract with independent parties to design the trial protocols, arrange for and monitor the clinical trials, collect data and analyze data. In addition, certain clinical trials for our products may be conducted by government-sponsored agencies and will be dependent on governmental participation and funding. Our dependence on independent parties and clinical sites involves risks including reduced control over the timing and other aspects of our clinical trials.

We are exposed to product liability, pre-clinical and clinical liability risks which could place a substantial financial burden upon us, should we be sued, because we do not currently have product liability insurance above and beyond our general insurance coverage.

Our business exposes us to potential product liability and other liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical formulations and products, as a result of which claims may be asserted against us. In addition, the use in our clinical trials of pharmaceutical formulations and products that our potential collaborators may develop and the subsequent sale of these formulations or products by us or our potential collaborators may cause us to bear a portion of or all product liability risks. A successful liability claim or series of claims brought against us could have a material adverse effect on our business, financial condition and results of operations.

Since we do not currently have any FDA-approved products or formulations, we do not currently have any product liability insurance covering commercialized products. We may not be able to obtain or maintain adequate product liability insurance on acceptable terms, if at all, or such insurance may not provide adequate coverage against our potential liabilities. Furthermore, our current and potential partners with whom we have collaborative agreements or our future licensees may not be willing to indemnify us against these types of liabilities and may not themselves be sufficiently insured or have sufficient liquidity to satisfy any product liability claims. Claims or losses in excess of any product liability insurance coverage that may be obtained by us could have a material adverse effect on our business, financial condition and results of operations.

If users of our proposed products are unable to obtain adequate reimbursement from third-party payers, or if new restrictive legislation is adopted, market acceptance of our proposed products may be limited and we may not achieve revenues.

The continuing efforts of government and insurance companies, health maintenance organizations and other payers of healthcare costs to contain or reduce costs of health care may affect our future revenues and profitability, and the future revenues and profitability of our potential customers, suppliers and collaborative partners and the availability of capital. For example, in certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. In the U.S., given recent federal and state government initiatives directed at lowering the total cost of health care, the U.S. Congress and state legislatures will likely continue to focus on health care reform, the cost of prescription pharmaceuticals and on the reform of the Medicare and Medicaid systems. While we cannot predict whether any such legislative or regulatory proposals will be adopted, the announcement or adoption of such proposals could materially harm our business, financial condition and results of operations.

Our ability to commercialize our proposed products will depend in part on the extent to which appropriate reimbursement levels for the cost of our proposed formulations and products and related treatments are obtained by governmental authorities, private health insurers and other organizations, such as health management organizations, or HMOs. Third-party payers are increasingly challenging the prices charged for medical drugs and services. Also, the trend toward managed health care in the U.S. and the concurrent growth of organizations such as HMOs, which could control or significantly influence the purchase of health care services and drugs, as well as legislative proposals to reform health care or reduce government insurance programs, may all result in lower prices for or rejection of our products.

There are risks associated with our reliance on third parties for marketing, sales, managed care and distribution infrastructure and channels.

We expect that we will be required to enter into agreements with commercial partners to engage in sales, marketing and distribution efforts around our products in development. We may be unable to establish or maintain third-party relationships on a commercially reasonable basis, if at all. In addition, these third parties may have similar or more established relationships with our competitors. If we do not enter into relationships with third parties for the sales and marketing of our proposed products, we will need to develop our own sales and marketing capabilities.

We may be unable to engage qualified distributors. Even if engaged, these distributors may:

- fail to satisfy financial or contractual obligations to us;
- fail to adequately market our products;
- cease operations with little or no notice to us; or
- offer, design, manufacture or promote competing formulations or products.

If we fail to develop sales, managed care, marketing and distribution channels, we would experience delays in generating sales and incur increased costs, which would harm our financial results.

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

We are highly dependent on Anatole Klyosov, Ph.D., Chief Scientist who has scientific technical or other business expertise and experience that is critical to our success. The loss of Dr. Klyosov, or failure to attract or retain other key personnel, could prevent us from pursuing collaborations or developing our products and core technologies.

Risks Related to the Drug Development Industry

We will need regulatory approvals to commercialize our products.

We are required to obtain approval from the FDA in order to sell our products in the U.S. and from foreign regulatory authorities in order to sell our products in other countries. The FDA's review and approval process is lengthy, expensive and uncertain. Extensive pre-clinical and clinical data and supporting information must be submitted to the FDA for each indication for each product candidate in order to secure FDA approval. Before receiving FDA clearance to market our proposed products, we will have to demonstrate that our products are safe and effective on the patient population and for the diseases that are to be treated. Clinical trials, manufacturing and marketing of drugs are subject to the rigorous testing and approval process of the FDA and equivalent foreign regulatory authorities. The Federal Food, Drug and Cosmetic Act and other federal, state and foreign statutes and regulations govern and influence the testing, manufacture, labeling, advertising, distribution and promotion of drugs and medical devices. As a result, regulatory approvals can take a number of years or longer to accomplish and require the expenditure of substantial financial, managerial and other resources. The FDA could reject an application or require us to conduct additional clinical or other studies as part of the regulatory review process. Delays in obtaining or failure to obtain FDA approvals would prevent or delay the commercialization of our product candidates, which would prevent, defer or decrease our receipt of revenues. In addition, if we receive initial regulatory approval, our product candidates will be subject to extensive and rigorous ongoing domestic and foreign government regulation.

Data obtained from clinical trials are susceptible to varying interpretations, which could delay, limit or prevent regulatory clearances.

Data already obtained, or in the future obtained, from pre-clinical studies and clinical trials do not necessarily predict the results that will be obtained from later pre-clinical studies and clinical trials. Moreover, pre-clinical and clinical data is susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. The failure to adequately demonstrate the safety and effectiveness of a proposed formulation or product under development could delay or prevent regulatory clearance of the potential drug, resulting in delays to commercialization, and could materially harm our business. Our clinical trials may not demonstrate sufficient levels of safety and efficacy necessary to obtain the requisite regulatory approvals for our drugs, and thus our proposed drugs may not be approved for marketing.

Our competitive position depends on protection of our intellectual property.

Development and protection of our intellectual property are critical to our business. All of our intellectual property, patented or otherwise, has been invented and/or developed by employees of our company. If we do not adequately protect our intellectual property, competitors may be able to practice our technologies. Our success depends in part on our ability to obtain patent protection for our products or processes in the U.S. and other countries, protect trade secrets, and prevent others from infringing on our proprietary rights. We are a counterclaim defendant in a lawsuit instituted by our chief executive officer that relates to our intellectual property as described under “Risks Related to Our Company” above.

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

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

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

Products we develop could be subject to infringement claims asserted by others.

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

We face intense competition in the biotechnology and pharmaceutical industries.

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

The market for our proposed products is rapidly changing and competitive, and new drugs and new treatments which may be developed by others could impair our ability to maintain and grow our business and remain competitive.

The pharmaceutical and biotechnology industries are subject to rapid and substantial technological change. Developments by others may render our proposed products noncompetitive or obsolete, or we may be unable to keep pace with technological developments or other market factors. Technological competition from pharmaceutical and biotechnology companies, universities, governmental entities and others diversifying into the field is intense and is expected to increase.

As a pre-revenue company engaged in the development of drug technologies, our resources are limited and we may experience technical challenges inherent in such technologies. Competitors have developed or are in the process of developing technologies that are, or in the future may be, the basis for competition. Some of these technologies may have an entirely different approach or means of accomplishing similar therapeutic effects compared to our proposed products. Our competitors may develop drugs that are safer, more effective or less costly than our proposed products and, therefore, present a serious competitive threat to us.

The potential widespread acceptance of therapies that are alternatives to ours may limit market acceptance of our proposed products, even if commercialized. Many of our targeted diseases and conditions can also be treated by other medication. These treatments may be widely accepted in medical communities and have a longer history of use. The established use of these competitive drugs may limit the potential for our technologies, formulations and products to receive widespread acceptance if commercialized.

Health care cost containment initiatives and the growth of managed care may limit our returns.

Our ability to commercialize our products successfully may be affected by the ongoing efforts of governmental and third-party payers to contain the cost of health care. These entities are challenging prices of health care products and services, denying or limiting coverage and reimbursement amounts for new therapeutic products, and for FDA-approved products considered experimental or investigational, or which are used for disease indications without FDA marketing approval.

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

Our insurance coverage may not be adequate in all circumstances.

If we commercialize our products, their use by patients could expose us to potential product liability and other claims resulting from alleged injury. This liability may result from claims made directly by consumers or by pharmaceutical companies or others selling such products. Although we currently have clinical trial insurance and directors and officers insurance, we may be unable to maintain such insurance on acceptable terms, if at all. Moreover, we have no product or professional liability insurance due to our stage of development, and we may be unable to obtain such insurance at the appropriate time on acceptable terms, if at all. Any inability to obtain and/or maintain insurance coverage on acceptable terms could prevent or limit the commercialization of any products we develop.

Risks Related to Our Stock

Stock prices for pharmaceutical and biotechnology companies are volatile.

The market price for securities of pharmaceutical 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, among other things, the interest in our stock by purchasers on the open market and our ability to raise capital.

Our common stock was delisted from trading on the NYSE Alternext US and only recently began to be quoted on the OTC Bulletin Board.

Our common stock was delisted from trading on the NYSE Alternext US as of January 9, 2009 and as of January 21, 2009, began to be quoted on OTC Bulletin Board. We cannot predict how liquid a market for our stock will be developed on the OTC Bulletin Board. Companies whose stock is quoted on the OTC Bulletin are not required to comply with the more extensive corporate governance and other listing requirements needed to meet the listing qualifications of the national securities exchanges. Investors in such companies may encounter greater compliance required by broker-dealers in trading their shares.

We could issue additional common stock, which might dilute the book value of our common stock.

Our board of directors has authority, without action or vote of our stockholders, to issue all or a part of our authorized but unissued shares. Such stock issuances could be made at a price that reflects a discount or a premium from the then-current trading price of our common stock. In addition, in order to raise capital, we may need to issue securities that are convertible into or exchangeable for a significant amount of our common stock. These issuances would dilute your percentage ownership interest, which would have the effect of reducing your influence on matters on which our stockholders vote, and might dilute the book value of our common stock. You may incur additional dilution if holders of stock options, whether currently outstanding or subsequently granted, exercise their options, or if warrant holders exercise their warrants to purchase shares of our common stock.

Our board of directors has the power to designate a series of preferred stock without shareholder approval that could contain conversion or voting rights that adversely affect the voting power of holders of our common stock.

Our Articles of Incorporation authorizes issuance of capital stock including 10,000,000 undesignated shares, and empowers our Board of Directors to prescribe by resolution and without shareholder approval a class or series of undesignated shares, including the number of shares in the class or series and the voting powers, designations, rights, preferences, restrictions and the relative rights in each such class or series. The Board previously authorized a series of preferred stock comprised of 5,000,000 shares designated as Series A 12% preferred stock, of which 1,742,500 shares are issued and outstanding, in which each share has one vote and votes on an as-converted basis with our common stock. The Board on February 12, 2009, authorized and designated two series of preferred stock comprised Series B-1 preferred stock, of which 900,000 shares are issued and outstanding, and Series B-2 preferred stock, comprised of 2,100,000 authorized shares of which 450,000 are outstanding as of June 10, 2009. Each share of Series B-1 preferred stock and Series B-2 preferred stock is convertible into four shares of our common stock and, in addition to a separate class vote with respect to certain matters, votes on an as-converted basis as a class with our common stock. In addition, the Board has authority to designate the remaining 2,000,000 shares in one or more series with conversion or voting rights, such as multiple votes per share, the result of which could adversely affect the voting rights of holders of our common stock.

We may need to request our shareholders to authorize additional shares of common stock in connection with subsequent equity finance transactions.

We are authorized to issue 200,000,000 shares of common stock, of which 50,356,709 shares were issued and outstanding on June 10, 2009. We have reserved 13,742,500 shares of common stock for issuance upon conversion of our Series A 12% preferred stock and Series B-1 and Series B-2 preferred stock, and 66,056,811 shares for issuance upon exercise of our outstanding stock options and warrants. If all of these securities were converted or exercised, a total of approximately 128,000,000 shares of our common stock would be outstanding. In addition, certain dilutive finance transactions could require us to reserve additional shares if certain of our warrants become exercisable for additional shares as a result of anti-dilution protection provisions. As a result, we may have insufficient shares of common stock available to issue in connection with a future equity finance transaction, and accordingly may be required at an annual or special meeting of shareholders to seek approval of an increase in the number of our authorized shares of common stock before undertaking or as a condition to completing an offering. We cannot assure you that our shareholders would authorize an increase in the number of shares of our common stock.

As a "thinly-traded" stock, large sales can place downward pressure on our stock price.

Our common stock, despite certain increases of trading volume from time to time, experiences periods when it could be considered "thinly traded." Finance transactions resulting in a large amount of newly issued shares that become readily tradable, or other events that cause current stockholders to sell shares, could place downward pressure on the trading price of our stock. In addition, the lack of a robust resale market may require a stockholder who desires to sell a large number of shares to sell the shares in increments over time to mitigate any adverse impact of the sales on the market price of our stock.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares by the selling stockholders. To the extent that the warrants are exercised by the selling stockholders for cash, rather than by cashless exercise, we will receive proceeds constituting the exercise price of such warrants. Any such proceeds received by us through warrant exercises will be used for working capital.

SELLING STOCKHOLDERS

In February 2006, we completed a private placement to investors of $10 million aggregate principal amount of convertible debentures (all of which have been redeemed) and warrants to purchase 2,150,000 shares of common stock. Subsequent to the transaction, additional warrants were issued under their anti-dilution provisions exercisable for 10,983,606 shares of common stock. The warrants have a current exercise price of $0.50 and are exercisable until February 2011.

In February 2008, we completed a private placement of 1,742,500 units to investors, with each unit consisting of (1) one share of our Series A 12% Convertible Preferred Stock, which is convertible into one share of common stock, (2) a five-year warrant to purchase one share of common stock at an exercise price of $1.50, and (3) a five-year warrant to purchase one share of common stock at an exercise price of $2.00.

This prospectus covers the sale by the selling stockholders from time to time of:

- 10,983,606 shares of common stock issuable upon the exercise of the additional warrants issued in connection with the February 2006 private placement;
- 1,742,500 shares of common stock issuable upon the conversion of shares of our Series A 12% Convertible Preferred Stock sold in the February 2008 private placement; and
- 3,485,000 shares of common stock issuable upon the exercise of the warrants sold in the February 2008 private placement.

We issued the securities to the selling stockholders without registration under the Securities Act of 1933 (the “Securities Act”) in reliance upon the exemption provided by Section 4(2) of the Securities Act for transactions not involving a public offering. Prior to issuance, each selling stockholder represented to us that it was an accredited investor, as defined in Rule 501 of Regulation D under the Securities Act, and that it was acquiring the securities for investment purposes only and not with a view to, or sale in connection with, any distibution thereof.

The term “selling stockholder” includes (i) each person and entity that is identified in the table below (as such table may be amended from time to time by means of an amendment to the registration statement of which this prospectus forms a part) and (ii) any transferee, donee, pledgee or other successor of any person or entity named in the table that acquires any of the shares of common stock covered by this prospectus in a transaction exempt from the registration requirements of the Securities Act of 1933 and that is identified in a supplement or amendment to this prospectus.

We have listed below:

- the name of each selling stockholder;
- the number of shares of common stock beneficially owned by the selling stockholder as of the date of this prospectus;
- the maximum number of shares of common stock being offered by each of them in this offering; and
- the number of shares of common stock to be owned by the selling stockholder after this offering (assuming sale of such maximum number of shares) and the percentage of the class which such number constitutes (if one percent or more).

The footnotes to the table identify each selling stockholder that is a registered broker-dealer or an affiliate of a registered broker-dealer.

Except as otherwise noted below, during the last three years, no selling stockholder has been an officer, director or affiliate of our company, nor has any selling stockholder had any material relationship with our company or affilliates during that period. Each selling stockholder represented at the closing of the private placement that it did not have any contract, undertaking, agreement or arrangement with any person to sell, transfer, pledge, hypothecate, grant any option to purchase or otherwise dispose of any of the securities. Based on information provided to us by the selling stockholders, the selling stockholders purchased the securities in the ordinary course of business.

The shares of common stock being offered hereby are being registered to permit public secondary trading, and the selling stockholders are under no obligation to sell all or any portion of their shares included in this prospectus. The information contained in the following table is derived from information provided to us by selling stockholders, our books and records, as well as from our transfer agent. Where we were unable to obtain information from a selling stockholder with respect to the total number of shares beneficially owned by such holder, we have included only the shares underlying warrants held by such holder.

Unless otherwise indicated, each person has sole investment and voting power with respect to the shares indicated. For purposes of this table, a person or group of persons is deemed to have "beneficial ownership" of any shares as of a given date which such person has the right to acquire within 60 days after such date.

We do not know when or in what amounts a selling stockholder may offer shares for sale. The selling stockholders may not sell any or all of the shares offered by this prospectus. Because the selling stockholders may offer some or all of the shares pursuant to this prospectus, and because there are currently no agreements, arrangements or understandings with respect to any of the shares, we cannot estimate the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders. The numbers of shares shown under the column "Common Stock Owned Upon Completion of this Offering" reflect the assumption solely for purpose of this table that such shares are still owned upon completion of the offering, which assumption is not intended to override the selling stockholder table in, as applicable, any other prospectus covering the resale of any other of our securities by the selling stockholders.

Name of Selling Stockholder	Common Stock Beneficially Owned Prior to the Offering	Common Stock Offered Pursuant to this Prospectus[1]	Common Stock Owned Upon Completion of this Offering	Percentage of Common Stock Owned Upon Completion of this Offering
Alexandra Global Master Fund Ltd.[2]	1,193,508	998,508	195,000	*
William & Karen Belcher	178,523	75,000	103,523	*
Yona Binder	79,409	75,000	4,409	*
Bristol Investment Fund, Ltd.[3]	1,293,508	998,508	295,000	*
Roy Brown	119,292	75,000	44,292	*
Clark Capraro	41,540	30,000	11,540	*
Mildred Christian[4]	132,171	75,000	57,171	*
Dale Conaway[5]	80,752	30,000	50,752	*
Cranshire Capital, L.P.[6]	1,693,508	998,508	695,000	1.4%
Howard Crosby	856,200	150,000	706,200	1.4%
James Czirr Trust[7]	904,900	300,000	604,900	1.2%
Cynthia Dimmette	97,792	75,000	22,792	*
DKR Soundshore Oasis Holding Fund Ltd.[8]	1,193,508	998,508	195,000	*
Fivex LLC[9]	300,000	300,000	0	—
Peter Fox	79,167	75,000	4,167	*
Gayle Galan Living Trust	104,500	75,000	29,500	*
Harvey & Sandra Gertsch	104,175	75,000	29,175	*
Irwin Goldstein	41,170	30,000	11,170	*
Richard & Mary Gumaer	38,838	37,500	1,338	*

James Hart	120,000	90,000	30,000	*
Preston & Carrie Hawkins	355,525	225,000	130,525	*
Iroquois Master Fund Ltd.[10]	1,393,508	998,508	395,000	*
Robert Jacobs	280,185	165,000	115,185	*
JAM Capital Associates, LLC[11]	104,200	60,000	44,200	*
JMG Capital Partners, L.P.[12]	596,757	499,257	97,500	*
JMG Triton Offshore Fund, Ltd.[13]	596,757	499,257	97,500	*
Kendler Family Trust	233,300	75,000	158,300	*
Kings Road Investments, Ltd.[14]	2,387,022	1,997,022	390,000	*
Anatole Klyosov[15]	1,128,684	75,000	1,053,684	2.1%
Frederick Laun	562,284	150,000	412,284	*
Herbert Lazar Revocable Trust	31,670	30,000	1,670	*
Steven Lazar	79,292	75,000	4,292	*
Thomas & Margaret McNulty	79,175	75,000	4,175	*
James McPhelan	98,000	75,000	23,000	*
Judith Melillo	125,000	75,000	50,000	*
Robert Myers	115,000	75,000	40,000	*
William Novak	131,000	75,000	56,000	*
Gilbert Omenn	268,000	150,000	118,000	*
Bertram Pitt	258,350	150,000	108,350	*
David Platt[16]	4,028,014	300,000	3,728,014	7.4%
James & Julie Prendergast	78,542	75,000	3,542	*
Michael & Paige Prendergast	86,000	75,000	11,000	*
Robert Rettig	112,850	83,675	29,175	*
Rodman & Renshaw, Inc.[17]	1,231,175	998,508	232,667	*
Stephen & Peggy Rogers	193,669	75,000	118,669	*
Russo Family Living Trust	79,175	75,000	4,175	*
Robert & Claudine Salanski	230,000	75,000	155,000	*
Gary & Linda Sanford Revocable Living Trust	100,000	75,000	25,000	*
Earl Schalin	100,000	75,000	25,000	*
Charles Shafer	129,175	75,000	54,175	*
James Shaw	82,425	75,000	7,425	*
Michael Sheikh	320,000	90,000	230,000	*
David Smith	525,000	525,000	0	—
Smithfield Fiduciary, LLC[18]	2,503,689	1,997,022	506,667	1.0%
Bjarn & Glafira Sorensen	44,150	30,000	14,150	*
Irving Sparage Revocable Trust	91,675	75,000	16,675	*
Charles Stafford	79,175	75,000	4,175	*
Tailwind V.C., LLC[19]	75,000	75,000	0	—
Linda Upton Living Trust	31,075	30,000	1,075	*
Gary Zoellner	224,050	150,000	74,050	*
George Zoellner	31,634	30,000	1,634	*
TOTAL		**16,211,106**		

* Amount less than one percent.

Percentage calculations are based on 50,356,709 shares of our common stock issued and outstanding as of June 10, 2009.

1 Unless otherwise indicated, two-thirds of the shares shown in this column for each selling stockholder are issuable upon the exercise of warrants, and the remaining one-third are issuable upon the conversion of shares of Series A 12% Convertible Preferred Stock.

2 Represents shares issuable upon the exercise of warrants. Alexandra Investment Management, LLC, a Delaware limited liability company (“AIM”), serves as investment adviser to Alexandra Global Master Fund Ltd., a British Virgin Islands company (“Alexandra”). By reason of such relationship, AIM may be deemed to share dispositive power over the shares of common stock stated as beneficially owned by Alexandra. AIM disclaims beneficial ownership of such shares of common stock. Mr. Mikhail A. Filimonov (“Filimonov”) is the Chairman, Chief Executive Officer, Chief Investment Officer and a

managing member of AIM. By reason of such relationships, Filimonov may be deemed to share dispositive power over the shares of common stock stated as beneficially owned by Alexandra. Filimonov disclaims beneficial ownership of such shares of common stock.

3 Represents shares issuable upon the exercise of warrants.

4 Formerly a Director of the Company.

5 Formerly a Director of the Company.

6 Represents shares issuable upon the exercise of warrants. Downsview Capital, Inc. ("Downsview") is the general partner of Cranshire Capital, L.P. ("Cranshire") and consequently has voting control and investment discretion over securities held by Cranshire. Mitchell P. Kopin ("Mr. Kopin"), President of Downsview, has voting control over Downsview. As a result, each of Mr. Kopin, Downsview and Cranshire may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended) of the shares owned by Cranshire which are being registered hereunder.

7 James C. Czirr is a Director of the Company.

8 Represents shares issuable upon the exercise of warrants. The investment manager of DKR Soundshore Oasis Holding Fund Ltd. (the "Fund") is DKR Oasis Management Company LP (the "Investment Manager"). The Investment Manager has the authority to take any and all actions on behalf of the Fund with respect to the shares held by the Fund. Mr. Seth Fischer is the managing partner of Oasis Management Holding LLC, one of the general partners of the Investment Manager. Mr. Fischer has ultimate responsibility for trading with respect to the Fund. Mr. Fischer disclaims beneficial ownership of these shares.

9 David Smith is the manager of Fivex LLC, a Connecticut limited liability company, and may be deemed to have dispositive power over the shares held by this entity. Mr. Smith disclaims beneficial ownership of these shares.

10 Represents shares issuable upon the exercise of warrants. Joshua Silverman, the general partner of Iroquois Capital LP, may be deemed to have voting and dispositive over the shares held by Iroquois Capital LP. Mr. Silverman disclaims beneficial ownership of these shares.

11 Leonard Pearlman is the manager of JAM Capital Associates, LLC, a New York limited liability company, and may be deemed to have dispositive power over the shares held by this entity. Mr. Pearlman disclaims beneficial ownership of these shares.

12 Represents shares issuable upon the exercise of warrants. JMG Capital Partners, L.P. is a California limited partnership ("JMG Partners"). Its general partner is JMG Capital Management, LLC, a Delaware limited liability company (the "Manager"), and an investment adviser that has voting and dispositive control over the investments of JMG Partners, including the shares held by JMG Partners. The equity interests of the Manager are owned by JMG Capital Management, Inc., a California corporation ("JMG Capital"), and Asset Alliance Holding Corp., a Delaware corporation. Jonathan M. Glaser is the Executive Officer and Director of JMG Capital and has sole investment discretion over the portfolio holdings of JMG Partners.

13 Represents shares issuable upon the exercise of warrants. JMG Triton Offshore Fund, Ltd., organized under the law of the British Virgin Islands (the "Fund"), is an international business company. The Fund's investment manager is Pacific Assets Management LLC, a Delaware limited liability company (the "Manager"), that has voting and dispositive control of the Fund's investments, including the shares held by the Fund. The equity interests of the Manager are owned by Pacific Capital Management, Inc., a California corporation ("Pacific"), and Asset Alliance Holding Corp., a Delaware corporation. The equity interests of Pacific are owned by Messrs. Roger Richter, Jonathan M. Glaser and Daniel A. David. Messrs. Glaser and Richter have sole investment discretion over the Fund's portfolio holdings.

14 Represents shares issuable upon the exercise of warrants. Kings Road Investments Ltd. ("Kings Road") is a wholly-owned subsidiary of Polygon Global Opportunities Master Fund ("Master Fund"). Polygon Investment Partners LLP and Polygon Investment Partners LP (the "Investment Managers"), Polygon Investments Ltd. (the "Manager"), the Master Fund, Alexander Jackson, Reade Griffith and Paddy Dear share voting and dispositive power over the securities held by Kings Road including the shares held by Kings Road. The Investment Managers, the Manager and Messrs. Jackson, Griffith and Dear disclaim beneficial ownership of these shares.

15 Chief Scientist of the Company.

16 Formerly President, Chief Executive Officer and a Director of the Company.

17 Represents shares issuable upon the exercise of warrants. Rodman & Renshaw, Inc. is a registered broker-dealer and FINRA member. David Horin has the power to vote or dispose of the shares held by this entity.

18 Represents shares issuable upon the exercise of warrants. Highbridge Capital Management, LLC ("Highbridge") is the trading manager of Smithfield Fiduciary LLC ("Smithfield") and has voting control and investment discretion over securities held by Smithfield. Glen Dubin and Henry Swieca control Highbridge. Each of Highbridge and Messrs. Dubin and Swieca disclaims beneficial ownership of the shares held by Smithfield.

19 David Smith is the manager of Tailwind V.C., LLC, a Connecticut limited liability company, and may be deemed to have dispositive power over the shares held by this entity. Mr. Smith disclaims beneficial ownership of these shares.

PLAN OF DISTRIBUTION

Each selling stockholder and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of his, her or its shares on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- broker-dealers may agree with the selling stockholders to sell a specified number of shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any of these methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act of 1933, as amended (the “Securities Act”), if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA/NASD Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA/NASD IM-2440.

In connection with the sale of shares, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the shares in the course of hedging the positions they assume. The selling stockholders may also sell shares short and deliver these shares to close out their short positions, or loan or pledge shares to broker-dealers that in turn may sell these shares. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to that broker-dealer or other financial institution of shares offered by this prospectus, which shares that broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect that transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with those sales. In that event, any commissions received by those broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the shares. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%) of the gross proceeds of any sale.

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling stockholders may be deemed to be “underwriters” within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 there under. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the selling stockholders without registration and without regard to any volume limitations by reason of Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the shares have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), any person engaged in the distribution of the shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations there under, including Regulation M, which may limit the timing of purchases and sales of the shares by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

BUSINESS

We are a development-stage company engaged in the discovery and development of carbohydrate-based therapeutics that we believe enhance existing cancer treatments. We believe our therapeutics could also be used in treatment of liver, microbial and inflammatory diseases. All of our products are presently in development, including pre-clinical and clinical trials.

On February 12, 2009, David Platt, Ph.D. resigned as Chairman of our Board of Directors and as Chief Executive Officer and each of Dale H. Conaway, D.V.M., Henry J. Esber, Ph.D. and James T. Gourzis, M.D. resigned from our Board of Directors. Theodore Zucconi, Ph.D., a director of the Company, was named our Chief Executive Officer and President. Also, on February 12, 2009, James C. Czirr, Rod Martin, Gilbert Amelio, Ph.D. and Peter Traber, M.D., were elected to our Board of Directors.

Since our inception on July 10, 2000, our primary focus has been the development of a new generation of anticancer treatments using carbohydrate polymers which are aimed at increasing survival and improving the quality of life for cancer patients. Our lead product candidate, DAVANAT ® , is a patented new chemical entity that we believe, when administered in combination with a chemotherapy, increases the efficacy while reducing adverse side effects of the chemotherapy. We hold the patent on DAVANAT ® , which was invented by company founders David Platt, Ph.D., our former Chief Executive Officer, and Anatole Klyosov, Ph.D., our Chief Scientist.

In 2002, the Federal Drug Administration or FDA granted us an Investigational New Drug application, or IND, for use of DAVANAT® in combination with 5-fluorouracil, or 5-FU, to treat late-stage cancer patients with solid tumors. 5-FU is FDA-approved and one of the most widely used chemotherapies for treatment of various types of cancer, including colorectal, breast and gastrointestinal. In September 2008, we submitted a clinical and pre-clinical package to the FDA in support of our DAVANAT ® New Drug Application, or NDA. The FDA reported to us in its minutes for the December 22, 2008 meeting that we will be required to conduct a Phase III trial to demonstrate superiority to the best standard of care for late stage colorectal cancer patients. We believe that using DAVANAT ® in combination with 5-FU enables greater absorption of the chemotherapy in cancer cells while reducing its toxic side effects.

We plan to submit an NDA, for co-administration of DAVANAT® with 5-FU for the indication of colorectal cancer.

We were incorporated under Nevada law on January 26, 2001 and in May of that year acquired a Massachusetts corporation (organized on July 10, 2000) engaged in the business we now undertake. We have a wholly-owned Delaware subsidiary that we formed in 2003 to hold our cash and cash equivalents. We also own 10% of a Nevada subsidiary that we formed in October 2008 for the development of our technology in cardiovascular treatments.

Background on Carbohydrates

In order to function biologically, living organisms require the capability to recognize cellular information and trigger and perform biochemical reactions. Organisms as complex as human beings require systems with extraordinarily large capacity to recognize and translate information on a molecular level because of the tremendous number of different molecular messages that must be quickly and unambiguously deciphered, accepted or rejected. To accomplish this important task, a class of molecules capable of great variation in shape, orientation and composition is required. Carbohydrates serve this function in the body because they have the large range of structural properties, including linkage variations, branching and anomeric isomers, that enable them to provide the required cellular recognition capabilities. These complex molecules are also referred to as polysaccharides or complex sugars.

The particular role of carbohydrates, in this regard, is recognition of molecular information that triggers biological reactions. These activities include signal transmission, cell recognition, interaction and binding by other cells, hormones and viruses. Carbohydrates often accomplish this by working with lectins, which are carbohydrate binding proteins that exist on cells. Biological processes that involve lectin binding include a vast array of cell to cell interactions including infections, toxins and many physiological processes such as control and spread of metastasis, which is the spreading of disease from one part of the body to another and is an important feature of many cancers.

Our Strengths and Strategies

Focus on novel therapeutic opportunities provided by carbohydrates. We believe our company is one of the pioneers focused on development of carbohydrate-based therapeutics. As a result of their structural complexity, carbohydrates have not received as much scientific attention as nucleic acids and proteins, and are not as well understood. Carbohydrate molecules, which are essential to the transmission and recognition of cellular information, have been shown to play an important role in major diseases including cancer, cardiovascular disease, Alzheimer's disease, inflammatory disease and viral infections. We believe this offers a largely untapped area for treatment of disease including chemotherapeutics, infection treatment, vaccines and antibiotics.

Leverage extensive scientific expertise. Our scientists have substantial expertise, developed over decades, in the area of carbohydrates. Our team has conducted research in therapeutic application of carbohydrate-based therapeutics for approximately 20 years. Dr. Klyosov, who headed the Carbohydrate Research Laboratory at the USSR Academy of Sciences and was a visiting biochemistry professor at Harvard Medical School, holds more than 20 patents. We believe that this expertise, supplemented by members of our Scientific and Medical Advisory Boards, provides us with a substantial advantage in this relatively new area of drug development.

Completion of development milestones toward commercialization of DAVANAT® and 5-FU combination cancer therapy. We have completed important milestones in the development of DAVANAT ® in combination with 5-FU to treat late-stage cancer patients with solid tumors. These include our submission of the Drug Master

File, or DMF, to the FDA in May 2008, which we believe demonstrates our ability to produce commercial quantities of pharmaceutical-grade DAVANAT ® under manufacturing standards known as cGMP ("current Good Manufacturing Process"); our submission in September 2008 of a clinical and pre-clinical package to the FDA in support of our DAVANAT ® NDA; and our December 2008 pre-NDA meeting with the FDA which provided guidance as to certain components of a Phase III trial of DAVANAT ® /5-FU that would be needed for an NDA demonstrating superiority to the best standard of care for late stage colorectal patients. In addition, our planned 505(b)(2) NDA utilizes a regulatory pathway that is less costly because it allows us to rely on previous FDA findings about safety and efficacy and to refer to data that has been previously published. These NDAs are often used for drugs involving previously-approved products, such as 5-FU. We also have explored utilizing DAVANAT ® with other therapeutics and also as a potential stand-alone therapeutic.

Apply our technology to broad range of applications. Our research indicates that DAVANAT® has the potential for broad application. Following development of DAVANAT ® in combination with chemotherapies and biologics, we plan to combine it with other drugs to extend its use to treat other serious diseases. Generally speaking, a biologic is a therapeutic product based on materials derived from living materials, whereas a chemotherapy is a chemical compound, typically used in cancer treatment. Pre-clinical studies indicate that DAVANAT ® and other proprietary carbohydrates we have in development may have application for advanced treatment of liver, microbial and inflammatory diseases. This could substantially increase the marketability of our products.

Product Development

We are initially developing a pipeline of compounds that may be combined with chemotherapies, such as 5-FU and irinotecan, and biologics, such as Avastin ® , so as to improve the clinical benefit to patients. Based on our research, we believe DAVANAT ® , when combined with chemotherapies and biologics can significantly increase the clinical benefit to cancer patients by extending survival and increasing quality of life. Our lead product candidate, DAVANAT ® , is a patented new chemical entity that has completed Phase II trials for treatment of colorectal cancer in combination with 5-FU.

To date, DAVANAT® has been administered to approximately 100 cancer patients in Phase I and II trials. Data from a Phase II trial for late-stage colorectal cancer patients showed DAVANAT ® extended median survival to 6.7 months with significantly reduced side effects, as compared to 4.6 months for best standard of care as determined by the patient's physician. Patients have improved quality of life as result of experiencing fewer adverse side effects of the chemotherapy and requiring less hospitalization.

In addition, results of pre-clinical studies we have conducted in mice show that more 5-FU accumulates in the tumor when co-administered with DAVANAT ® than when 5-FU is administered alone in the mice. Our pre-clinical and clinical trial data also show that DAVANAT ® is tolerable, safe and non-toxic.

Our NDA for DAVANAT® will seek FDA approval for co-administration of DAVANAT® with 5-FU for intravenous injection for the treatment of colorectal cancer. We plan additional NDAs for DAVANAT ® in combination with other chemotherapeutics and biologics.

According to its published guidance, the FDA initially determines whether an NDA filing is complete for purposes of allowing a review, and, if allowed, then determines whether to approve the NDA, a process that takes six months (typically for a chemotherapy) or ten months (typically for a biologic). Upon approval, an applicant may commence commercial marketing and distribution of the approved products. We have retained Camargo Pharmaceutical Services, LLC ("Camargo") for regulatory support of our submission with the FDA. Camargo's expertise in regulatory affairs and submissions includes the preparation and submission of NDAs.

We are also developing other carbohydrate-based therapeutic compounds for treatment of other serious disease, such as liver and kidney fibrosis. These product candidates are all in the pre-clinical stage of development. We entered into research collaborations with the Mount Sinai School of Medicine to study the anti-fibrotic effects of our carbohydrate compounds on liver fibrosis and with Brigham and Women's Hospital to evaluate the anti-fibrotic effects of these compounds to treat acute and chronic kidney disease. Our carbohydrate

compounds significantly reduced collagen expression and reversed fibrosis in animal models. Whereas previously *in vitro* data indicated a reversal of fibrosis markers, in this proof-of-concept animal study, the compounds clearly reduced collagen expression and reversed liver fibrosis.

DAVANAT®

DAVANAT®, our lead product candidate in development, is a proprietary carbohydrate (polysaccharide) polymer comprised of mannose and galactose carbohydrates that is derived from plant sources and has a precisely defined chemical structure. More specifically, it is galactomannan which is isolated from seeds of guar and subjected to a controlled partial chemical and physical degradation. Guar is a legume grown in the United States and elsewhere for a wide variety of food and non-food uses.

We believe the mechanism of action for DAVANAT® is based upon interaction with lectins, which are cell surface proteins that bind only to a particular kind of carbohydrate. DAVANAT ® is formulated to attach to specific lectins (Galectins), which are abundant on the surface of tumor cells, while selectively avoiding healthy tissue. We believe the structure of our carbohydrate is such that it is attracted to lectin receptors that are specific and over-expressed on cancer cells. The receptor effectively interacts with the carbohydrate and chemotherapy and/or biologic combination and assists in the accumulation of the chemotherapy in the cancer cell. This may allow for administration of higher doses of chemotherapy thereby increasing efficacy while reducing toxicity.

Pre-clinical Studies of DAVANAT®

Our pre-clinical studies demonstrate that DAVANAT® when used in combination with chemotherapies, such as 5-FU and irinotecan, and biologics, such as Avastin ® , may improve the clinical benefit of anti-cancer treatments. Pre-clinical studies also demonstrated delayed tumor growth and tumor shrinkage against a control group of animals when DAVANAT ® was used in combination with standard therapies. These studies demonstrated that DAVANAT ® could be used effectively with different chemotherapies and biologics.

Clinical Trial Development of DAVANAT®

Results from our Phase II clinical trial data to date in late-stage cancer patients shows that DAVANAT® extends median survival to 6.7 months from 4.6 months (or a 46% increase) after other treatments were exhausted. The results of this trial also demonstrated reduction of adverse gastrointestinal, hematological and other side effects of chemotherapy treatment.

Phase I Trial for Late-Stage Patients with Solid Tumors.

In 2005, we completed a Phase I study to evaluate DAVANAT®, alone and in combination with 5-FU, to treat solid tumors in a trial of 40 end-stage patients with advanced solid tumors who failed chemotherapy, radiation therapy, and/or surgical treatments. The objective of the open label study was to evaluate the safety and tolerability of escalating doses of DAVANAT ® (30-280mg/m 2) when administered alone and in combination.

Based on objective tumor assessment using Response Evaluation Criteria in Solid Tumors, or RECIST, the disease was stabilized in 14 of 26 of the evaluable patients with measurable disease. Furthermore, 7 of 10 patients were stabilized at the highest dose level of DAVANAT ® administered in the study. Efficacy results are analyzed based on RECIST following completion of the second cycle of treatment. According to RECIST, a stable disease is a disease with neither sufficient shrinkage to qualify for Partial Response (more than 30% shrinkage) nor sufficient increase to qualify for Progressive Disease (greater than 20% increase) taking as reference the smallest sum longest diameter since the treatment started.

The Phase I data also indicate that DAVANAT® was well tolerated by patients. The maximum tolerated dose was not reached indicating DAVANAT ® is safe and has the potential for further dose escalation. Adverse side effects were primarily disease related. Additionally, the results showed that the DAVANAT ® /5-FU combination remained in the bloodstream up to eight times longer, which we believe increases the efficacy of the treatment.

Phase II Trial for Late Stage Patients with Metastatic Colorectal Cancer.

In 2004, we initiated a Phase II clinical trial to further evaluate DAVANAT ® for late-stage patients with metastatic colorectal cancer. The multi-center, open label, single-dose level study was designed to evaluate up to 15 patients in stage one, and up to 18 patients in stage two. The study, which was designed to evaluate the efficacy and safety of DAVANAT ® in combination with chemotherapy when administered in monthly cycles, had two objectives: (1) to document the rate of response and stabilization of patients with advanced colorectal cancer; and (2) to continue evaluating the safety of the DAVANAT ® in combination 5-FU. Dosing of patients began in May 2005. We stopped recruiting for the study in May 2006 because we achieved our objective. The data for the study indicates that based on objective tumor assessment one patient experienced a partial tumor response and the disease was stabilized in 6 of 20 patients. Data on 20 patients from this trial showed that DAVANAT ® extended median survival . We tracked these patients and gathered data after they left the trial. The patients entered the trial with disease that progressed despite previously being treated with standard chemotherapies and biologics.

Phase II Trial for First-line Treatment of Patients with Biliary Cancer.

In 2007, we initiated a Phase II trial for the first-line treatment of patients with biliary (gall bladder) cancer. Biliary cancer may represent an opportunity for orphan drug status approval. See “FDA “Orphan Drug” Designation” below under “Government Regulation.” The multi-center, open label, single-dose level study is designed to evaluate up to 42 patients. The study was designed to evaluate the efficacy and safety of DAVANAT ® when administered for at least two monthly cycles or until disease progression. The trial had two objectives: (1) complete/partial tumor response in 20% of patients (17% in the first stage); and (2) the safety of DAVANAT ® regimen in this patient population. We stopped the trial due to financial constraints in the second quarter of 2008 and do not expect to resume it.

Phase II Trial for First-line Treatment of Patients with Colorectal Cancer.

In 2006, we initiated a Phase II trial for initial treatment of colorectal cancer patients. The multi-center, open label, single-dose level study was designed to evaluate up to 50 patients who are unable to sustain the high toxicity of current intensive combination chemotherapy. The study was expected to evaluate the efficacy and, safety of DAVANAT® when administered in combination with the current standard of care in two monthly cycles or until disease progression or toxicity. The primary objectives of the study were a complete or partial response in 33% of the patients and a secondary measurement of progression free survival at 6 and 12 months. We stopped the trial due to financial constraints in the second quarter of 2008 and do not expect to resume it.

Please see “Risks Related to our Company — We have one candidate in clinical trials and results are uncertain” for additional discussion of risks related to clinical trials.

Patents and Proprietary Rights

Our development and commercial viability, and ultimately our competitiveness, depend on our ability to develop and maintain the proprietary aspects of our technology and operate without infringing on the proprietary rights of others. We rely on a combination of patent, trademark, trade secret and copyright law and contract restrictions to protect the proprietary aspects of our technologies. We seek to limit disclosure of our intellectual property by requiring employees, consultants, and any third parties with access to our proprietary information to execute confidentiality agreements and by restricting access to that information.

As of December 31, 2008, we held five U.S. patents and have patent applications pending from the U.S. Patent and Trademark Office. Many of our patents and patent applications cover methods and composition for reducing toxicity and enhancing chemotherapeutic drugs by co-administering a polysaccharide with a chemotherapeutic agent. We have corresponding patent applications pending in Europe, Canada, Israel, Brazil, Japan, China and Australia. Additionally, we have patent applications in other areas to utilize our carbohydrate-based compounds to treat disease other than cancer.

Please see “Risks Related to our Company — We are a counterclaim defendant in a lawsuit instituted by our former Chief Executive Officer” and “Risks Related to the Drug Development Industry — Our competitive position depends on protection of our intellectual property” for additional discussion of risks related to protection of our intellectual property based on inventions.

Research

Our initial focus is on the design and analysis of carbohydrate-based compounds to improve the clinical benefit of chemotherapeutic agents and biologics. We contract with independent laboratories and other facilities to conduct our research, which is designed, evaluated and managed by our scientists. We do not anticipate building in-house research or development facilities or hiring staff other than for purposes of designing and managing our out-sourced research.

As we develop products eligible for clinical trials, we contract with independent parties to design the trial protocols, arrange for and monitor the clinical trials, collect data and analyze data. In addition, certain clinical trials for our products may be conducted by government-sponsored agencies and will be dependent on governmental participation and funding. Our dependence on independent parties and clinical sites involves risks including reduced control over the timing and other aspects of our clinical trials.

Our research and development expenditures totaled approximately $17.4 million for the cumulative period from inception (July 10, 2000) through December 31, 2008. During the year ended December 31, 2008, and 2007, our expenditures for research and development were approximately $1.77 million and $2.05 million, respectively.

On October 31, 2008, our board of directors authorized Medi-Pharmaceuticals, Inc., a Nevada corporation and then our wholly-owned subsidiary, to enter into a joint venture to deploy certain technology we own, as well as original technology to be developed by the joint venture, for use in nutraceutical cardiovascular therapies. This deployment was accomplished by: (i) a merger of FOD Enterprises, Inc., a Nevada corporation, with and into Medi-Pharmaceuticals on November 25, 2008, following which Medi-Pharmaceuticals became the surviving corporation and we became the owner of 10% of the outstanding capital stock of Medi-Pharmaceuticals; and (ii) our entering into a license agreement with Medi-Pharmaceuticals dated November 25, 2008, and clarified by an amendment dated December 15, 2008. On February 12, 2009 we terminated the license agreement and entered into a Technology Transfer and Sharing Agreement, or Sharing Agreement, with Medi-Pharmaceuticals. Under the terms of the Sharing Agreement, we and Medi-Pharmaceuticals agreed that we would not work in the area of polysaccharides in heart disease for a period of five years without the consent of Medi-Pharmaceuticals and Medi-Pharmaceuticals will not work in the area of polysaccharides in oncology and liver/kidney fibrosis for a period of five years without our consent. Pursuant to the Sharing Agreement we licensed to Medi-Pharmaceuticals in perpetuity all items of intellectual property owned by us with respect to the use of polysaccharides for heart indications. Further, we granted Medi-Pharmaceuticals access to all of our intellectual property in the area of fibrotic tissue in applications other than liver/kidney fibrosis and Medi-pharmaceuticals granted us access to all intellectual property in the area of kidney/lever fibrosis.

Manufacturing and Marketing

We are a development stage company at this time and do not intend to establish internal facilities for the manufacture of our products for clinical or commercial production. To have our products manufactured, we have developed and will continue to develop relationships with third-parties that have established manufacturing capabilities. We are not a party to any long-term agreement with any of our suppliers and, accordingly, we have our products manufactured on a purchase-order basis from one of two primary suppliers.

Because our products are in the development stage, we have not created a sales and marketing staff to commercialize pharmaceutical products. If we develop products eligible for commercial sale, we will need to develop a sales and marketing capability or 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 reduced control, and other risks including those discussed in “Risks Related to our Company — We will depend on third parties to manufacture and market our products and to design trial protocols, arrange for and monitor the clinical trials, and collect and analyze data.”

Competition

Many biotechnology and pharmaceutical companies are developing new technologies for the treatment of cancer and other diseases. Technologies such as monoclonal antibodies, developed by Genentech, Inc., could be competitive with our carbohydrate-based platforms. Several companies, such as Momenta Pharmaceuticals Inc., are developing carbohydrate technologies and sequencing of complex sugars to improve or develop new or existing drugs. Other companies, such as ImClone Systems Incorporated, are trying to improve the therapeutic profile of widely used protein-based drugs. While these companies may broaden the market for our products they may also provide competitive alternatives to our products.

Please see “Risks Related to the Drug Development Industry — We face intense competition in the biotechnology and pharmaceutical industries” for additional discussion related to our current and potential competition.

Government Regulation

The research, development, testing, manufacture, labeling, promotion, advertising, distribution, and marketing, among other things, of our products are extensively regulated by governmental authorities in the United States and other countries. The FDA regulates drugs under the federal Food, Drug, and Cosmetic Act and its implementing regulations. Failure to comply with the applicable U.S. requirements may subject us to administrative or judicial sanctions, such as FDA refusal to approve pending NDAs, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, and/or criminal prosecution.

Drug Approval Process

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

1. Pre-clinical laboratory tests, animal studies, and formulation studies,

2. Submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin,

3. Adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for each indication,

4. Submission to the FDA of an NDA,

5. Satisfactory completion of an FDA inspection of the manufacturing facility or facilities, at which the drug is produced to assess compliance with cGMP established by the FDA,

6. FDA review and approval of the NDA, and

7. FDA review and approval of a trademark used in connection with a pharmaceutical.

Pre-clinical tests include laboratory evaluation of product chemistry, toxicity, and formulation, as well as animal studies. The results of the pre-clinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND, which must become effective before human clinical trials may begin. An IND automatically becomes 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 patients to evaluate its safety, dosage tolerance, pharmacodynamics, and, if possible, to gain an early indication of its effectiveness. Phase II usually involves trials in a limited patient population to (i) evaluate dosage tolerance and appropriate dosage; (ii) identify possible adverse effects and safety risks; and (iii) evaluate preliminarily the efficacy of the drug for specific indications. Phase III trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. There is no assurance that these trials will be completed within a specified period of time, if at all.

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

Please see “Risks Related to the Drug Development Industry — We will need regulatory approvals to commercialize our products” for additional discussion of regulatory risks related to our drug development program.

FDA Priority Review

FDA procedures provide for priority review of an NDA submitted for drugs that, compared to currently marketed products, offer a significant improvement in the treatment, diagnosis, or prevention of a disease. NDAs that are granted priority review are acted upon more quickly than NDAs given standard review. If we were to seek priority review, there can be no guarantee that the FDA will grant priority review status, that priority review status will affect the time of review, or that the FDA will approve the NDA submitted for any of our product candidates, whether or not priority review status is granted.

Post-Approval Requirements

If FDA approval of one or more of our products is obtained, we will be required to comply with a number of post-approval requirements. For example, holders of an approved NDA are required to report certain adverse reactions to the FDA and to comply with certain requirements concerning advertising and promotional labeling for their products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. In addition, discovery of problems with a product after approval may

result in restrictions on a product, manufacturer, or holder of an approved NDA, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of our products under development.

FDA "Orphan Drug" Designation

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

Regulation Outside the United States

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

Environmental Regulation

Pharmaceutical research and development involves the controlled use of hazardous materials. Biotechnology and pharmaceutical companies must comply with laws and regulations governing the use, generation, manufacture, storage, air emission, effluent discharge, handling and disposal of certain materials, biological specimens and wastes. We do not anticipate building in-house research, development or manufacturing facilities, and, accordingly, do not expect to have to comply directly with environmental regulation. However, our contractors and others conducting research, development or manufacturing activities for us may be required to incur significant compliance cost, and this could in turn could increase our expense or delay our completion of research or manufacturing programs.

Employees

As of December 31, 2008, we had eight full-time employees, three of whom were involved primarily in management of our pre-clinical research and development and clinical trials and five of whom were involved primarily in financial management and administration of our company. We also had two part-time contractors, one of whom provides financial management services and the other serves as our medical director.

Properties

We lease approximately 9,400 square feet for our executive offices located at 7 Wells Avenue, Newton, Massachusetts. We have a five year lease that commenced in August 2006 with an option to extend for an additional five years. We believe this space is suitable for our present operations and adequate for foreseeable expansion of our business.

Legal Proceedings

In January 2004, David Platt, Ph.D., our former Chairman and Chief Executive Officer, filed a lawsuit in Massachusetts Superior Court against GlycoGenesys, Inc. for various claims including breach of contract. GlycoGenesys subsequently asserted counterclaims against us and Dr. Platt alleging tortious interference, misappropriation of proprietary rights, defamation and unfair competition, and sought monetary and injunctive relief related to our intellectual property. In October 2006, Prospect Therapeutics, Inc. (formerly known as Marlborough Research and Development, Inc.) purchased selected assets including this lawsuit from the GlycoGenesys bankruptcy estate and continues prosecuting the counterclaims against us and Dr. Platt. Concluding that certain disputes of fact could not be resolved as a matter of law, the court on May 27, 2008 denied our motion for summary judgment. Prospect Therapeutics informed the court that it does not seek monetary damages other than recovery of attorney fees. In response to a motion for withdrawal by counsel in this case, the court on December 12, 2008, amended its order dated October 6, 2008, to state that by January 9, 2009, a default judgment will be entered against us if new defense counsel has not entered an appearance on our behalf or we have not restored our relationship with our current counsel. On January 7, 2009, our successor counsel entered a notice of appearance to represent us at trial which commenced on March 10, 2009. We believe the lawsuit is without merit and intend to contest it vigorously.

In January 2005, we filed a request with the U.S. Patent and Trademark Office for an inter partes re-examination of U.S. Patent No. 6,680,306 now owned by Prospect Therapeutics, Inc. because we believe that the invention claimed in this patent is anticipated by other inventions (technically, “prior art”), including our U.S. Patent No. 6,645,946 for DAVANAT ® . The Patent Office has agreed with our argument throughout the re-examination that all claims stated in the ‘306 patent are anticipated by prior art. We believe that the actions of the Patent Office support our position that the invention claimed in the DAVANAT ® patent is prior art.

On January 30, 2008, Custom Equity Research, Incorporated (d/b/a Summer Street Research Partners) filed a lawsuit against us in the Superior Court of the Commonwealth of Massachusetts, alleging claims for breach of contract, declaratory judgment and unjust enrichment arising out of an engagement letter under which Summer Street agreed to provide institutional investment placement services to us. Summer Street claims it is entitled to a placement fee for each placement made during the term of the agreement and for each issuance of securities made or agreed to be made by us from October 17, 2007 through November 16, 2008. We initially responded to the lawsuit with a motion to dismiss, which the Court denied on June 23, 2008, finding that the letter agreement was ambiguous with respect to Summer Street’s entitlement to compensation. The Court also denied Summer Street’s motion for a prejudgment attachment and trustee process, preliminarily finding that Summer Street was not likely to prevail on any of its claims. On July 3, 2008, we filed our answer, denying Summer Street’s material allegations. The parties are currently engaged in discovery and no trial date has been set for this matter. We believe the lawsuit is without merit and intend to contest it vigorously.

Market for Registrant’s Common Equity and Related Stockholder Matters

Price Range of Common Stock

Following the delisting of our common stock from the NYSE Alternext US as of the close of trading on January 9, 2009, our common stock has been quoted on the OTC Bulletin Board since January 21, 2009 under the symbol “PRWP.OB”. The high and low closing prices for our common stock as reported on the NYSE Alternext US, through January 20, 2009, and the OTC Bulletin Board, since January 21, 2009, for the periods indicated below were as follows:

	High	Low
Fiscal Year Ending December 31, 2009		
First Quarter	$0.32	$0.08
Fiscal Year Ended December 31, 2008		
First Quarter	$0.70	$0.26
Second Quarter	$0.48	$0.25
Third Quarter	$0.39	$0.17
Fourth Quarter	$0.30	$0.05
Fiscal Year Ended December 31, 2007		
First Quarter	$1.39	$0.25
Second Quarter	$0.93	$0.35
Third Quarter	$0.72	$0.31
Fourth Quarter	$0.89	$0.60

Holders of Common Stock

As of June 10, 2009, there were approximately 260 shareholders of record of our common stock. Because shares of our common stock are held by depositaries, brokers and other nominees, the number of beneficial holders of our shares is substantially larger than the number of record holders. Based on information available to us, we believe there are approximately 4,100 non-objecting beneficial owners of our shares of our common stock in addition to the record holders.

Dividends

There have been no cash dividends declared on our common stock since our company was formed. Dividends are declared at the sole discretion of our Board of Directors. Our intention is not to declare cash dividends and retain all cash for our operations. In February 2008, we issued 1,742,500 shares of Series A 12% Convertible Preferred Stock which pay dividends at the rate of 12% per share per annum payable, at our option, in cash or shares of common stock valued at the higher of $1.00 or 100% of the value weighted average price of our share price for the twenty consecutive trading dates prior to the dividend payment date. It is our intent to make the dividend payments with shares of common stock.

In February 2009, we issued 900,000 shares of Series B-1 Convertible Preferred Stock which pay dividends at the rate of 12% per share per annum payable, at our option, in cash or Common Stock valued at 100% of the value weighted average price of our share price for the 20 consecutive trading days prior to the applicable dividend date; provided, however that there is an effective registration statement covering the shares of Common Stock (for dividend payments due on September 30, 2009 or later) and the issuance of shares does not trigger anti-dilution provisions under other agreements to which we are a party. It is our intent to make the dividend payments with shares of common stock.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

We are a development-stage company engaged in the discovery and development of carbohydrate-based therapeutics that we believe enhance existing cancer treatments. We believe our therapeutics could also be used in treatment of liver, microbial and inflammatory diseases. All of our products are presently in development, including pre-clinical and clinical trials.

Since our inception on July 10, 2000, our primary focus has been the development of a new generation of anti-cancer treatments using carbohydrate polymers which are aimed at increasing survival and improving the quality of life for cancer patients. Our lead product candidate, DAVANAT ® , is a patented new chemical entity that we believe, when administered in combination with a chemotherapy, increases the efficacy while reducing adverse side effects of the chemotherapy. We hold the patent on DAVANAT ® , which was invented by company founders David Platt, Ph.D., our former Chief Executive Officer, and Anatole Klyosov, Ph.D., our Chief Scientist.

At March 31, 2009, we had approximately $861,000 of unrestricted cash and cash equivalents available to fund future operations. On May 13, 2009, we completed a closing for gross proceeds of $900,000 (net proceeds of approximately $801,000) on our offering of Series B-2 Redeemable Convertible Preferred Stock ("Series B-2"). With the completion of the closing of the Series B-2 offering, combined with cash on hand, we believe there is sufficient cash to fund operations into October 2009. We will require more cash to fund our operations and believe we will be able to obtain additional financing. However, there can be no assurance that we will be successful in obtaining such new financing or, if available, that such financing will be on terms favorable to us. We have taken steps to reduce our administrative and clinical spending, however, we must raise additional cash by October 2009, which may include one or more subsequent closings under the Series B Preferred Stock purchase agreement entered into on February 12, 2009, or we may not be able to continue operations and may be forced to seek bankruptcy protection.

In 2002, the FDA granted us an IND for use of DAVANAT® in combination with 5-FU to treat late-stage cancer patients with solid tumors. 5-FU is FDA-approved and one of the most widely used chemotherapies for treatment of various types of cancer, including colorectal, breast and gastrointestinal. We believe that using DAVANAT ® in combination with 5-FU enables greater absorption of the chemotherapy in cancer cells while reducing its toxic side effects.

The FDA has also granted us an IND for DAVANAT® to be administered with Avastin®, 5-FU and leucovorin in a combination therapy to treat early-stage colorectal cancer patients. In addition, the FDA also has granted us INDs on a case-by-case basis to treat breast cancer in response to physicians' requests for so-called "compassionate use" INDs.

To date, DAVANAT® has been administered to approximately 100 cancer patients. Data from a Phase II trial for end-stage colorectal cancer patients showed that DAVANAT ® in combination with 5-FU extended median survival to 6.7 months with significantly reduced side effects, as compared to 4.6 months for best standard of care as determined by the patients' physicians. These clinical trials also showed that patients experienced fewer adverse side effects of the chemotherapy and required less hospitalization.

In addition, results of pre-clinical studies we have conducted in mice show that more 5-FU accumulates in the tumor when co-administered with DAVANAT ® than when 5-FU is administered alone in the mice. Our pre-clinical and clinical trial data also show that DAVANAT ® is tolerable, safe and non-toxic.

In early 2007, in an effort to lower clinical development costs and accelerate the approval and commercialization of DAVANAT®, we chose a regulatory strategy known as a "505(b)(2)" NDA. Our 505(b)(2) NDA for DAVANAT ® will seek FDA approval for co-administration of DAVANAT ® with 5-FU for intravenous injection for the treatment of colorectal cancer. These 505(b)(2) NDAs are often used for drugs involving previously-approved products and, as a result, are less costly to prepare and file with the FDA. Although we believe, based on the outcome of our clinical trials to date, that DAVANAT ® when co-administered with 5-FU or biological drugs is superior to the current standard of care, we cannot in a 505(b)(2) NDA claim superiority over the current standard of care. We believe, however, that if and when our 505(b)(2) NDA is approved by the FDA, we are better positioned to attract a strategic partner with the resources to undertake the costly Phase III clinical trials required to produce the data on which to make a superiority claim. We plan to submit the 505(b)(2) NDA for DAVANAT ® .

We also plan to file additional NDAs for DAVANAT® in combination with other chemotherapeutics and biologics. Biologics are therapeutic products based on materials derived from living materials.

According to its published guidance, the FDA initially determines whether an NDA filing is complete for purposes of allowing a review, and, if allowed, then determines whether to approve the NDA, a process that takes six or ten months. Upon approval, an applicant may commence commercial marketing and distribution of the approved products. We have retained Camargo Pharmaceutical Services, LLC for regulatory support of our submission with the FDA. Camargo's expertise in regulatory affairs and submissions includes the preparation and submission of NDAs.

In May 2008, we submitted a DMF for DAVANAT® to the FDA. This is an important step toward the filing of our DAVANAT® NDA because a DMF contains confidential detailed information in support of the NDA about facilities, processes or articles used in the chemistry, manufacturing, controls, processing, packaging, and storing or stability of drugs. We believe the DMF represents a significant milestone in our eventual commercialization of DAVANAT ® because it demonstrates our ability to produce commercial quantities of pharmaceutical-grade DAVANAT ® under cGMP standards. A DMF can be cross-referenced by potential partners to use in combination with other therapies to expedite clinical studies and submission of NDAs.

In September 2008, we submitted a clinical and pre-clinical package to the FDA in support of our DAVANAT® NDA. The FDA reported to us in its minutes for the December 22, 2008 meeting that we will be required to conduct a Phase III trial to demonstrate superiority to the best standard of care for late stage colorectal cancer patients. As part of the Phase III trial, we plan to open the study to conduct a pharmacokinetic (PK) analysis of approximately 60 patients, which may allow us to file an NDA for DAVANAT ® as an adjuvant when administered with 5-FU. Adjuvants are pharmacological or immunological agents that modify the effect of other agents, such as drugs or vaccines. We also plan to file a Special Protocol Assessment ("SPA"), for the Phase III trial. The benefit of a successful SPA is that the FDA agrees that an uncompleted Phase III trial's design, clinical endpoints and statistical analyses are acceptable for FDA approval. As noted above, using the 505(b)(2) NDA regulatory pathway, which allows us to rely on previous FDA findings, is important to our near-term product development strategy because it enables us to lower the clinical development costs and accelerate the approval and commercialization of DAVANAT ® .

On October 31, 2008, our board of directors authorized Medi-Pharmaceuticals, Inc. ("Medi-Pharma"), a Nevada corporation and then our wholly-owned subsidiary, to enter into a joint venture to deploy certain technology we own, as well as original technology to be developed by the joint venture, for use in nutraceutical cardiovascular therapies. This deployment was accomplished by: (i) a merger of FOD Enterprises, Inc., a Nevada corporation, with and into Medi-Pharma on November 25, 2008, following which Medi-Pharma became the surviving corporation and we became the owner of 10% of the outstanding capital stock of Medi-Pharma; and (ii) our entering into a license agreement with Medi-Pharma November 25, 2008, and clarified by an amendment dated December 15, 2008. Pursuant to the license agreement, we granted Medi-Pharma an exclusive, worldwide perpetual license to commercialize all of our polysaccharide technology exclusively in the field of cardiovascular therapies (both preventative and therapeutic) in exchange for a royalty equal to 10% of Medi-Pharma's net revenues from products sold based on the licensed technology. Medi-Pharm must advance $1.0 million in cash to us by May 30, 2009 or we will have the ability to terminate the license agreement. On February 12, 2009 we terminated the license agreement and entered into a Technology Transfer and Sharing Agreement, or Sharing Agreement, with Medi-Pharma. Under the terms of the Sharing Agreement, we and Medi-Pharma agreed that we would not work in the area of polysaccharides in heart disease for a period of five years without the consent of Medi-Pharma and Medi-Pharma will not work in the area of polysaccharides in oncology and liver/kidney fibrosis for a period of five years without our consent. Pursuant to the Sharing Agreement we licensed to Medi-Pharma in perpetuity all items of intellectual property owned by us with respect to the use of polysaccharides for heart indications. Further, we granted Medi-Pharma access to all of our intellectual property in the area of fibrotic tissue in applications other than liver/kidney fibrosis and Medi-Pharma granted us access to all intellectual property in the area of kidney/lever fibrosis. At December 31, 2008, Medi-Pharma had no assets.

Following a hearing with the NYSE Alternext US on December 23, 2008, our appeal of an earlier delisting notice was denied and our common stock ceased to trade on this exchange as of the close of trading on January 9, 2009. On January 21, 2009 our common stock began trading on the OTC Bulletin Board under the symbol "PRWP.OB".

Critical Accounting Policies and Estimates

Our significant accounting policies are more fully described in Note 2 to our consolidated financial statements included elsewhere in this prospectus. Certain of our accounting policies, however, are critical to the portrayal of our financial position and results of operations and require the application of significant judgment by our management, which subjects them to an inherent degree of uncertainty. In applying our accounting policies, our management uses its best judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Our more significant estimates include stock option and warrant liability valuations, useful lives of intangible assets and accrued liabilities. These estimates are based on our historical experience, terms of existing contracts, our observance of trends in the industry, information available from other outside sources, and on various other factors that we believe to be appropriate under the circumstances. We believe that the critical accounting policies discussed below involve more complex management judgment due to the sensitivity of the methods, assumptions and estimates necessary in determining the related asset, liability, revenue and expense amounts.

Cash Flow. Our audited year-end financial statements were prepared on a going concern basis with the assumption that we had sufficient cash on hand at March 30, 2009 to fund operations into June 2009 and that by June 2009 we would have raised sufficient cash to continue operations. We believe that our unrestricted cash and cash equivalents on hand at March 31, 2009, of $861,000, combined with $900,000 gross (approximately $801,000, net) proceeds from a closing of our offering of Series B-2 on May 13, 2009, will be sufficient to enable us to meet our operating requirements into October 2009. We will require more cash to fund our operations and believe we will be able to obtain additional financing. However, there can be no assurance that we will be successful in obtaining such new financing or, if available, that such financing will be on terms favorable to us.

Intangible Assets. Intangible assets include patent costs, consisting primarily of related legal fees, which are capitalized as incurred and amortized over an estimated useful life of five years from issuance.

Accrued Expenses. As part of the process of preparing our consolidated financial statements, we are required to estimate accrued expenses. This process involves identifying services that third parties have performed on our behalf and estimating the level of service performed and the associated cost incurred on these services as of each balance sheet date in our consolidated financial statements. Examples of estimated accrued expenses include contract service fees in conjunction with pre-clinical and clinical trials, professional service fees, such as those arising from the services of attorneys and accountants and accrued payroll expenses. In connection with

these service fees, our estimates are most affected by our understanding of the status and timing of services provided relative to the actual services incurred by the service providers. In the event that we do not identify certain costs that have been incurred or we under-or over-estimate the level of services or costs of such services, our reported expenses for a reporting period could be understated or overstated. The date on which certain services commence, the level of services performed on or before a given date, and the cost of services are often subject to our judgment. We make these judgments based upon the facts and circumstances known to us in accordance with accounting principles generally accepted in the U.S.

Convertible Debt Instrument. Our convertible debt instrument issued in February 2006 (the "Debentures") constitutes a hybrid instrument that has the characteristics of a debt host contract containing several embedded derivative features that would require bifurcation and separate accounting as a derivative instrument pursuant to the provisions of Statement of Financial Accounting Standards ("SFAS") No. 133, " *Accounting for Derivative Instruments and Hedging Activities*" ("SFAS 133"). As permitted by SFAS No. 155, " *Accounting for Certain Hybrid Financial Instruments — an amendment of FASB Statements No. 133 and 140* ," we irrevocably elected to initially and subsequently measure the Debentures in their entirety at fair value with changes in fair value recorded as either a gain or loss in the consolidated statement of operations under the caption "Change in fair value of convertible debt instrument." Fair value of the Debentures is determined using a binomial financial valuation model that requires assumptions that are subject to significant management judgment such as volatility of our common share price, interest rates and our intention to redeem the Debentures in cash or common shares. Volatility and interest rate expectations are based on the remaining time to maturity of the Debentures.

Warrants. We have issued common stock warrants in connection with the execution of certain equity and debt financings and consulting agreements. Certain warrants are accounted for as derivative liabilities at fair value in accordance with SFAS 133. Such warrants do not meet the criteria in paragraph 11(a) of SFAS 133 that a contract should not be considered a derivative instrument if it is (1) indexed to its own stock and (2) classified in stockholders' equity. Changes in fair value of derivative liabilities are recorded in the consolidated statement of operations under the caption "Change in fair value of warrant liabilities." Warrants that are not considered derivative liabilities as defined in SFAS 133 are accounted for at fair value at the date of issuance in additional paid-in capital. The fair value of warrants is determined using the Black-Scholes option-pricing model using assumptions regarding volatility of our common share price, remaining life of the warrant, and risk-free interest rates at each period end.

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

Stock-Based Compensation. Through December 31, 2005, we accounted for stock-based compensation to employees and non-employee directors under the intrinsic value method in accordance with Accounting Principles Board ("APB") Opinion No. 25,
" *Accounting for Stock Issued to Employees*," ("APB No. 25") and the related interpretations. Under APB No. 25, no compensation expense is recognized for stock options granted to employees at fair market value and with fixed terms. On January 1, 2006, we adopted SFAS 123(R), " *Share Based Payment*," ("SFAS 123(R)") using the modified prospective method, which results in the provisions of SFAS 123(R) being applied to the consolidated financial statements on a going-forward basis. Prior periods have not been restated. SFAS 123(R) requires companies to recognize stock-based compensation awards granted to its employees as compensation expense on a fair value method. Under the fair value recognition provisions of SFAS 123(R), stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the service period, which generally represents the vesting period. The grant date fair

value of stock options is calculated using the Black-Scholes option-pricing model. The expense recognized over the service period is required to include an estimate of the awards that will be forfeited. Previously, we recorded the impact of forfeitures as they occurred. We do not anticipate any awards will be forfeited in our calculation of compensation expense due to the limited number of employees that receive stock option grants and our historical employee turnover.

We consider equity compensation to be an important component in attracting and retaining key employees. During the years ended December 31, 2008 and 2007, we awarded approximately 1,130,000 and 1,048,500 stock options, respectively, to employees, consultants and non-employee members of our board of directors for normal services and we recorded approximately $697,000, and $616,000 of related stock option expense during the years ended December 31, 2008 and 2007, respectively.

Results of Operations

Three Months Ended March 31, 2009 Compared to Three Months Ended March 31, 2008

Research and Development Expense. Research and development expenses were approximately $153,000 during the three months ended March 31, 2009, or a 64% decrease as compared to approximately $422,000 incurred during the three months ended March 31, 2008. We generally categorize research and development expenses as either direct external expense, comprised of amounts paid to third party vendors for services, or all other expenses, comprised of employee payroll and general overhead allocable to research and development. We subdivide external expenses between clinical programs and pre-clinical activities. We consider a clinical program to have begun upon acceptance by the FDA, or similar agency outside of the United States, to commence a clinical trial in humans, at which time we begin tracking expenditures by the product candidate. We have one product candidate – DAVANAT® – in clinical trials at this time. Clinical program expenses comprise payments to vendors related to preparation for, and conduct of, all phases of the clinical trial, including costs for drug manufacture, patient dosing and monitoring, data collection and management, oversight of the trials and reports of results. Pre-clinical expenses comprise all research and development amounts incurred before human trials begin, including payments to vendors for services related to product experiments and discovery, toxicology, pharmacology, metabolism and efficacy studies, as well as manufacturing process development for a drug candidate.

Our research and development expenses for the three months ended March 31, 2009, as compared to the three months ended March 31, 2008, were as follows:

	Three Months Ended March 31,	
	2009	2008
	(in thousands)	
Direct external expenses:		
Clinical programs	$ 5	$ 60
Pre-clinical activities	35	171
All other research and development expenses	113	191
	$ 153	$ 422

Clinical program and pre-clinical expenses for the three-month period ended March 31, 2009, decreased compared to the same period in 2008, due primarily to overall lower activity as a result of cost containment measures. We expect to initiate a Phase III trial as soon as we are able to raise additional funds which will serve to increase our research and development expense.

Both the time required and costs we may incur in order to commercialize a drug candidate that would result in material net cash inflow are subject to numerous variables, and therefore we are unable at this stage of our development to forecast useful estimates. Variables that make estimates difficult include the number of clinical trials we may undertake, the number of patients needed to participate in the clinical trial, patient recruitment uncertainties, trial results as to the safety and efficacy of our product, and uncertainties as to the regulatory agency response to our trial data prior to receipt of marketing approval. Moreover, the FDA or other regulatory agencies may suspend clinical trials if we or an agency believes patients in the trial are subject to unacceptable risks, or find deficiencies in the conduct of the clinical trial. Delays or rejections may also occur if governmental regulation or policy changes during our clinical trials or in the course of review of our clinical data. Due to these uncertainties, accurate and meaningful estimates of the ultimate cost to bring a product to market, the timing of costs and completion of our program and the period during which material net cash inflows will commence are unavailable at this time.

General and Administrative Expense. During the three-months ended March 31, 2009, general and administrative expenses increased approximately $591,000, or 60%, to approximately $1,581,000, as compared to approximately $990,000 incurred during the same period in 2008. General and administrative expenses consist primarily of salaries including stock based compensation, legal and accounting fees, insurance, investor relations, business development and other office related expenses. The primary reason for this increase was due to the recognition of severance obligations related to the departure of our former chief executive officer for which we recognized an additional expense of approximately $562,000, during the three months ended March 31, 2009. Additionally, stock-based compensation costs increased by $127,000 as 2009 employee stock options grants were awarded in the first quarter of 2009 while in 2008 they were awarded in the second quarter.

Other Income and Expense. Other income and expense for the three months ended March 31, 2009 was expense of $861,000 as compared to expense of $574,000 for the three months ended March 31, 2008. The increase is primarily due a change in value of the warrants as well as our adoption of EITF 07-5 on January 1, 2009 which required us to reclassify certain warrants as liabilities. During the three-months ended March 31, 2009 we recognized a total expense of $862,000 in our condensed consolidated statements of operations related to the change in fair value of warrant liabilities. The $862,000 expense was comprised of $581,000 related to warrants reclassified as liabilities due to the adoption of EITF 07-5 on January 1, 2009 and $281,000 related to warrants classified as liabilities prior to January 1, 2009. During the three-months ended March 31, 2008, we recognized expense of $587,000 related to the change in fair value of warrant liabilities.

Fiscal Year Ended December 31, 2008 Compared to Fiscal Year Ended December 31, 2007

Research and Development Expenses. Research and development expenses were approximately $1,774,000 during the year ended December 31, 2008 as compared to approximately $2,053,000 incurred during the year ended December 31, 2007. We generally categorize research and development expenses as either direct external expense, comprised of amounts paid to third party vendors for services, or all other expenses, comprised of employee payroll and general overhead allocable to research and development. We subdivide external expenses between clinical programs and preclinical activities. We consider a clinical program to have begun upon acceptance by the FDA, or similar agency outside of the United States, to commence a clinical trial in humans, at which time we begin tracking expenditures by the product candidate. We have one product candidate — DAVANAT ® — in clinical trials at this time. Clinical program expenses comprise payments to vendors related to preparation for, and conduct of, all phases of the clinical trial, including costs for drug manufacture, patient dosing and monitoring, data collection and management, oversight of the trials and reports of results. Pre-clinical expenses comprise all research and development amounts incurred

before human trials begin, including payments to vendors for services related to product experiments and discovery, toxicology, pharmacology, metabolism and efficacy studies, as well as manufacturing process development for a drug candidate.

Our research and development expenses for the year ended December 31, 2008, as compared to the year ended December 31, 2007 were as follows:

	Year Ended December 31, ($000)	
	2008	2007
Direct external expenses		
Clinical programs	$ 244	$ 809
Pre-clinical activities	681	357
All other research and development expenses	849	887
	$1,774	$2,053

Clinical trial costs decreased by approximately $565,000. The decrease is due principally to lower activity in the Phase II colorectal and biliary cancer trials as we focused on filing our DAVANAT ® DMF with the FDA, as well as filing an IND and preparations for our NDA filing. Pre-clinical expenses in 2008 increased by approximately $324,000 compared to 2007. Of this amount, a $402,000 increase was due to expense associated with filing our DMF. This increase was offset by approximately $78,000 in lower activity related to all other research activities. Other research and development costs decreased by approximately $38,000. Payroll expense decreased by approximately $152,000 due principally to salary reductions. Stock based compensation increased by approximately $127,000 and all other spending decreased by approximately $13,000.

Both the time required and costs we may incur in order to commercialize a drug candidate that would result in material net cash inflow are subject to numerous variables, and hence we are unable at this stage of our development to forecast useful estimates. Variables that make estimates difficult include the number of clinical trials we may undertake, the number of patients needed to participate in the clinical trial, patient recruitment

uncertainties, trial results as to the safety and efficacy of our product, and uncertainties as to the regulatory agency response to our trial data prior to receipt of marketing approval. Moreover, the FDA or other regulatory agencies may suspend clinical trials if we or an agency believe patients in the trial are subject to unacceptable risks, or find deficiencies in the conduct of the clinical trial. Delays or rejections may also occur if governmental regulation or policy changes during our clinical trials or in the course of review of our clinical data. Please see “Risks Related to Our Company” and “Risks Related to the Drug Development Industry” for additional risks and other factors that make estimates difficult at this time. Due to these uncertainties, accurate and meaningful estimates of the ultimate cost to bring a product to market, the timing of costs and completion of our program and the period during which material net cash inflows will commence are unavailable at this time.

General and Administrative Expenses. General and administrative expenses were approximately $3,552,000 in 2008, a decrease of approximately $850,000 compared to approximately $4,402,000 in 2007. General and administrative expenses consist primarily of salaries, including stock-based compensation, legal and accounting fees, insurance, investor relations, business development and other office related costs. Of the approximately $850,000 decrease in expense in 2008, approximately $666,000 was due to lower legal and accounting expenses, approximately $135,000 was due to lower payroll expenses as salaries were reduced in an effort to conserve cash. Additionally, non-cash stock based compensation decreased by approximately $46,000.

Other Income and Expense. Other income and expense was income of approximately $2,175,000 in 2008 as compared to expense of approximately $2,978,000 in 2007. Of the approximately $5,153,000 increase, approximately $4,875,000 was due to change in fair value accounting associated with our warrant liabilities and convertible debenture. Interest expense decreased by approximately $350,000 as our convertible debenture was paid in full at the end of 2007. Interest income decreased by approximately $72,000 due principally to lower cash balances.

Liquidity and Capital Resources

As described elsewhere in this prospectus, we are in the development stage and have not generated any revenues. Since our inception on July 10, 2000, we have financed our operations from proceeds of public and private offerings of debt and equity. As of March 31, 2009, we raised a net total of $40.9 million from these offerings. At December 31, 2008, we had approximately $318,000 unrestricted cash on hand, and at March 31, 2009, we had approximately $861,000 of unrestricted cash and cash equivalents available to fund future operations. On May 13, 2009, we completed a closing for gross proceeds of $900,000 (net proceeds of approximately $801,000) on our offering of Series B-2.

Net cash used in operations decreased by approximately $818,000 to approximately $4.7 million in 2008, as compared to $5.5 million in 2007. Cash operating expenses decreased by approximately $905,000 for the year ended December 31, 2008, and were offset by an increase in working capital needs of approximately $307,000 and a decrease in interest income of approximately $72,000. Cash interest expense decreased by approximately $15,000.

Net cash used in operations decreased by $742,000 to $757,000 for the three months ended March 31, 2009, as compared to $1,499,000 for the three months ended March 31, 2008. Cash operating expenses decreased principally due to decreased research and development activities and cost containment measures during the period which required overall lower cash expenditures.

Net cash provided by investing activities was approximately $9,000 in 2008, as compared to approximately $4.9 million in 2007. The decrease is due principally to the maturity of a $5.0 million certificate of deposit in 2007. Approximately $2,000 was used for purchase of plant and equipment in 2008, and approximately $5,000 in 2007. No amount was used for patent costs in 2008 as compared to a use of approximately $37,000 in 2007. Restricted cash decreased by approximately $11,000 in 2008 and was an increase of approximately $11,000 during the same period in 2007.

No cash was provided by or used in investing activities during the three-months ended March 31, 2009, essentially unchanged from the same period in 2008.

Cash provided by financing activities was approximately $3.7 million in 2008 principally due to the sale of common stock and warrants in a transaction on February 25, 2008 as more fully described below, as compared to approximately $1.1 million in 2007. In 2007, we raised approximately $1.6 million from investors who subscribed to the sale of Series A Convertible Preferred Stock and Warrants on February 4, 2008. This amount was offset by approximately $0.5 million of payments related to our convertible debt instrument.

Cash provided by financing activities was $1,300,000 during the three-months ended March 31, 2009 as compared to $3,434,000 during the three-months ended March 31, 2008, due primarily to the transactions described below.

On February 12, 2009, the initial closing date under the purchase agreement, the Company issued and sold: (i) 900,000 shares of Series B-1 convertible preferred stock (“Series B-1 Redeemable Convertible Preferred Stock” or “Series B-1”) convertible into 3,600,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 1,800,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 1,800,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 7,200,000 shares of common stock. Net proceeds from the closing of the initial tranche were approximately $1.5 million. Concurrent with the closing of the Series B-1 transaction, we repaid an investor $200,000 of advances received in 2008.

On February 25, 2008, we closed an offering resulting in net proceeds of $3,381,000 from the sale of an aggregate of 7,500,000 shares of common stock at $0.50 per share, (ii) warrants , with a term of five years, to purchase an aggregate of 7,500,000 shares of common stock at an exercise price of $0.70 per share, and (iii) warrants, with a term of four months, to purchase an aggregate of 3,000,000 shares of common stock at an exercise price of $0.67 per share.

We believe that our unrestricted cash and cash equivalents on hand at March 31, 2009, of $861,000, combined with $900,000 gross (approximately $801,000, net) proceeds from a closing of our offering of Series B-2 on May 13, 2009, will be sufficient to enable us to meet our operating requirements into October 2009. We will require more cash to fund our operations and believe we will be able to obtain additional financing. However, there can be no assurance that we will be successful in obtaining such new financing or, if available, that such financing will be on terms favorable to us. We have taken steps to reduce our administrative and clinical spending, however, we must raise additional cash by October 2009, which may include one or more subsequent closings under the Series B Preferred Stock purchase agreement entered into on February 12, 2009, or we may not be able to continue operations and may be forced to seek bankruptcy protection.

Payments Due Under Contractual Obligations

The following table summarizes the payments due under our contractual obligations at March 31, 2009, and the effect such obligations are expected to have on liquidity and cash flow in future periods:

	Payments due by period (in thousands)				
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating leases	$ 628	$ 259	$ 369	$ —	$ —
Separation agreement	562	154	408	—	—
Total payments due under contractual obligations	$1,190	$ 413	$ 777	$ —	$ —

Operating leases. On May 1, 2006 we entered into an operating lease for office space. The lease commenced on August 11, 2006, and extends for five years and terminates on September 30, 2011. The lease provides for annual base rental payments of $235,000 in the first year, increasing in each subsequent lease year to $244,000, $253,000, $263,000 and $273,000, respectively. In addition to base rental payments included in the contractual obligations table above, we are responsible for our pro-rata share of increases in the operating expenses for the building after calendar year 2006 and taxes for the building after fiscal year 2007. We have the option to extend the term of the lease for an additional five year period at the prevailing market rate at the time of exercise. In connection with this lease, a commercial bank has issued a letter of credit collateralized by cash we have on deposit with the bank of approximately $59,000. Additionally, we have a non-cancellable lease for a car, for our former chief executive officer, which expires in January 2011 and which is included in the severance agreement line of the contractual obligations table.

Separation agreement. In February 2009, in connection with the resignation of David Platt, Ph.D., our former Chief Executive Officer and Chairman of the Board of Directors, we entered into a Separation Agreement. The Separation Agreement provides that we shall continue to pay Dr. Platt his current salary at a monthly rate of $21,667 for 24 months and that we may defer payment of a portion of such salary amounts greater than $10,000 per month (so long as Dr. Platt does not receive payments of less than the salary payments being made to the Company's Chief Executive Officer). However, all deferred amounts will continue to accrue and will be payable on the earlier of (i) the Company receiving a minimum of $4.0 million of funding after February 12, 2009, or (ii) February 12, 2011. We also agreed to continue to (i) provide health and dental insurance benefits to Dr. Platt, until the first to occur of February 12, 2011 or the date Dr. Platt and his family become eligible to receive health and dental insurance benefits under the plans of a subsequent employer and (ii) make the current monthly lease payments on his automobile until February 12, 2011. We recognized the full amount of the salary, health insurance and automobile during the three months ended March 31, 2009. The remaining liability related to this severance is reflected in accrued expenses ($154,000) and in Other long-term liabilities ($408,000) on our Consolidated Balance Sheet at March 31, 2009.

The Separation Agreement provides for the deferral of a $1.0 million severance payment due to Dr. Platt under his employment agreement until the occurrence of any of the following milestone events: (i) the approval by the Food and Drug Administration for a new drug application ("NDA") for any drug candidate or drug delivery candidate based on the DAVANAT® technology (whether or not such technology is patented); (ii) consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50 million of royalty revenue to the Company; or

(iii) the renewed listing of our securities on a national securities exchange. Payment upon the events (i) and (iii) may be deferred up to six months, and if we have insufficient cash at the time of any of such events, we may issue Dr. Platt a secured promissory note for such amount. If we file a voluntary or involuntary petition for bankruptcy, whether or not a milestone event has occurred, such event shall trigger our obligation to pay the $1.0 million with the result that Dr. Platt may assert a claim for such obligation against the bankruptcy estate. Due to the uncertainties regarding the achievement of any of the milestones as described, we have not accrued for the $1.0 million severance as of March 31, 2009. When it is deemed probable that one of the milestone events will be achieved, we will then recognize the $1.0 million severance at that time.

The Separation Agreement also provides that upon (i) the consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50.0 million of royalty revenue, we will grant Dr. Platt fully vested cashless-exercise stock options exercisable to purchase at least 300,000 shares of our common stock for ten (10) years at an exercise price not less than the fair market value of the Common Stock determined as of the date of the grant and (ii) approval by the FDA of the first NDA for any of our drug or drug delivery candidates based on DAVANAT® technology (whether or not such technology is patented), we will grant Dr. Platt fully vested cashless stock option with identical terms to purchase at least 500,000 shares of common stock. Due to the uncertainties regarding the achievement of any of the milestones as described, we have not recognized the value of the unissued stock options as of March 31, 2009. When it is deemed probable that one of the milestone events will be achieved, we will then recognize the expense related to the issuance of the stock options at that time based on the then current fair value.

Other. We have engaged outside vendors for certain services associated with our clinical trials. These services are generally available from several providers and, accordingly, our arrangements are typically cancellable on 30 days notice.

Off-Balance Sheet Arrangements

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

Application of Critical Accounting Policies and Estimates

The preparation of consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to intangible assets, income taxes, accrued expenses, stock-based compensation, convertible debt instrument and warrant liabilities, contingencies and litigation. We base our estimates on historical experience, terms of existing contracts, our observance of trends in the industry, information available from other outside sources and on various other factors that we believe to be appropriate under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies are those policies that affect our more significant judgments and estimates used in preparation of our consolidated financial statements. We believe our critical accounting policies include our policies regarding stock-based compensation, accrued expenses, income taxes and convertible debt instrument and warrant liabilities. For a more detailed discussion of our critical accounting policies, please refer to our 2008 Annual Report on Form 10-K.

Recent Accounting Pronouncements

The Financial Accounting Standards Board (FASB) Statement No. 157, Fair Value Measurements ("SFAS 157") defines fair value, establishes a framework for measuring fair value in U.S. generally accepted accounting principles, and expands disclosures about fair value measurements. This Statement emphasizes that fair value is a market-based measurement, not an entity-specific measurement. In February 2008, the FASB issued FASB Staff Position ("FSP") No. 157-2, Effective Date of FASB Statement No. 157 ("FSP FAS 157-2"). FSP FAS 157-2 amends SFAS 157 to delay the effective date for nonfinancial assets and liabilities, except for those that are recognized or disclosed at fair value on a recurring basis. The deferred effective date for such nonfinancial assets and liabilities is for fiscal years beginning after November 15, 2008. We adopted the provisions of FSP FAS 157-2 at the beginning of 2009 and the adoption of this statement did not have a material effect on our financial condition or results of operations.

In April 2009, FSP FAS 157-4, *Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly,* ("FSP FAS 157-4") was issued. FSP FAS 157-4 provides guidelines for estimating fair value when the volume and level of activity has significantly decreased. FSP FAS 157-4 provides additional authoritative guidance in determining whether a market is active or inactive and whether a transaction is distressed. It is applicable to all assets and liabilities (i.e. financial and nonfinancial) and will require enhanced disclosures. This standard is effective for periods ending after June 15, 2009. We are currently evaluating the impact, if any, that this standard will have on our financial statements.

In April 2009, FSP FAS 115-2 and FAS 124-2, *Recognition and Presentation of Other-Than-Temporary Impairments*, was issued. This standard provides additional guidance to provide greater clarity about the credit and noncredit component of an other than temporary impairment event and modifies the presentation and disclosures when an other than temporary impairment event has occurred. This FSP applies to debt securities. This standard is effective for periods ending after June 15, 2009. We are currently evaluating the impact, if any, that this standard will have on our financial statements.

In April 2009, FSP FAS 107-1 and APB 28-1, *Interim Disclosures about Fair Value of Financial Instruments,* ("FSP FAS 107-1") and APB 28-1, was issued. FSP FAS 107-1 and APB 28-1, amends FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments,* to require disclosures about fair value of financial instruments in interim as well as in annual financial statements. This FSP also amends APB Opinion No. 28, *Interim Financial Reporting,* to require those disclosures in all interim financial statements. This standard is effective for periods ending after June 15, 2009. We are currently evaluating the impact that this standard will have on our financial statements.

In December 2007, the FASB issued SFAS No. 160, *Non-controlling Interests in Consolidated Financial Statements—an amendment of ARB No. 51* (SFAS 160). This statement is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008, with earlier adoption prohibited. This statement requires the recognition of a non-controlling interest (minority interest) as equity in the consolidated financial statements and separate from the parent's equity. The amount of net income attributable to the non-controlling interest will be included in consolidated net income on the face of the income statement. It also amends certain of ARB No. 51's consolidation procedures for consistency with the requirements of SFAS 141(R). This statement also includes expanded disclosure requirements regarding the interests of the parent and its non-controlling interest. The adoption of this statement did not have a material effect on our financial condition or results of operations.

In December 2007, the FASB issued SFAS No. 141R, *Business Combinations,* ("SFAS 141R") which changes how business acquisitions are accounted for. SFAS No. 141R requires the acquiring entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction and establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed in a business combination. Certain provisions of this standard will, among other things, impact the determination of acquisition-date fair value of consideration paid in a business combination (including contingent consideration); exclude transaction costs from acquisition accounting; and change accounting practices for acquired contingencies, acquisition-related restructuring costs, in-process research and development, indemnification assets and tax benefits. The adoption of this statement did not have a material effect on our financial condition or results of operations.

DIRECTORS AND EXECUTIVE OFFICERS

Board of Directors:

Name	Age	Position
Theodore D. Zucconi, Ph.D.	62	Chief Executive Officer, President and Director
Gilbert F. Amelio, Ph.D.	66	Director
James C. Czirr	55	Director
Rod D. Martin	39	Director
S. Colin Neill	62	Director
Steven Prelack	51	Director
Jerald K. Rome	74	Director
Peter G. Traber, M.D.	53	Director

Mildred S. Christian, Ph.D., was a member of the Board of Directors until her death on March 26, 2009. Our Board of Directors and management are grateful for her diligent service as a member of the Board and the Compensation Committee since 2002 and offer our condolences to her family, friends and colleagues.

Dr. Zucconi, a director since 2007, was named our Chief Executive Officer and President on February 12, 2009, and served as its President from October 2007 to December 31, 2008. From 2002 to 2007, Dr. Zucconi was President of Implementation Edge, a management consulting firm that specializes in organizational performance improvement. From 1994 until 2002, Dr. Zucconi served in various capacities at Motorola, including Director of Motorola University. Prior to Motorola, Dr. Zucconi held technical, operational, and senior management positions at various high technology companies, including IBM and Nortel Networks. Dr. Zucconi received a B.S. degree in Chemistry from Villanova University, an M.S. degree in Chemistry from the University of Connecticut and a Ph.D. in analytical chemistry from State University of New York in 1977. Dr. Zucconi also received a Master's Certificate in international management from Thunderbird University and a certified project manager from Stanford University.

Dr. Amelio was appointed a director on February 12, 2009. Dr. Amelio, who began his career at Bell Labs, is Senior Partner of Sienna Ventures, a privately-held venture capital firm, and has acted in this capacity since 2001. Dr. Amelio was Chairman and Chief Executive Officer of Jazz Technologies, Inc., a specialty wafer foundry, from 2005 until his retirement in 2008, when he was named Chairman Emeritus. Dr. Amelio was Chairman and Chief Executive Officer of Beneventure Capital, LLC, a venture capital firm from 1999 to 2005 and was Principal of Aircraft Ventures, LLC, a consulting firm from 1997 to 2004. Dr. Amelio was elected a Director of AT&T (NYSE: T) in 2001 and had previously served as an Advisory Director of AT&T from 1997 to 2001. He served as a Director of Pacific Telesis Group from 1995 until the company was acquired by AT&T in 1997. Dr. Amelio was chief executive officer of Apple, Inc., and from 1991 to 1993, he was chief executive officer of National Semiconductor Corporation. He was a director of Chiron, now a part of Novartis.

Mr. Czirr, a Series B director, was appointed a director and became Chairman of the Board of Directors on February 12, 2009. Mr. Czirr is a co-founder 10X Fund, L.P. and is a managing member of 10X Capital Management LLC, the general partner 10X Fund, L.P. Mr. Czirr was a co-founder of Pro-Pharmaceuticals in July 2000. Mr. Czirr was instrumental in the early stage development of Safe Science Inc., a developer of anti-cancer drugs, served from 2005 to 2008 as Chief Executive Officer of Minerva Biotechnologies Corporation, a developer of nano particle bio chips to determine the cause of solid tumors, and was a consultant to Metalline Mining Company Inc. (NYSE Alternext US: MMG), a mineral exploration company seeking to become a low cost producer of zinc. Mr. Czirr received a B.A. degree from the University of Michigan.

Mr. Martin, a Series B director, was appointed a director and became a member of the Nominating and Corporate Governance Committee and member of the Compensation Committee on February 12, 2009. Mr. Martin is a co-founder 10X Fund, L.P. and is a managing member of 10X Capital Management LLC, the general partner 10X Fund, L.P. Mr. Martin served as a senior advisor to PayPal, Inc. founder Peter Thiel, during the period in which the company conducted its initial public offering and subsequently acquired by eBay Inc., and afterward, served at Clarium Capital, a global macro hedge fund which has more than $5 billion under management. Mr. Martin also served as Director of Policy Planning & Research for former Arkansas Governor and presidential candidate Mike Huckabee. He is a widely noted author and speaker, and leads several non-profit organizations. Mr. Martin holds a J.D. from Baylor Law School and B.A. from the University of Arkansas.

Dr. Traber was appointed a director on February 12, 2009. Dr. Traber is President Emeritus, and from 2003 to 2008 was Chief Executive Officer, of Baylor College of Medicine. From 2000 to 2003 he was Senior Vice President Clinical Development and Regulatory Affairs and Chief Medical Officer of GlaxoSmithKline plc. He has also served as Chief Executive Officer of the University of Pennsylvania Health System, as well as Chair of the Department of Internal Medicine and Chief of Gastroenterology for the University of Pennsylvania School of Medicine. Dr. Traber received his M.D. from Wayne State School of Medicine and a B.S. in chemical engineering form the University of Michigan.

Mr. Neill, a director since May 2007, became President of Pharmos Corp. (Nasdaq: PARS) in 2008, and since 2006, was its Senior Vice President, Chief Financial Officer, Secretary, and Treasurer. From 2003 to 2006, Mr. Neill served as Chief Financial Officer, Treasurer and Secretary of Axonyx Inc., a biopharmaceutical company that develops products and technologies to treat Alzheimer's disease and other central nervous system disorders. Mr. Neill served as Senior Vice President, Chief Financial Officer, Secretary and Treasurer of ClinTrials Research Inc., a global contract research organization in the drug development business, from 1998 to 2001. From 2001 to 2003, Mr. Neill served as an independent consultant assisting start-up and development stage companies in raising capital. Earlier experience was gained as Vice President Finance and Chief Financial Officer of BTR Inc., a U.S. subsidiary of BTR plc, a British diversified manufacturing company, and Vice President Financial Services of The BOC Group Inc., a British owned industrial gas company with substantial operations in the health care field. Mr. Neill served four years with American Express Travel Related Services, first as chief internal auditor for worldwide operations and then as head of business planning and financial analysis. Mr. Neill began his career in public accounting with Arthur Andersen LLP in Ireland and later with Price Waterhouse LLP as a senior manager in New York City. He also served with Price Waterhouse for two years in Paris, France. Mr. Neill graduated from Trinity College, Dublin with a first class honors degree in business/economics and he holds a masters degree in Accounting and Finance from the London School of Economics. He is a Certified Public Accountant in New York State and a Chartered Accountant in Ireland.

Mr. Prelack, a director since April 2003, has served as Senior Vice President, Chief Financial Officer and Treasurer of VelQuest Corporation since 2001, a provider of automated compliance management solutions for the pharmaceutical industry. In this capacity, Mr. Prelack oversees business development, financial, administrative and other functions and is responsible for VelQuest's transition from a development-stage company to an operating company. Mr. Prelack is a director of Codeco Corporation, a designer and manufacturer of custom resisters and switches, and of Sight Code, Inc., which specializes in OPM, a systems design and architecture platform. Mr. Prelack, a Certified Public Accountant, received a B.B.A. degree from the University of Massachusetts at Amherst in 1979.

Mr. Rome, a director of ours since March 2004, has been a private investor since 1996. Mr. Rome founded Amberline Pharmaceutical Care Corp., a marketer of non-prescription pharmaceuticals, in 1993 and served as its President from 1993 to 1996. From 1980 to 1990, he served as Chairman, President and Chief Executive Officer of Moore Medical Corp., a national distributor of branded pharmaceuticals and manufacturer and distributor of generic pharmaceuticals and was previously Executive Vice President of the H.L. Moore Drug Exchange, a division of Parkway Distributors and predecessor of Moore Medical Corp. Mr. Rome received a B.S. degree in pharmaceutical sciences from the University of Connecticut.

Executive officers and key employees:

Theodore Zucconi, Ph.D., President (see Board of Directors)

Anatole Klyosov, Ph.D., D.Sc., is Chief Scientist, a co-inventor of our patented technology, and a founder of Pro-Pharmaceuticals. Dr. Klyosov was vice president, research and development for Kadant Composites, Inc., a subsidiary of Kadant, Inc. (KAI-NYSE), where he directed, since 1996, a laboratory performing work in biochemistry, microbiology and polymer engineering. From 1990 to 1998, Dr. Klyosov was visiting professor of biochemistry, Center for Biochemical and Biophysical Sciences, Harvard Medical School, and from 1981 to 1990 he was professor and head of the Carbohydrates Research Laboratory at the A.N. Bach Institute of Biochemistry, USSR Academy of Sciences. Dr. Klyosov was elected as a member of the World Academy of Art and Sciences and is the recipient of distinguished awards including the USSR National Award in Science and Technology. He has published more than 230 peer-reviewed articles in scientific journals, authored books on enzymes, carbohydrates, and biotechnology, and holds more than 20 patents. Dr. Klyosov earned his Ph.D. and D.Sc. degrees in physical chemistry, and an M.S. degree in enzyme kinetics, from Moscow State University.

Eliezer Zomer, Ph.D., is Executive Vice President of Manufacturing and Product Development. Prior to joining our company, Dr. Zomer had been the founder of Alicon Biological Control, where he served from November 2000 to July 2002. From December 1998 to July 2000, Dr. Zomer served as Vice President of product development at SafeScience, Inc. 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 a post-doctoral study at the National Institute of Health.

Anthony D. Squeglia became our Chief Financial Officer in October 2007 and from 2003 served as our Vice President of Investor Relations. From 2001 to 2003, Mr. Squeglia was a Partner in JFS Advisors, a management consulting firm that delivered strategic services to entrepreneurial businesses that includes raising funds, business planning, positioning, branding, marketing and sales channel development. From 1996 to 2001, Mr. Squeglia was Director of Investor Relations and Corporate Communications for Quentra/Coyote Networks. Previously, Mr. Squeglia held management positions with Summa Four, Unisys, AT&T, Timeplex, Colonial Penn and ITT. Mr. Squeglia received an M.B.A. from Pepperdine University and a B.B.A. from The Wharton School, University of Pennsylvania.

Maureen Foley has been our Chief Operating Officer since October 2001 and was formerly our Manager of Operations and acting Chief Financial Officer. She has provided 30 years of business and operations management experience including facility design, construction, and fit out, project management, IT, HR, press and public relations, accounting and finance to startup companies. Between 1999 and 2000 she managed business operations for eHealthDirect, Inc., a developer of medical records processing software; and ArsDigita, Inc., a web development company. From 1996 to 1999, she served as Manager of Operations with Thermo Fibergen, Inc., a developer of composite materials and a subsidiary of Thermo Electron Corporation. Ms. Foley is a graduate of The Wyndham School, Boston, Massachusetts, with a major in Mechanical Engineering. Ms. Foley serves as Secretary to the Board.

None of the directors, executive officers and key employees shares any familial relationship.

Independence of Directors

Our Board of Directors has determined that all of the current directors are, and all of the former directors who served during our last fiscal year were, “independent” within the meaning of the rules of the NYSE Alternext US, other than Dr. Zucconi, who does not serve on a standing committee, and David Platt, Ph.D., formerly our Chief Executive Officer and a director.

COMPENSATION OF NAMED EXECUTIVE OFFICERS

The following information summarizes the compensation paid to our Named Executive Officers for the fiscal years ended December 31, 2008 and 2007.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($) [1]	All Other Compensation ($)	Total ($)
David Platt, Ph.D.,	2008	141,000	—	156,787	40,244(3)	338,031
Chief Executive Officer(2)	2007	195,000	—	86,250	49,850(4)	331,100
Theodore Zucconi, Ph.D.,	2008	137,169	—	48,215	39,502(6)	
President(5)	2007	55,410	—	—	16,284(7)	224,886
Eliezer Zomer, Ph.D.,	2008	124,333	—	109,882	29,271(8)	71,689
Executive Vice President of Manufacturing and Product Development	2007	165,000	—	85,651	26,870(9)	277,521

(1) Reference is made to Note 9, “Stock Based Compensation,” to the Consolidated Financial Statements filed in our Form 10-K for the year ended December 31, 2008 filed with the SEC on March 30, 2009, which identifies assumptions made in the valuation of option awards in accordance with SFAS No. 123(R). The amounts listed in this column represent the amount of stock based compensation recognized for financial statement reporting purposes for the year ended December 31, 2008, in accordance with SFAS No. 123(R) and thus may include amounts from awards granted in or prior to 2008 in our operating expenses for the named executive officers for the year ended December 31, 2008.

(2) Resigned effective February 12, 2009.

(3) Includes $27,403 for health insurance expenses, $7,201 for automobile expenses, and $5,640 for retirement plan contributions.

(4) Includes $22,220 for health insurance expenses, $17,795 for automobile expenses, $7,800 for retirement plan contributions and $2,035 for health club expenses.

(5) Appointed Chief Executive Officer effective February 12, 2009.

(6) Includes $34,744 for local housing and travel to permanent residence and $4,758 for automobile expenses.

(7) Includes $15,223 for local housing and travel to permanent residence and $1,061 for automobile expenses.

(8) Includes $24,568 for health insurance expenses and $4,703 for retirement plan contributions.

(9) Includes $19,937 for health insurance expenses, $6,533 for retirement plan contributions, and $400 for health club expenses.

NARRATIVE DISCLOSURE TO SUMMARY COMPENSATION TABLE

In order to conserve cash, the Named Executive Officers and certain other key employees voluntarily reduced their cash salaries in 2008 and 2007.

Material Terms of Employment Contracts of Named Executive Officers

Theodore D. Zucconi, PhD., Chief Executive Officer and President

We entered into an employment agreement with Dr. Zucconi on December 19, 2007, which we refer to as the Zucconi Employment Agreement, which amended and restated his prior employment agreement effective October 1, 2007. Although the Zucconi Employment Agreement expired on October 1, 2008, we continued to compensate him on the same terms until December 31, 2008, when his employment terminated in connection with our cash conservation efforts. In connection with the purchase of our Series B preferred stock, Dr. Zucconi was appointed as our Chief Executive Officer and President effective February 12, 2009. As of April 3, 2009, we have not entered into a written employment with Dr. Zucconi.

Under the now-expired Zucconi Employment Agreement, Dr. Zucconi is required to assign inventions and other intellectual property to us which he conceives or reduces to practice during employment and for one year after the end of his employment. Dr. Zucconi has also agreed to refrain from soliciting, diverting or accepting business relating to our products, processes or services from any customers that he has come into contact with as a result of his employment with us for a period of 12 months after termination of his employment. In addition, Dr. Zucconi has agreed to refrain from rendering any services as an employee, consultant or otherwise to any competing organization or from owning any interest in any competing organization for a period of six months after termination of his employment. Dr. Zucconi is also subject to a non-solicitation provision for 12 months after termination of his employment.

The Zucconi Employment Agreement provided a monthly salary of $9,167 in 2007 and an annual salary of $220,000 in 2008, payment of 50% of which was deferred until October 1, 2008. Under the Zucconi Employment Agreement, Dr. Zucconi was paid a cash bonus of $27,500 before June 1, 2008, and was entitled to health insurance, participation in our 401(k) plan and other employee benefits, as well as $54,000 for relocation costs and airfare reimbursement (usable by him or his spouse) for up to 14 round trips to his home in Phoenix, Arizona. The Zucconi Employment Agreement also provided for a “sign-on” bonus of 200,000 stock options, which were granted in December 2007, and 10,000 incentive stock options for each $1.0 million of financing received by us from investors identified by him. All of these stock options were fully vested on the applicable grant date, had an exercise price equal to the fair market value of our common stock on the grant date, and are exercisable for five years, whether or not Dr. Zucconi is then employed by us.

David Platt, PhD., former Chief Executive Officer and President

On January 2, 2004, we entered into an employment with David Platt, Ph.D., then our President and Chief Executive Officer, which we refer to as the Platt Employment Agreement. The Platt Employment Agreement terminated as of Dr. Platt’s voluntary resignation from these offices on February 12, 2009, on which date we entered into a separation agreement with Dr. Platt, which we refer to as the Separation Agreement. The Separation Agreement addressed certain matters in the Platt Employment Agreement including events that would trigger bonus compensation as well as severance compensation. No “triggers” for bonus compensation occurred in 2008 under the Platt Employment Agreement, and, accordingly, we did not pay a bonus to Dr. Platt in 2008.

Dr. Platt will continue to provide consulting services to us. The Separation Agreement requires that we pay Dr. Platt his current salary at the monthly rate of $21,667 for 24 months. We may defer payment of a portion of such salary amounts above $10,000 per month (so long as Dr. Platt does not receive payments of less than the

salary payments being made to our Chief Executive Officer). However, all deferred amounts will continue to accrue and will be payable upon the earlier to occur of (i) our receipt of a minimum of $4.0 million of funding after February 12, 2009, or (ii) February 12, 2011. We also agreed to continue to (i) provide health and dental insurance benefits to Dr. Platt, until the first to occur of February 12, 2011 or the date Dr. Platt and his family become eligible to receive health and dental insurance benefits under the plans of a subsequent employer and (ii) make the current monthly lease payments on his automobile until February 12, 2011.

The Separation Agreement provides that the $1 million severance compensation formerly payable under the Platt Employment Agreement may be deferred until the occurrence of any of the following events, referred to as a Milestone Event: (i) approval by the Food and Drug Administration of a new drug application, or NDA, for any drug candidate or drug delivery candidate based on our DAVANAT ® technology (whether or not such technology is patented); (ii) consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50.0 million of royalty revenue to us; or (iii) the renewed listing of our securities on a national securities exchange and the achievement of a market capitalization of $100.0 million. Payment upon the events referred to in clause (i) and (iii) may be deferred up to six months, and if we have insufficient cash at the time of any of such events, we may issue Dr. Platt a secured promissory note for such amount. If we file a voluntary or involuntary petition for bankruptcy, whether or not a Milestone Event has occurred, such event shall trigger our obligation to pay the $1.0 million with the result that Dr. Platt may assert a claim for such obligation against the bankruptcy estate.

The Separation Agreement also provides that we will grant Dr. Platt fully vested cashless-exercise stock options exercisable to purchase shares of our common stock for ten years at an exercise price not less than the fair market value of our common stock on the date of the grant, as follows: (i) at least 300,000 options upon consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50.0 million of royalty revenue to us, and (ii) at least 500,000 options upon approval by the FDA of the first NDA for any of our drug or drug delivery candidates based on our DAVANAT ® technology (whether or not such technology is patented).

The Separation Agreement provides that the confidentiality provisions in the Platt Employment Agreement remain in effect and contains non-competition covenants that continue for 24 months after its effective date.

Eliezer Zomer, Ph.D., Executive Vice President of Manufacturing and Product Development

We do not have an employment agreement with Dr. Zomer.

OUTSTANDING EQUITY AWARDS AT YEAR END

The following information summarizes outstanding equity awards held by the Named Executive Officers as of December 31, 2008.

		Stock Option Awards			
Name	Option Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying (#) Unexercised Options Un-exercisable	Option Exercise Price Per Share ($)	Option Expiration Date
David Platt, Ph.D.	03/09/2006	50,000	25,000	3.75	03/09/2011
	03/08/2007	50,000	100,000	1.01	03/08/2012
	4/10/2008	50,000	—	0.44	04/10/2013
	4/10/2008	100,000	—	0.44	04/10/2013
Theodore Zucconi, Ph.D.	12/10/07	200,000	—	0.70	12/10/2012
	04/10/2008	150,000	—	0.44	04/10/2013
Eliezer Zomer, Ph.D.	12/04/2002	120,000	—	3.50	11/14/2012
	09/18/2003	425,000	—	4.05	09/02/2013
	12/21/2004	75,000	—	1.90	12/21/2014
	03/09/2006	33,333	16,667	3.75	03/09/2011
	03/08/2007	33,334	66,666	1.01	03/08/2012
	4/10/2008	50,000	—	0.44	04/10/2013
	4/10/2008	100,000	—	0.44	04/10/2013

Options vest annually, in equal increments, over three years beginning the first anniversary of the grant date, provided the grantee is then an employee. The exercise price of the options is set at the closing price of our stock on the date of grant. Grants of options are recommended by the Compensation Committee and adopted by the Board of Directors. No options were exercised in 2008.

DIRECTOR COMPENSATION

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)	Option Awards ($) [1]	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Non-qualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Mildred S. Christian, Ph.D.	—	—	(2,292)	—	—	—	(2,292)
Dale H. Conaway, D.V.M[2]			(1,644)				(1,644)
Henry J. Esber, Ph.D.[2]			(1,149)				(1,149)
James T. Gourzis, M.D., Ph.D.[2]			(850)				(850)
S. Colin Neill			(555)				(555)
Steven Prelack	68,000	—	(1,131)	—	—	—	66,869
Jerald K. Rome	—	—	(1,934)	—	—	—	(1,934)

(1) Reflects the dollar amount recognized for financial statement reporting purposes for the fiscal year ended December 31, 2008, that were expensed accordance with SFAS No. 123(R) for awards granted in 2008 and stock options earned and expensed in 2008. This expense includes a mark to market credit for options earned in 2007 and granted in 2008. Reference is made to Note 9 “Stock Based Compensation” in our Form 10-K for the year ended December 31, 2008 filed with the SEC on March 30, 2009, which states the assumptions made in the calculation of these amounts.

(2) Resigned on February 12, 2009.

NARRATIVE TO DIRECTOR COMPENSATION TABLE

As provided for in our 2003 Non-employee Directors Stock Incentive Plan, each non-employee director receives a grant of 500 non-qualified stock options for each meeting of our Board, and each meeting of a standing committee of the Board, that such director attended during a year of service. We paid Mr. Prelack $68,000 for service as Chair of the Audit Committee.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of December 31, 2008 with respect to compensation plans, including individual compensation arrangements, under which our common stock is authorized for issuance.

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))
Equity compensation plans approved by security holders	4,342,250	$ 2.24	1,607,750
Equity compensation plans not approved by security holders	403,250	$ 2.97	—
Total	4,745,500	$ 2.30	1,607,750

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of June 10, 2009, certain information concerning the beneficial ownership of our common stock, our Series A preferred stock and our Series B preferred stock by (i) each person known by us to own beneficially five per cent (5%) or more of the outstanding shares of each class, (ii) each of our directors and named executive officers, and (iii) all of our executive officers and directors as a group. The table also sets forth, in its final column, the combined voting power of the voting securities on all matters presented to the stockholders for their approval at the Annual Meeting, except for such separate class votes as are required by law.

The number of shares beneficially owned by each 5% stockholder, director or executive officer is determined under the rules of the Securities and Exchange Commission, or SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under those rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and also any shares that the individual or entity has the right to acquire within 60 days after June 10, 2009 through the exercise of any stock option, warrant or other right, or the conversion of any security. Unless otherwise indicated, each person or entity has sole voting and investment power (or shares such power with his or her spouse) with respect to the shares set forth in the following table. The inclusion in the table below of any shares deemed beneficially owned does not constitute an admission of beneficial ownership of those shares.

Name and Address[1]	Shares of Common Stock Beneficially Owned [2]	Percent of Common Stock [3]	Shares of Series A Preferred Stock Beneficially Owned	Percent of Series A Preferred Stock [4]	Shares of Series B Preferred Stock Beneficially Owned [5]	Percent of Series B Preferred Stock	Combined Percent of Voting Securities [6]
5% Stockholders							
David Platt, Ph.D. 12 Appleton Circle Newton, MA 02455	4,028,014[7]	6.9%	100,000	5.7%	—	—	5.7%
James C. Czirr	53,141,468[8]	53.9%	—	—	3,000,000	100%	15.4%[9]
10X Fund, L.P., c/o 10X Capital Management, LLC 1099 Forest Lake Terrace Niceville, FL 32578	48,000,000[10]	48.8%	—	—	3,000,000	100%	6.5%
Rod D. Martin, J.D.	48,518,926[11]	49.3%			3,000,000	100%	7.4%[9]
James C. Czirr Trust, c/o James C. Czirr 425 Janish Drive, Sandpoint, ID 83864	16,700	*	100,000	5.7%	—	—	*
David Smith 34 Shorehaven Road E. Norwalk, CT 06855	—	—	175,000	10.0%	—	—	*
Fivex LLC c/o David Smith 34 Shorehaven Road E. Norwalk, CT 06855	—	—	100,000[12]	5.7%	—	—	*

Name and Address[1]	Shares of Common Stock Beneficially Owned [2]	Percent of Common Stock [3]	Shares of Series A Preferred Stock Beneficially Owned	Percent of Series A Preferred Stock [4]	Shares of Series B Preferred Stock Beneficially Owned [5]	Percent of Series B Preferred Stock	Combined Percent of Voting Securities [6]
Directors and Named Executive Officers							
Gilbert F. Amelio, Ph.D.	500,000[13]	1.0%	—	—	—	—	*
James C. Czirr	53,158,368[8]	53.9%	100,000	5.7%	3,000,000	100%	15.4%
Rod D. Martin, J.D.	48,518,926[11]	49.3%	—	—	3,000,000	100%	7.4%
S. Colin Neill	11,500	*	—	—	—	—	*
Steven Prelack	37,000	*	—	—	—	—	*
Jerald K. Rome	229,844	*	—	—	—	—	*
Peter G. Traber, M.D.	500,000[13]	*	—	—	—	—	*
Theodore D. Zucconi, Ph.D.	846,343	*	—	—	—	—	*
Eliezer Zomer, Ph.D.	886,667	1.8%	—	—	—	—	—
All executive officers and directors as a group (9 persons)	58,278,449[14]	56.9%	100,000	5.7%	3,000,000	100%	18.6%

* Less than 1%.

(1) Except as otherwise indicated in the table, the address for each named person is c/o Pro-Pharmaceuticals, Inc., 7 Wells Avenue, Newton, Massachusetts 02459.

(2) Includes the following number of shares of our common stock issuable upon exercise of outstanding stock options granted to our named executive officers and directors that are exercisable within 60 days after June 10, 2009:

Directors and Named Executive Officers	Options Exercisable Within 60 Days
Mr. Neill:	11,500
Mr. Prelack:	37,000
Mr. Rome:	70,500
Dr. Zucconi:	750,000
Dr. Zomer:	886,667
All executive officers and directors as a group	2,870,668

(3) For each named person and group included in this table, percentage ownership of our common stock is calculated by dividing the number of shares of our common stock beneficially owned by such person or group by the sum of (i) 50,356,709 shares of our common stock outstanding as of June 10, 2009 and (ii) the number of shares of our common stock that such person has the right to acquire within 60 days after June 10, 2009.

(4) For each named person and group included in this table, percentage ownership of our Series A preferred stock is based on 1,742,500 shares of Series A preferred stock outstanding as of June 10, 2009.

(5) Includes (i) 900,000 shares of Series B-1 preferred stock issued and outstanding and (ii) 2,100,000 shares of Series B-2 preferred stock that we have agreed to sell to 10X Fund, L.P., a Delaware limited partnership which we refer to as 10X Fund, pursuant to a securities purchase agreement dated as of February 12, 2009, which we refer to as the 10X Purchase Agreement, 1,650,000 of which have not been issued as of June 10, 2009.

(6) Represents the combined voting power of the voting securities (comprised of the aggregate of the shares of our common stock, Series A preferred stock voting on an as-converted basis with the common stock, and Series B-1 preferred stock voting on an as-converted basis with the common stock) on all matters presented to the stockholders for their approval at the Annual Meeting (except for such separate class votes as are required by law or the terms of a class or series of securities) and excludes shares of common stock underlying (i) outstanding options and warrants that have not been exercised as of the record date and (ii) the Series B-2 preferred stock and related warrants that have not been issued pursuant to the 10X Purchase Agreement as of the record date.

(7) Includes (i) 7,379 shares of our common stock owned by Dr. Platt's wife as to which he disclaims beneficial ownership; (ii) 100,000 shares of our common stock issuable upon conversion of Series A preferred stock; and (iii) 200,000 shares of our common stock underlying warrants to purchase shares of our common stock.

(8) Includes (i) 33,200 shares of our common stock owned by a minor child of Mr. Czirr as to which Mr. Czirr disclaims beneficial ownership; (ii) 100,000 shares of our common stock issuable upon conversion of Series A preferred stock; (iii) 200,000 shares of our common stock underlying warrants to purchase shares of our common stock; (iv) 500,000 shares of restricted stock, all of which are subject to forfeiture pursuant to the terms of the restricted stock grant; (v) 3,600,000 shares of our common stock issuable upon conversion of 900,000 shares of Series B-1 preferred stock held of record by 10X Fund, as to which Mr. Czirr, in his capacity as a managing member of 10X Capital Management Fund, LLC, a Florida limited liability company and general partner of 10X Fund, which we refer to as 10X Management, has shared voting and investment power, and disclaims beneficial ownership; (vi) 10,800,000 shares of our common stock underlying warrants to purchase shares of our common stock held of record by 10X Fund as to which Mr. Czirr in his capacity a managing member of 10X Management has shared voting and investment power, and disclaims beneficial ownership; (vii) 8,400,000 shares of our common stock issuable upon conversion of 2,100,000 shares of Series B-2 preferred stock that we have agreed to sell to 10X Fund pursuant to the 10X Purchase Agreement; and (viii) 25,200,000 shares of our common stock underlying warrants to purchase shares of our common stock that we have agreed to sell to 10X Fund pursuant to the 10X Purchase Agreement in connection with the sale of the Series B-2 preferred stock.

(9) Excludes, for purposes of this column, shares of common stock underlying the B-1 preferred stock as to which such person has shared voting power but which will be voted by 10X Fund.

(10) Includes (i) 3,600,000 shares of our common stock issuable upon conversion of 900,000 shares of Series B-1 preferred stock; (ii) 10,800,000 shares of our common stock underlying warrants to purchase shares of our common stock; (iii) 8,400,000 shares of our common stock issuable upon conversion of 2,100,000 shares of Series B-2 preferred stock that we have agreed to sell to 10X Fund pursuant to the 10X Purchase Agreement; and (iv) 25,200,000 shares of our common stock underlying warrants to purchase shares of our common stock that we have agreed to sell pursuant to the 10X Purchase Agreement in connection with the sale of the Series B-2 preferred stock. Each of Mr. Czirr and Mr. Martin, in his capacity as a managing member of 10X Management, the general partner of 10X Fund, has voting and investment power, and disclaims beneficial ownership, of these securities.

(11) Includes (i) 500,000 shares of restricted stock, all of which are subject to forfeiture pursuant to the terms of the restricted stock grant; (ii) 3,600,000 shares of our common stock issuable upon conversion of 900,000 shares of Series B-1 preferred stock held of record by 10X Fund as to which Mr. Martin, in his capacity as a managing member of 10X Management, its general partner, has shared voting and investment power, and disclaims beneficial ownership; (iii) 10,800,000 shares of our common stock underlying warrants to purchase shares of our common stock held of record by 10X Fund as to which Mr. Martin, in his capacity as a managing member of 10X Management, has shared voting and investment power, and disclaims beneficial ownership; (iv) 8,400,000 shares of our common stock issuable upon conversion of 2,100,000 shares of Series B-2 preferred stock that we have agreed to sell to 10X Fund pursuant to the 10X Purchase Agreement; and (v) 25,200,000 shares of our common stock underlying warrants to purchase shares of our common stock that we have agreed to sell to 10X Fund pursuant to the 10X Purchase Agreement in connection with the sale of the Series B-2 preferred stock.

(12) Mr. Smith is the manager of Fivex LLC, a Connecticut limited liability company, and may be deemed to have voting and investment control over, but disclaims beneficial ownership of, the shares of Series A preferred stock.

(13) Represents shares of restricted stock, all of which are subject to forfeiture pursuant to the terms of the restricted stock grant.

(14) Includes 48,000,000 shares of our common stock underlying the Series B preferred stock and related warrants as to which Messrs. Czirr and Martin share voting and investment control but are counted one time for purposes of this total. For additional information about the beneficial ownership of our capital stock by Messrs. Czirr and Martin, see notes 8 and 11 respectively.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus has been passed upon for Pro-Pharmaceuticals, Inc. by Eilenberg & Krause LLP of New York, New York.

EXPERTS

The financial statements included in this prospectus for the year ended December 31, 2008 have been so included in reliance on the report of Vitale, Caturano & Company, P.C. (whose name has been changed to Caturano and Company, P.C., effective May 1, 2009), an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The consolidated financial statements included in this Prospectus for the year ended December 31, 2007 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is appearing herein, (which report expresses an unqualified opinion on the financial statements and includes explanatory paragraphs relating to the adoption of Financial Accounting Standards Board (“FASB”) Interpretation (“FIN”) No. 48, “Accounting For Uncertainty in Income Taxes” on January 1, 2007 and to the substantial doubt about the Company’s ability to continue as a going concern). Such consolidated financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the Public Reference Room (Room 1580), 100 F Street, N.E., Washington, D.C. 20549. You may also obtain information on the operations of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website (www.sec.gov) that contains the reports, proxy and information statements, and other information that we file electronically with the SEC.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and the securities, including exhibits and schedules. You can obtain a copy of the registration statement from the SEC at the above address or from the SEC’s Internet site.

Our internet address is www.pro-pharmaceuticals.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this document. Our web address is included in this document as an inactive textual reference only.

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FINANCIAL STATEMENTS

Pro-Pharmaceuticals, Inc.
(A Development Stage Company)

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying consolidated balance sheet of Pro-Pharmaceuticals, Inc. and subsidiary (a development stage company) (the "Company") as of December 31, 2008, and the related consolidated statement of operations, changes in stockholders' deficit, and cash flows for the year ended December 31, 2008, and for the period from inception (July 10, 2000) to December 31, 2008. 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2008, and the consolidated results of their operations and their cash flows for the year ended December 31, 2008, and for the period from inception (July 10, 2000) to December 31, 2008 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. As discussed in Note 1 to the consolidated financial statements, the Company's recurring losses from operations and stockholders' deficit raise substantial doubt about its ability to continue as a going concern. Management's plans concerning these matters are also discussed in Note 1 to the consolidated financial statements. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As discussed in Note 7, the Company adopted the provisions of Statement of Financial Accounting Standards No. 157, *Fair Value Measurements*, on January 1, 2008.

/s/ Vitale, Caturano & Company, P.C.

Boston, Massachusetts
March 30, 2009

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying consolidated balance sheet of Pro-Pharmaceuticals, Inc. and subsidiary (a development stage company) (the "Company") as of December 31, 2007 and the related consolidated statements of operations, stockholders' deficit, and cash flows for the year then ended and for the period from inception (July 10, 2000) to December 31, 2007 (not presented herein). 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Pro-Pharmaceuticals, Inc. and subsidiary as of December 31, 2007 and the consolidated results of their operations and their cash flows for the year then ended and for the period from inception (July 10, 2000) to December 31, 2007 (not presented herein), in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the 2007 consolidated financial statements, the Company adopted Financial Accounting Standards Board ("FASB") Interpretation ("FIN") No. 48 "Accounting For Uncertainty in Income Taxes" on January 1, 2007.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the 2007 consolidated financial statements, the Company's recurring losses from operations and stockholders' deficit raise substantial doubt about its ability to continue as a going concern. Management's plans concerning these matters are also discussed in Note 1 to the 2007 consolidated financial statements. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 28, 2008

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

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2008 AND 2007 (amounts in thousands except share and share data)

	2008	2007
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 318	$ 1,319
Prepaid expenses and other current assets	62	70
Total current assets	380	1,389
PROPERTY AND EQUIPMENT—NET	40	73
RESTRICTED CASH	59	70
INTANGIBLE ASSETS—NET	225	250
TOTAL ASSETS	$ 704	$ 1,782
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Accounts payable	$ 447	$ 601
Accrued expenses	380	362
Accrued dividends payable	52	—
Advances received for equity consideration	200	1,637
Total current liabilities	1,079	2,600
WARRANT LIABILITIES	55	2,069
OTHER LONG-TERM LIABILITIES	39	37
Total liabilities	$ 1,173	$ 4,706
COMMITMENTS AND CONTINGENCIES (Note 10)		
STOCKHOLDERS' DEFICIT:		
Series A 12% Convertible Preferred Stock 5,000,000 authorized, 1,742,500 shares issued and outstanding at December 31, 2008 and 1,667,500 shares subscribed, none issued and outstanding at December 31, 2007	$ 704	$ —
Common stock, $0.001 par value; 200,000,000 shares authorized; 48,052,159 and 40,364,792 shares of common stock issued and outstanding at December 31, 2008 and 2007, respectively;	48	40
Additional paid-in capital	37,329	32,196
Deficit accumulated during the development stage	(38,550)	(35,160)
Total stockholders' deficit	(469)	(2,924)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 704	$ 1,782

See notes to consolidated financial statements.

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

CONSOLIDATED STATEMENTS OF OPERATIONS
YEARS ENDED DECEMBER 31, 2008, 2007 AND CUMULATIVE PERIOD
FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2008 (amounts in thousands except share and per share data)

	Years Ended December 31,		Cumulative Period from Inception (July 10, 2000) to December 31, 2008
	2008	2007	
OPERATING EXPENSES:			
Research and development	$ 1,774	$ 2,053	$ 17,355
General and administrative	3,552	4,402	26,007
Total operating loss	(5,326)	(6,455)	(43,362)
OTHER INCOME AND (EXPENSE):			
Interest income	30	102	767
Interest expense	—	(350)	(4,451)
Change in fair value of convertible debt instrument	—	(1,032)	(3,426)
Change in fair value of warrant liabilities	2,145	(1,698)	12,161
Total other income (expense)	$ 2,175	$ (2,978)	$ 5,051
NET LOSS	$ (3,151)	$ (9,433)	$ (38,311)
SERIES A 12% CONVERTIBLE PREFERRED STOCK DIVIDEND	(239)	—	(239)
NET LOSS APPLICABLE TO COMMON STOCK	$ (3,390)	$ (9,433)	$ (38,550)
NET LOSS PER SHARE—BASIC AND DILUTED	$ (0.07)	$ (0.24)	
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING—BASIC AND DILUTED	46,815,250	38,980,548	

See notes to consolidated financial statements.

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

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' (DEFICIT)
CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000)
TO DECEMBER 31, 2008 (amounts in thousands except share data)

	Common Stock		Series A 12% Convertible Preferred Stock		Additional Paid-in Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' (Deficit) Equity
	Number of Shares	$0.001 Par Value	Number of Shares	Amount				
Issuance of founders shares in 2000	12,354,670	$ 12	—	—	$ (3)	$ —	$ —	$ 9
Beneficial conversion feature and rights to common stock embedded in convertible note in 2000	—	—			222	—	—	222
Issuance of common stock and beneficial conversion feature related to convertible note in 2001	660,321	1			1,035	—	—	1,036
Issuance of common stock in connection with reverse merger of Pro-Pharmaceuticals-NV in 2001	1,221,890	1			106	—	—	107
Conversion of notes payable and accrued interest to common stock in 2001	598,229	1			1,125	—	—	1,126
Issuance of warrants to induce conversion of notes payable in 2001	—	—			503	—	—	503
Issuance of common stock and warrants (net of issuance costs of $17) in 2001	689,300	1			2,220	—	—	2,221
Issuance of common stock (net of issuance costs of $49) in 2002	185,999	—			602	—	—	602
Issuance of common stock related to 2002 private placement (net of issuance costs of $212)	3,223,360	3			2,858	—	—	2,861
Conversion of notes payable and accrued interest to common stock	105,877	—			290	—	—	290
Issuance of warrants to purchase common stock in consideration for placement of convertible notes payable in 2002	—	—			236	—	—	236
Issuance of common stock to investors in 2002 private placement (net of issuance costs of $18)	1,088,000	1			1,069	—	—	1,070
Issuance of common stock to consultants for services related to 2002 private placement	12,250	—			12	—	—	12

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

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' (DEFICIT)—(Continued)
CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000)
TO DECEMBER 31, 2008 (amounts in thousands except share data)

	Common Stock		Series A 12% Convertible Preferred Stock		Additional Paid-in Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' (Deficit) Equity
	Number of Shares	$0.001 Par Value	Number of Shares	Amount				
Receipt of subscription receivable	—	—			150	—	—	150
Conversion of accrued expenses to common stock and options	201,704	—			302	—	—	302
Issuance of common stock to investors in May, 2003 private placement (net of issuance costs of $128)	2,399,500	3			4,407	—	—	4,410
Fair value of common stock warrants issued to placement agents in May, 2003 private placement	—	—			261	—	—	261
Issuance of common stock to investors in October, 2003 private placement (net of issuance costs of $559)	1,314,571	1			1,318	—	—	1,319
Cashless exercise of employee stock options	16,629	—			74			74
Issuance of common stock to investors in April, 2004 private placement (net of issuance costs of $466))	1,236,111	1			1,897	—	—	1,898
Issuance of common stock to investors in August, 2004 private placement (net of issuance costs of $485)	2,000,000	2			488	—	—	490
Common stock issued in 2006 related to convertible debenture conversions	476,202	1			1,744			1,745
Common stock issued in 2006 and 2007 related to convertible debenture redemptions	7,367,831	7			3,941			3,948
Common stock issued in 2007 related to convertible debenture waiver and exchange agreement	5,205,348	5			5,325			5,330
Series A 12% Convertible Preferred Stock issued in a February 4, 2008 private placement (net of cash issuance costs of $52)			1,742,500	704				704
Common stock issued in a February 25, 2008 offering (net of cash issuance costs of $369)	7,500,000	8			1,036			1,044

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

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' (DEFICIT)—(Continued)
CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000)
TO DECEMBER 31, 2008 (amounts in thousands except share data)

	Common Stock							
	Number of Shares	$0.001 Par Value	Number of Shares	Series A 12% Convertible Preferred Stock Amount	Additional Paid-in Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' (Deficit) Equity
Series A 12% Convertible Preferred Dividend							(239)	(239)
Issuance of common stock in payment of Series A 12% Convertible Preferred Dividend	187,367	—			187			187
Issuance of Common Stock Warrants					20			20
Reclassification of Warrant Liabilities					3,193			3,193
Deferred compensation relating to issuance of stock options	—	—			455	(455)	—	—
Amortization of deferred compensation	—	—			—	612	—	612
Stock compensation expense related to fair market revaluation	—	—			157	(157)	—	—
Stock based compensation expense					2,072			2,072
Stock compensation related to the issuance of common shares	7,000	—			27	—	—	27
Net loss since inception	—	—			—	—	(38,311)	(38,311)
BALANCE, DECEMBER 31, 2008	48,052,159	$ 48	1,742,500	$ 704	$ 37,329	$ —	$ (38,550)	$ (469)

See notes to consolidated financial statements.

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

CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' DEFICIT FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2007
(amounts in thousands except share data)

	Common Stock		Series A 12% Convertible Preferred Stock		Deficit Accumulated During the Development Stage	Additional Paid-in Capital	Total Stockholders' Deficit
	Number of Shares	Amount	Number of Shares	Amount			
BALANCE January 1, 2007	32,518,643	$ 32			$ (25,727)	$ 25,673	$ (22)
Common stock issued related to convertible debenture redemptions	2,640,801	3				582	585
Common Stock issued related to waiver and exchange agreement	5,205,348	5				5,325	5,330
Stock based compensation expense						616	616
Net loss					(9,433)		(9,433)
BALANCE, DECEMBER 31, 2007	40,364,792	40	—	—	(35,160)	32,196	(2,924)
Net loss					(3,151)		(3,151)
Series A 12% Convertible Preferred Stock issued in a February 4, 2008 private placement (net of cash issuance costs of $52)			1,742,500	704			704
Common stock issued in a February 25, 2008 offering (net of cash issuance costs of $369)	7,500,000	8				1,036	1,044
Series A 12% Convertible Preferred dividend					(239)		(239)
Issuance of common stock in payment of Series A 12% Convertible Preferred dividend	187,367	—				187	187
Issuance of common stock Warrants						20	20
Reclassification of warrant liabilities						3,193	3,193
Stock-based compensation expense						697	697
BALANCE, DECEMBER 31, 2008	48,052,159	$ 48	1,742,500	$ 704	$ (38,550)	$ 37,329	$ (469)

See notes to consolidated financial statements.

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

CONSOLIDATED STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2008 and 2007, AND CUMULATIVE PERIOD FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2008 (amounts in thousands)

	Years Ended December 31,		Cumulative Period from Inception (July 10, 2000) to December 31, 2008
	2008	2007	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$(3,151)	$(9,433)	$ (38,311)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	49	64	488
Stock-based compensation expense	697	616	2,785
Non-cash interest expense	—	333	4,279
Change in fair value of convertible debt instrument	—	1,032	3,426
Change in fair value of warrant liabilities	(2,145)	1,698	(12,161)
Write-off of intangible assets	11	23	181
Changes in other assets and liabilities:			
Prepaid expenses and other current assets	8	61	(59)
Accounts payable and accrued expenses	(136)	111	945
Changes in long term liabilities	2	12	39
Net cash used in operating activities	(4,665)	(5,483)	(38,388)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Maturity of certificate of deposit	—	5,000	
Purchases of property and equipment	(2)	(5)	(421)
Decrease (increase) in restricted cash	11	(11)	(59)
Increase in patents costs and other assets	—	(37)	(404)
Net cash provided by (used in) investing activities	9	4,947	(884)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from issuance of common stock and warrants	3,381	—	28,690
Net proceeds from issuance of Series A Convertible Preferred Stock and Warrants	54	1,637	1,691
Net proceeds from issuance of convertible debt instrument	—	—	10,621
Repayment of convertible debt instrument	—	(555)	(1,641)
Proceeds from issuance of common stock warrants	20		20
Proceeds from shareholder advances	200	—	209
Net cash provided by financing activities	3,655	1,082	39,590
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(1,001)	546	318
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	1,319	773	—
CASH AND CASH EQUIVALENTS, END OF PERIOD	$ 318	$ 1,319	$ 318
SUPPLEMENTAL DISCLOSURE—Cash paid for interest	$ —	$ 17	$ 114
NON-CASH FINANCING ACTIVITIES			
Issuance of equity warrants in connection with equity offerings	—	—	1,172
Conversion of accrued expenses into common stock	—	—	303
Cashless exercise of employee stock options	—	—	74
Conversion and redemptions of convertible notes and accrued interest into common stock	—	5,915	12,243
Conversion of extension costs related to convertible notes into common stock	—	—	171
Conversion of prepaid interest into common stock	—	(32)	
Payment of 12% Convertible Preferred dividend in common stock	187	—	187
Dividends payable on preferred stock	52	—	52
Issuance of warrants to induce conversion of notes payable	—	—	503
Issuance of stock to acquire Pro-Pharmaceuticals-NV	—	—	107

See notes to consolidated financial statements.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION AND SUBSEQUENT EVENTS

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

The Company is devoting substantially all of its efforts toward product research and development, and raising capital. In May 2008, the Company submitted a Drug Master File ("DMF") for the Company's lead product DAVANAT ® to the FDA. The DMF contains confidential detailed information in support of a New Drug Application ("NDA") about facilities, processes or articles used in the manufacturing, processing, packaging, and storing or stability of drugs.

In September 2008, the Company submitted a clinical and pre-clinical package to the Food and Drug Administration ("FDA") in support of the Company's DAVANAT ® NDA. The FDA reported to the Company in its minutes for the December 22, 2008 meeting that the Company will be required to conduct a Phase III trial to demonstrate superiority to the best standard of care for late stage colorectal cancer patients.

The Company incurred net losses of approximately $38.6 million for the cumulative period from inception (July 10, 2000) through December 31, 2008. The Company's net losses have resulted principally from costs associated with (i) research and development expenses, including clinical trial costs, (ii) general and administrative activities and (iii) the Company's financing transactions including interest and the costs related to fair value accounting for the Company's convertible debt instrument and warrant liabilities. As a result of planned expenditures for future research, discovery, development and commercialization activities and potential legal cost to protect its intellectual property, the Company expects to incur additional losses and use additional cash in its operations for the foreseeable future. Through December 31, 2008, the Company had raised approximately $41.2 million in capital through sale and issuance of common stock, common stock purchase warrants, convertible preferred stock and debt securities in public and private offerings. From inception (July 10, 2000) through December 31, 2008, the Company used cash of approximately $38.4 million in its operations.

At March 20, 2009, the Company had approximately $900,000 of non-restricted cash available to fund future operations. The Company believes there is sufficient cash to fund operations into June 2009. If the Company is unsuccessful in raising additional capital before the end of June 2009, the Company may be required to cease operations or seek bankruptcy protection. In light of the Company's current financial position and the uncertainty of raising sufficient capital to achieve its business plan, there is substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result if such circumstances arise.

On January 9, 2009, the Company was delisted from the NYSE Alternext US ("Exchange"), formerly the American Stock Exchange, due to non-compliance with the Exchange minimum shareholders' equity requirements. On January 21, 2009 the Company began trading on the Over-the-Counter Bulletin Board ("OTCBB") under the symbol PRWP.OB.

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

Cash on hand of approximately $900,000 at March 20, 2009, is sufficient to fund operations into June 2009. The Company must raise money before June 2009 or the Company may be forced to cease operations or seek bankruptcy protection. There can be no assurance that additional capital will be available to the Company prior to that time. Therefore, there exists substantial doubt about the Company's ability to continue as a going concern. No adjustments have been made to the carrying value of the assets or liabilities despite this uncertainty.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

Basis of Consolidation – The consolidated financial statements include the accounts of the Company and Pro-Pharmaceuticals Securities Corp., its wholly-owned subsidiary, which was incorporated in Delaware on December 23, 2003. Pro-Pharmaceuticals Securities Corp. holds the cash and cash equivalents that are not required to fund current operating needs. All intercompany transactions have been eliminated.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and disclosure of contingent assets and liabilities. Management's estimates and judgments include assumptions used in stock option and warrant liability valuations, useful lives of intangible assets, accrued liabilities and various other assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

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

Cash Flow – Our financial statements have been prepared on a going concern basis with the assumption that we have sufficient cash to fund operations into June 2009 and that by June 2009 we will raise sufficient cash to continue operations.

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

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

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

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

Restricted Cash – Restricted cash consists of security deposits principally for a real estate lease.

Intangible Assets – Intangible assets include patent costs, consisting primarily of related legal fees, which are capitalized as incurred and amortized over an estimated useful life of five years from issuance. Amortization expense in 2008 and 2007 was, approximately $14,000 and $20,000 respectively. Gross intangible assets at December 31, 2008 and 2007 totaled approximately $329,000 and $340,000 respectively and accumulated amortization at December 31, 2008 and 2007 totaled approximately $104,000 and $90,000, respectively.

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

The Company wrote off capitalized patent costs of approximately $11,000 and $23,000 in 2008 and 2007, respectively, when it was determined that the underlying intellectual property would have no future benefit to the Company.

Convertible Debt Instrument – The Company's 7% Convertible Debt instrument issued in 2006 (the "Debentures") constitutes a hybrid instrument that has the characteristics of a debt host contract containing several embedded derivative features that would require bifurcation and separate accounting as a derivative instrument pursuant to the provisions of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS No. 133"). As permitted by SFAS No. 155, "Accounting for Certain Hybrid Financial Instruments — an amendment of FASB Statements No. 133 and 140," the Company irrevocably elected to initially and subsequently measure the Debentures in their entirety at fair value with changes in fair value recorded as either a gain or loss in the consolidated statement of operations under the caption "Change in fair value of convertible debt instrument." Fair value of the Debentures is determined using a financial valuation model that requires assumptions that subject to significant management judgment.

Warrants – The Company has issued common stock warrants in connection with the execution of certain equity and debt financings. Certain warrants are accounted for as derivative liabilities at fair value in accordance with SFAS No. 133. Such warrants do not meet the criteria in paragraph 11(a) of SFAS No. 133 that a contract should not be considered a derivative instrument if it is (1) indexed to its own stock and (2) classified in stockholders' equity. Changes in fair value of derivative liabilities are recorded in the consolidated statement of operations under the caption "Change in fair value of warrant liabilities." Warrants that are not considered derivative liabilities as defined in SFAS No. 133 are accounted for at fair value at the date of issuance in additional paid-in capital. The fair value of warrants is determined using the Black-Scholes option-pricing model.

Research and Development Expenses – Costs associated with research and development are expensed as incurred. The Company defers and capitalizes nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities. Research and development expenses include, among other costs, salaries and other personnel-related costs, and costs incurred by outside laboratories and other accredited facilities in connection with clinical trials and preclinical studies.

Income Taxes – The Company accounts for income taxes in accordance with SFAS No. 109, "Accounting for Income Taxes" ("SFAS No. 109"). This statement requires an asset and liability approach to accounting for income taxes based upon the future expected values of the related assets and liabilities. Deferred income tax assets and liabilities are determined based on the differences between the financial reporting and tax bases of assets and liabilities and for tax loss and credit carry forwards, and are measured using the expected

tax rates estimated to be in effect when such basis differences reverse. Valuation allowances are established, if necessary, to reduce the deferred tax asset to the amount that will, more likely than not, be realized. In June 2006, the Financial Accounting Standards Board issued FASB Interpretation ("FIN") No. 48, "Accounting for Uncertainty in Income Taxes" ("FIN 48" or the "Interpretation"). This Interpretation clarifies the accounting for uncertainty in income taxes recognized in accordance with SFAS No. 109. This Interpretation prescribes a more-likely-than not recognition threshold that a tax position will be sustained upon examination and a measurement attribute for the financial statement recognition of a tax position taken or expected to be taken in a tax return. This Interpretation also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company adopted the provisions of FIN 48 on January 1, 2007. As of the date of adoption, the total amount of unrecognized tax benefits was approximately $1,031,000 of which approximately $880,000 if recognized, would impact the effective tax. As a result of the implementation of FIN 48, the Company did not recognize an adjustment to the deficit accumulated during the development stage for the unrecognized tax benefits because the Company has recorded a full valuation allowance against net operating loss carry forwards. There have been no changes in unrecognized tax benefits as a result of the tax positions taken during the current period (See Note 12 for further detail).

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

Fair Value of Financial Instruments – SFAS No. 107, "Disclosures About Fair Value of Financial Instruments," requires disclosure of the fair value of certain financial instruments. The Company's financial instruments consist of cash equivalents, accounts payable and accrued expenses. The estimated fair value of these financial instruments approximates their carrying value due to their short-term nature. Additionally, certain common stock warrants are recorded as liabilities at fair value. In September 2006, the Financial Accounting Standards Board issued SFAS No. 157, "Fair Value Measurements" ("SFAS No. 157"). SFAS No. 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements are separately disclosed by level within the fair value hierarchy. The Company adopted SFAS No. 157 in the first quarter of fiscal year 2008. See Note 7.

Concentration of Credit Risk – Financial instruments that subject the Company to credit risk consist of cash and cash equivalents and certificates of deposit. The Company maintains cash and cash equivalents and certificates of deposit with well-capitalized financial institutions. At times, those amounts may exceed federally insured limits. The Company has no significant concentrations of credit risk.

Stock-Based Compensation – Through December 31, 2005, the Company accounted for stock-based compensation to employees and non-employee directors under the intrinsic value method in accordance with Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees," ("APB No. 25") and the related interpretations. Under APB No. 25, no compensation expense was recognized for stock options granted at fair market value and with fixed terms. On January 1, 2006, the Company adopted SFAS No. 123(R), "Share-Based Payment," ("SFAS No. 123(R)") using the modified prospective method, which results in the provisions of SFAS No. 123(R) being applied to the consolidated financial statements on a going-forward basis. Prior periods have not been restated. SFAS No. 123(R) requires companies to recognize stock-based compensation awards as compensation expense on a fair value method. Under the fair value recognition provisions of SFAS No. 123(R), stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the service period, which generally represents the vesting period. The Company uses the Black-Scholes option-pricing model to calculate the grant date fair value of stock options. The expense recognized over the service period

is required to include an estimate of the awards that will be forfeited. Previously, the Company recorded the impact of forfeitures as they occurred. FASB Staff Position ("FSP") No. 123(R)-3, "Transition Election Related to Accounting for the Tax Effects of Share-Based Payment Awards" required an entity to follow either the transition guidance for the additional-paid-in-capital pool as prescribed in SFAS No. 123(R) or the alternative transition method described in FSP No. 123(R)-3. An entity that adopted SFAS No. 123(R) using the modified prospective application method may make a one-time election to adopt the transition method described in the FSP No. 123(R)-3, and may take up to one year from the latter of its initial adoption of SFAS No. 123(R) or the effective date of the FSP No. 123(R)-3 to evaluate the available transition alternatives and make its one-time election. The Company adopted the alternative transition method provided in the FSP No. 123(R)-3 for calculating the tax effects of stock-based compensation under SFAS No. 123(R). Stock-based compensation is more fully described in Note 9.

Impact of New Accounting Standards – In September 2006, the Financial Accounting Standards Board ("FASB"), issued SFAS No. 157. SFAS No. 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements are separately disclosed by level within the fair value hierarchy. In February 2008, the FASB decided that an entity need not apply this standard to nonfinancial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a nonrecurring basis until 2009. The Company adopted SFAS No. 157 in the first quarter of fiscal year 2008. See Note 7.

In October 2008, the FASB issued FSP No. FAS 157-3, *Determining the Fair Value of a Financial Asset When the Market for that Asset is Not Active* (FSP 157-2), which applies to financial assets that are required or permitted to be measured at fair value in accordance with SFAS No. 157. FSP 157-3 clarifies the application of SFAS No. 157 and provides an example to illustrate key considerations in determining the fair value of a financial asset when the market for that asset is not active. The adoption did not have a significant impact on the Company's financial position or results of operations, nor did it have a significant impact on the valuation techniques used by the Company in measuring the fair value of its portfolio investments.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* ("SFAS No. 159"). SFAS No. 159 provides entities with an option to report selected financial assets and liabilities at fair value, with the objective to reduce both the complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. The Company adopted SFAS No. 159 in the first quarter of fiscal year 2008. SFAS No. 159 had no impact on the Company's financial statements as the Company did not elect the option to value selected assets or liabilities at fair value.

In June 2007, the FASB issued Emerging Issues Task Force 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities* ("EITF 07-3"). EITF 07-3 provides that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities should be deferred and capitalized. The Company adopted EITF 07-3 in the first quarter of fiscal year 2008. This standard had no material effect on the Company.

In December 2007, the FASB issued SFAS No. 141(R) *Business Combinations* (SFAS 141(R)). This Statement replaces the original SFAS No. 141. This Statement retains the fundamental requirements in SFAS No. 141 that the acquisition method of accounting (which SFAS No. 141 called the *purchase method*) be used for all business combinations and for an acquirer to be identified for each business combination. The objective of SFAS No. 141(R) is to improve the relevance, and comparability of the information that a
reporting entity provides in its financial reports about a business combination and its effects. To accomplish that, SFAS No. 141(R) establishes principles and requirements for how the acquirer:

- Recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree.

- Recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase.
- Determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination.

This Statement applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008 and may not be applied before that date. The Company does not expect this standard will have a material effect on the Company.

In December 2007, the FASB issued SFAS No. 160, *Non-controlling Interests in Consolidated Financial Statements—an amendment of ARB No. 51* (SFAS No. 160). This statement is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008, with earlier adoption prohibited. This statement requires the recognition of a non-controlling interest (minority interest) as equity in the consolidated financial statements and separate from the parent's equity. The amount of net income attributable to the non-controlling interest will be included in consolidated net income on the face of the income statement. It also amends certain of ARB No. 51's consolidation procedures for consistency with the requirements of SFAS 141(R) . This statement also includes expanded disclosure requirements regarding the interests of the parent and its non-controlling interest. We are currently evaluating this new statement and anticipate that the statement will not have a significant impact on the reporting of our results of operations.

In April 2008, the FASB issued Staff Position No. FAS 142-3, *Determination of the Useful Life of Intangible Assets* ("FSP FAS 142-3"). FSP FAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets* ("SFAS No. 142"). The intent of FSP FAS 142-3 is to improve the consistency between the useful life of a recognized intangible asset under SFAS No. 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS 141(Revised) and other applicable accounting literature. FSP FAS 142-3 is effective for fiscal years beginning after December 15, 2008. The Company is currently evaluating the effect that the adoption of FSP FAS 142-3 will have on its consolidated results of operations and financial condition.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* (SFAS No. 162). The current hierarchy of generally accepted accounting principles is set forth in the (AICPA) Statement on Auditing Standards (SAS) No. 69, *The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principles.* SFAS No. 162 is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles for nongovernmental entities. This Statement is effective November 15, 2008. The adoption of this statement did not have a material effect on our financial condition or results of operations.

In June 2008, the FASB ratified EITF Issue No. 07-5, "Determining Whether an Instrument (or an Embedded Feature) Is Indexed to an Entity's Own Stock" (EITF 07-5). EITF 07-5 provides that an entity should use a two step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. It also clarifies on the impact of foreign currency denominated strike prices and market-based employee stock option valuation instruments on the evaluation. EITF 07-5 is effective for fiscal years beginning after December 15, 2008. The Company is currently assessing the impact of EITF 07-5 on its consolidated financial position and results of operations.

In November 2008, the FASB ratified Emerging Issues Task Force Issue No. 08-7, *Accounting for Defensive Intangible Assets*. EITF 08-7 clarifies the accounting for certain separately identifiable intangible assets which an acquirer does not intend to actively use but intends to hold to prevent its competitors from obtaining access to them. EITF 08-7 requires an acquirer in a business combination to account for a defensive intangible asset as a separate unit of accounting which should be amortized to expense over the period the asset diminishes in value. EITF 08-7 is effective for fiscal years beginning after December 15, 2008, with early adoption prohibited. The Company is currently evaluating the effect that the adoption of FSP FAS 142-3 will have on its consolidated results of operations and financial condition.

3. PROPERTY AND EQUIPMENT

Property and equipment consists of the following at December 31:

	2008	2007
Leasehold improvements	$ 15	$ 15
Computer and office equipment	194	192
Furniture and fixtures	107	107
Total	316	314
Less accumulated depreciation	(276)	(241)
Property and equipment—net	$ 40	$ 73

Depreciation expense for the years ended December 31, 2008 and 2007 was approximately $35,000 and $44,000 respectively.

4. ACCRUED EXPENSES

Accrued expenses consist of the following at December 31:

	2008	2007
Legal and accounting fees	$247	$ 14
Scientific and clinical fees	29	214
Accrued payroll	27	97
Other	77	37
Total	$380	$362

5. RELATED PARTY TRANSACTIONS

In 2002, a stockholder and director of the Company agreed to receive compensation for certain 2002 scientific advisory services in the form of 25,354 shares of common stock and 25,354 options at an exercise price of $2.96 to purchase common stock of the Company. As of December 31, 2002, the Company recorded the deemed fair value of such compensation of approximately $122,000 as an accrued liability. The common stock was valued at approximately $76,000, based on the closing price of the publicly traded shares of common stock on the date of grant. The options were valued at approximately $46,000 using the Black-Scholes option-pricing model, based on a deemed fair value of the Company's common stock of $3.00 per share. The accrued liability at December 31, 2002 was converted to equity in 2003 when the 25,354 shares of common stock and 25,354 options were issued to this individual.

On October 31, 2008, the Company's board of directors authorized Medi-Pharmaceuticals, Inc. ("Medi-Pharma"), a wholly-owned subsidiary as of that date, to enter into a joint venture to deploy certain of the Company's technology, as well as original technology to be developed by the joint venture, for use in nutraceutical cardiovascular therapies. This deployment was accomplished by: (i) a merger of FOD Enterprises, Inc., with and into Medi-Pharma on November 25, 2008, following which Medi-Pharma became the surviving corporation and the Company became the owner of 10% of the outstanding capital stock of Medi-Pharma; and (ii) the Company entering into a license agreement with Medi-Pharma dated November 25, 2008, and clarified by an amendment dated December 15, 2008. Pursuant to the license agreement, the Company granted Medi-Pharma an exclusive, worldwide perpetual license to commercialize all of the Company's polysaccharide technology exclusively in the field of cardiovascular therapies (both preventive and therapeutic) in exchange for a royalty equal to 10% of Medi-Pharma's net revenues from products sold based on the licensed technology. Under the terms of the agreement Medi-Pharma must advance $1.0 million in cash to the Company by May 30, 2009 or the Company will have the ability to terminate the license agreement. On February 12, 2009, the Company terminated the license agreement and entered into a Technology Transfer and Sharing Agreement (the "Sharing Agreement") with Medi-Pharma. Under the terms of the agreement, the Company and Medi-Pharma agreed that the Company would not work in the area of polysaccharides in heart disease for a period of five years without the consent of Medi-Pharma and Medi-Pharma will not work in the area of polysaccharides in oncology and liver/kidney fibrosis for a period of five years without the consent of the Company. Also under the terms of the agreement, the Company licensed to Medi-Pharma, in perpetuity, all items of intellectual property owned by the Company with respect to the use of polysaccharides for heart indications. Further, the Company granted Medi-Pharma access to all of the Company's intellectual property in the area of fibrotic tissue in applications other than liver/kidney fibrosis and Medi-Pharma granted the Company access to all intellectual property in the area of kidney/lever fibrosis.

On February 12, 2009, the Company also entered into a Consulting Agreement (the "Consulting Agreement") with Medi-Pharma pursuant to which the parties agreed that Medi-Pharma will provide (a) certain manufacturing and development services related to DAVANAT ® , (b) training to the Company's technicians in best practices for laboratory processes and procedures and (c) upon the request of the Company, advice and review relative to current pre-clinical trials and clinical trials, and submissions of information or other documentation, to the FDA related to DAVANAT ® . The Consulting Agreement provides that to the extent the services are provided by David Platt, Ph.D., Medi-Pharma shall receive no compensation. The term of the Consulting Agreement is until February 12, 2011.

At December 31, 2008, Medi-Pharma had no assets or liabilities and had recorded no income or expense. The Company intends to account for Medi-Pharma under the equity method of accounting.

6. CONVERTIBLE DEBT, WARRANT LIABILITIES AND WARRANTS

The Company has raised capital through a number of debt and equity financing transactions. The following provides a chronological description of the Company's debt financings and certain warrants issued in connection with debt and equity financings.

2000 and 2001 Convertible Notes – During 2001 and 2000, the Company issued approximately $1,036,000 and $285,000 of convertible notes, respectively. In August 2001, the Company offered warrants to holders of its outstanding convertible notes as an inducement to convert the notes prior to the maturity. Holders representing approximately $1,126,000 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 unexercised warrants expired in 2005. As described in Note 7, the Company valued the warrants at approximately $503,000 using the Black-Scholes option-pricing model, and recorded such value as a debt conversion in 2001. In addition, 110,000 warrants were issued to agents as part of this offering. Please see Note 7.

In May 2002, the Company extended the maturity date on the approximately $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 approximately $171,000 in costs associated with the extension, based on the fair value of the Company's common stock of $3.50 at the time of the extension. These deferred convertible notes payable costs were amortized ratably over the twelve-month extended term of the notes, or until conversion.

In June 2002, approximately $80,000 in convertible notes payable and approximately $10,000 in related accrued interest was converted into 45,128 shares of common stock. In October 2002, the Company settled convertible notes payable of approximately $100,000 through a cash payment of approximately $86,000 and conversion of approximately $14,000 of principal into 7,000 shares of common stock pursuant to the original terms of the note. In addition, approximately $17,000 of related accrued interest was repaid in cash. In 2003 the remaining approximately $15,000 of convertible note payable was converted into common stock.

During 2002, the remaining approximately $167,000 of the deferred convertible notes payable extension costs was amortized to interest expense.

October 2003, April 2004 and August 2004 "PIPE" Transactions – In connection with the October 2003 PIPE transaction, as described in Note 7, the Company issued 657,293 warrants (the "2003 Investor Warrants") with an initial exercise price of $5.29 per share to the investors and 65,729 warrants (the "2003 Placement Agent Warrants") with an initial exercise price of $6.86 per share to its placement agent. The exercise price of the warrants is subject to adjustment pursuant to anti-dilution and other provisions. The fair value of the 2003 Investor Warrants and the 2003 Placement Agent Warrants was determined based on a fair market value of the Company's common stock of $5.29 per share. The 2003 Investor Warrants and 2003 Placement Agent Warrants were valued at approximately $2,531,000 and $191,000, respectively. The Company uses the Black-Scholes pricing model to value these warrants. The 2003 Investor Warrants and the 2003 Placement Agent Warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet under the caption "Warrant Liabilities". Changes in fair value are recognized as either a gain or loss in the consolidated statement of operations under the caption "Change in fair value of warrant liabilities". On October 2, 2008 the 2003 Investor Warrants expired unexercised. The October 2003 Placement Agent Warrants expired unexercised in 2007.

In connection with the April 2004 PIPE transaction, as described in Note 7, the Company issued 618,056 warrants (the "April 2004 Investor Warrants") and 61,806 warrants (the "April 2004 Placement Agent Warrants") with an initial exercise price of $5.30 per share to the investors and to the placement agent, respectively. The exercise price of the warrants is subject to adjustment pursuant to anti-dilution and other provisions. The fair value of the April 2004 Investor Warrants and the April 2004 Placement Agent Warrants was determined based on a fair market value of the Company's common stock of $4.41 per share. The April 2004 Investor Warrants and April 2004 Placement Agent Warrants were valued at approximately $1,931,000 and $154,000, respectively. The Company uses the Black-Scholes pricing model to value these warrants. The April 2004 Investor Warrants and April 2004 Placement Agent Warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet under the caption "Warrant Liabilities". Changes in fair value are recognized as either a gain or loss in the consolidated statement of operations under the caption "Change in fair value of warrant liabilities". The April 2004 Placement Agent Warrants expired unexercised in 2007.

In connection with the August 2004 PIPE transaction, as described in Note 7, the Company issued 2,000,000 warrants (the "August 2004 Investor Warrants") and 100,000 warrants (the "August 2004 Placement Agent Warrants") with an exercise price of $4.20 per share to the investors and to the placement agent, respectively. The exercise price of the warrants is subject to adjustment solely as a result of stock splits, recapitalizations and similar events. The fair value of the August 2004 Investor Warrants and the August 2004 Placement Agent Warrants was determined based on a fair market value of the Company's common stock of $3.39 per share. The August 2004 Investor Warrants and August 2004 Placement Agent Warrants were valued at approximately $4,786,000 and $239,000, respectively. The Company uses the Black-Scholes pricing model to value these warrants. The August 2004 Investor Warrants and August 2004 Placement Agent Warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet under the caption "Warrant Liabilities". Changes in fair value are recognized as either a gain or loss in the consolidated statement of operations under the caption "Change in fair value of warrant liabilities".

February 2006 "PIPE" Transaction – In February 2006, the Company issued $10 million in aggregate principal amount of convertible debentures (the "Debentures") together with warrants to purchase approximately 1,490,313 shares of the Company's common stock (the "2006 Investor Warrants"). Additionally, in connection with issuance of the Debentures and Warrants, the placement agent received a fee of approximately $550,000 and approximately 149,031 fully vested warrants (the "2006 Placement Agent Warrants") to purchase shares of the Company's common stock. Net proceeds were approximately $9,300,000 net of approximately $700,000 in direct transaction costs, including the placement agent fee. Redemptions and conversions of the Debentures are described in the table below.

The Debentures bore interest at 7% and were required to be redeemed in eighteen equal monthly installments beginning in August 2006 and continuing through January 2008. Interest was payable monthly beginning in July 2006. Each redemption installment and accrued interest has been settled in cash or in shares of common stock at the option of the Company. The number of shares deliverable under the share-settlement option was determined based on the lower of (a) $3.35 per share, as adjusted pursuant to the terms of the Debentures or (b) 90% applied to the average of the lowest five volume-weighted-average trading prices in a twenty day period immediately preceding each share settlement. If the share-settlement option was elected by the Company, the Company was required to make an estimated payment in shares approximately 30 days prior to the scheduled maturity date.

On March 20, 2007, the Company entered into a Waiver and Exchange Agreement (the "Agreement") with six of seven remaining holders of the Debentures, representing approximately $3,889,000 of the approximately $4,444,000 outstanding principal. Pursuant to the Agreement, on March 21, 2007, the Company issued approximately 5.2 million shares of its common stock at $0.75 per share to discharge the principal, accrued and unpaid interest and any other obligations under the Debentures subject to the Agreement. The Agreement also provided that the exercise price of the common stock purchase warrants issued by the Company contemporaneously with the Debentures, would be reduced to $1.00 (and the number of shares issuable on exercise proportionately increased) to take into account the dilutive effect of this transaction. In connection with the February 2008 finance transactions, discussed in Note 8, as a result of the anti-dilution provisions of the warrant instruments, the exercise price of the investor and placement agent warrants was reduced to $0.50 and an additional 5,342,770 and 849,477 shares of the Company's common stock are issuable, respectively, upon exercise of the investor and placement agent warrants. The Warrant Agreement contains a provision that limits the number of shares that can be issued to holders of the warrant.

In October 2008, a number of holders representing 7,988,082 of the outstanding Convertible Debenture warrants agreed to waive their right to receive cash, at their option, in the event of a fundamental transaction related to the Company. Because they now receive the same treatment as common shareholders, the warrant liability associated with these warrants was reclassified to stockholders' equity in the fourth quarter of 2008. In addition, the placement agent representing 998,508 of the outstanding Convertible Debenture warrants

reclassified to stockholders' equity as described above, waived all future rights to the anti-dilution provisions of the warrant agreement. The warrant liabilities were marked to fair market value as of the agreement date resulting in an approximately $100,000 gain in the fourth quarter of 2008 to change in fair value of warrant liabilities in the consolidated statement of operations and a reclassification of the remaining balance to additional paid in capital of approximately $530,000. The remaining 2,995,523 of outstanding Convertible Debenture warrants continue to be classified as Warrant liabilities.

On December 14, 2007, the Company made its last scheduled payment of principal and interest of the remaining outstanding Debentures. At December 31, 2007, the Convertible Debenture was repaid in full.

The exercise price of the 2006 Investor and Placement Agent Warrants are subject to certain anti-dilution protections, including for stock splits, stock dividends, change in control events and dilutive issuances of common stock or common stock equivalents, such as stock options, at an effective price per share that is lower than the then conversion price. In the event of a dilutive issuance of common stock or common stock equivalents, the exercise price would be reduced to equal the lower price per share of the subsequent transaction together with a corresponding increase in the number of warrants.

As described in Note 2, the Company irrevocably elected to initially and subsequently measure the Debentures in their entirety at fair value with changes in fair value recognized as either a gain or loss in the consolidated statement of operations. Upon issuance of the Debentures, the Company allocated proceeds received to the Debentures and the 2006 Investor Warrants on a relative fair value basis. As a result of such allocation, the Company determined the initial carrying value of the Debentures to be approximately $7,747,000. The Debentures were immediately marked to fair value, resulting in a liability in the amount of approximately $9,126,000 and a charge to "Change in fair value of convertible debt instrument" of approximately $1,379,000.

Upon issuance, the Company allocated approximately $2,253,000 of the initial proceeds to the 2006 Investor Warrants and immediately marked them to fair value resulting in a derivative liability of approximately $2,654,000 and a charge to "change in fair value of warrant liabilities" of approximately $401,000. The Company paid approximately $700,000 in cash transaction costs and incurred another $266,000 in costs based upon the fair value of the 2006 Placement Agent Warrants. Such costs were expensed immediately as part of fair value adjustments required in connection with the Debentures and the Company's irrevocable election to initially and subsequently measure the Debentures at fair value with changes in fair value recognized in earnings.

The debt discount in the amount of approximately $2,253,000 (resulting from the allocation of proceeds) was amortized to interest expense using the effective interest method over the expected term of the Debentures. The Company amortized approximately $559,000 and $1,694,000 of this amount in 2007 and 2006 respectively with a corresponding increase in the carrying value of the Debentures. Of this amount approximately $257,000 and $1,358,000 was charged to interest expense and approximately $302,000 and $336,000 was recorded in additional paid-in capital as a result of redemptions and conversions during 2007 and 2006 respectively. An additional approximately $93,000 and $492,000 in interest expense was recorded during 2007 and 2006 respectively based upon the 7% coupon rate.

February 4, 2008 Transaction – On February 4, 2008, the Company closed a private placement in which it sold units of securities comprised of 1,742,500 shares of Series A 12% Convertible Preferred Stock together with warrants to purchase 1,742,500 shares of common stock exercisable at $1.50 and warrants to purchase 1,742,500 shares of common stock exercisable at $2.00. In addition the Company issued to placement agents warrants to purchase 8,400 shares of common stock at $1.50. The warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet formerly under the caption "Warrant Liabilities". These warrants were originally classified as a liability because the February 2006 warrants contain an anti-dilution provision in the event of a subsequent dilutive issuance and the potential number of

shares issuable exceeded the Company's authorized shares. Changes in fair value were recognized as either a gain or loss in the consolidated statement of operations under the caption "Change in fair value of warrant liabilities". In the second quarter of 2008, the warrants were reclassified to equity as a result of an amendment to the Company's articles of incorporation approved at the May 21, 2008 annual meeting of shareholders increasing the Company's authorized common stock from 100,000,000 to 200,000,000 shares (the "Charter Amendment"). The Charter Amendment authorization of the additional shares coupled with a provision in the February 2006 warrants limiting the number of shares that can be issued to holders of the February 2006 warrants, ensures that sufficient shares are available for issuance upon exercise of these warrants, thereby enabling them to be reclassified from a liability to equity. Through May 21, 2008, these warrants were marked to market resulting in a reduction in warrant liabilities in the balance sheet and an offsetting credit to change in fair value of warrant liabilities in the statement of operations in the amount of approximately $100,000. The remaining fair value of approximately $502,000 was credited to additional paid-in capital in the balance sheet. If the Company subdivides or combines its outstanding common stock, or issues additional shares of its capital stock in payment of a stock dividend in respect of its common stock or other securities, the number of shares issuable shall be proportionately increased or decreased, and the exercise price of the warrants shall be proportionately decreased or increased.

February 25, 2008 Transaction – On February 25, 2008, the Company sold to investors 7,500,000 shares of its common stock, 7,500,000 warrants to purchase shares of common stock exercisable at $0.70, and 3,000,000 warrants to purchase shares of common stock exercisable at $0.63. In addition, the Company issued to a placement agent 206,250 warrants to purchase shares of common stock at $0.70. The warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet under the caption "Warrant Liabilities". These warrants were originally classified as a liability because the February 2006 warrants contain an anti-dilution provision in the event of a subsequent dilutive issuance and the potential number of shares issuable exceeded the Company's authorized shares prior to the Charter Amendment. Changes in fair value were recognized as either a gain or loss in the consolidated statement of operations under the caption "Gain/loss on change in fair value of warrant liabilities". In the second quarter of 2008 the warrants were reclassified to equity as a result of the Charter Amendment. The Charter Amendment authorization of the additional shares coupled with a provision in the February 2006 warrants limiting the number of shares that can be issued to holders of the February 2006 warrants ensures that sufficient shares are available for issuance upon exercise of these warrants, thereby enabling them to be reclassified from a liability to equity. Through May 21, 2008, these warrants were marked to market resulting in a reduction in warrant liabilities in the balance sheet and an offsetting credit to change in fair value of warrant liabilities in the statement of operations in the amount of approximately $356,000. The remaining fair value of approximately $2,160,000 was credited to additional paid-in capital in the balance sheet. On December 26, 2008 the 3,000,000 warrants exercisable at $0.63 expired unexercised. If the Company pays a stock dividend or makes a distribution or combines shares of its common stock, then the number of shares issuable upon exercise of this warrant shall be proportionately adjusted such that the aggregate exercise price of this warrant remains unchanged.

Investor Relations Group – In May 2008 the Company entered into an agreement with Investor Relations Group ("IRG") for IRG to provide investor relations services to the Company in exchange for cash and warrants on a monthly basis. On September 30, 2008 the Company terminated the agreement under the provisions of the agreement. During the effective contract period IRG earned 39,000 warrants valued at approximately $3,000. The expense associated with these warrants was calculated using the Black-Scholes option-pricing model and charged to stock compensation expense. Assumptions used to value these warrants are included in the table provided below. The warrants are exercisable at $0.50 per share for a period of three years.

Cork Investments – On July 2, 2008 the Company issued 300,000 warrants to an investor in exchange for $20,000. The warrants are exercisable for common stock at $1.00 per share for a period of three years. The $20,000 was credited to additional paid in capital.

A summary of changes in the Debentures and Warrant Liabilities is as follows:

	Fair Value of Debentures	Fair Value of Warrant Liabilities	Total
Balance January 1, 2007	$ 5,137	$ 371	$ 5,508
Redemptions, at net carrying amount (1)	(556)		(556)
Conversions, related to waiver and exchange agreement dated March 20, 2007 at net carrying amount (2)	(5,315)		(5,315)
Redemptions paid in cash	(555)		(555)
Amortization of debt discount	257		257
Change in fair value of warrant liabilities	1,032	1,698	2,730
Balance December 31, 2007	$ —	$ 2,069	$ 2,069
Fair value assigned to February 4, 2008 transaction warrants upon issuance		987	987
Fair value assigned to February 25, 2008 transaction warrants upon issuance		2,337	2,337
Reclassification of February 4 and February 25, 2008 warrant liabilities to Stockholders' Deficit		(2,663)	(2,663)
Reclassification of February 2006 warrant liabilities to Stockholders' Deficit		(530)	(530)
Change in fair value of warrant liabilities		(2,145)	(2,145)
Balance December 31, 2008	—	55	55

(1) Represents payments in common stock of principal value of $481,000 and a fair value adjustment credit of $75,000. These amounts plus $29,000 of accrued interest were credited to common stock and additional paid in capital.

(2) Represents payments in common stock of principal value of $3,889,000, debt discount charge of $302,000 and a fair value adjustment credit of $1,728,000. These amounts plus $15,000 of accrued interest were credited to common stock and additional paid in capital.

The following table summarizes information with regard to outstanding warrants issued in connection with equity and debt financings and as compensation as of December 31, 2008. The 2001 Placement Agents, 7,988,082 of the February 2006, the February 4, 2008 Transaction and February 25, 2008 Transaction, Cork Investments and Investor Relations Group Warrants are classified as equity. The April 2004, August 2004 and 2,995,523 of the February 2006 Transaction Warrants do not meet the requirements of equity classification and are classified as liabilities:

Issued in Connection With	Number Issued	Exercise Price	Exercisable Date	Expiration Date
April 2004 Transaction (1)				
Investor Warrants	618,056	$ 3.23	April 7, 2004	April 7, 2009
August 2004 Transaction				
Investor Warrants	2,000,000	$ 4.20	February 13, 2005	August 12, 2009
Placement Agent Warrants	100,000	$ 4.20	February 13, 2005	August 12, 2009
February 2006 Transaction				
Investor Warrants Classified as Equity (2)	6,989,574	$ 0.50	August 15, 2006	August 14, 2011
Investor Warrants Classified as Warrant Liabilities (3)	2,995,523	$ 0.50	August 15, 2006	August 14, 2011
Placement Agent Warrants Classified as Equity (4)	998,508	$ 0.50	August 15, 2006	August 14, 2011
2001 Placement Agents	110,000	$ 3.50	February 1, 2002	February 1, 2012
February 4, 2008 Transaction				
$1.50 Investor Warrants	1,742,500	$ 1.50	August 3, 2008	February 4, 2012
$2.00 Investor Warrants	1,742,500	$ 2.00	August 3, 2008	February 4, 2012
$1.50 Placement Agent Warrants	8,400	$ 1.50	August 3, 2008	February 4, 2012
February 25, 2008 Transaction				
$0.70 Investor Warrants	7,500,000	$ 0.70	August 25, 2008	August 25, 2013
$0.70 Placement Agent Warrants	206,250	$ 0.70	August 25, 2008	August 25, 2013
Investor Relations Group	39,000	$ 0.50	September 30, 2008	September 30, 2011
Cork Investments	300,000	$ 1.00	July 2, 2008	July 2, 2011
Total	25,350,311			

(1) The exercise price of the warrants has been adjusted from the initial exercise price of $5.30 per share to $3.23 per share due to the subsequent issuance of equity related instruments.

(2) The exercise price of the warrants has been adjusted from the initial exercise price of $3.35 per share to $0.50 per share and an additional 2,548,430 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments.

(3) The exercise price of the warrants has been adjusted from the initial exercise price of $3.35 per share to $0.50 per share and an additional 5,946,354 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments.

(4) The exercise price of the warrants has been adjusted from the initial exercise price of $3.35 per share to $0.50 per share and an additional 849,477 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments.

7. FAIR VALUE OF CONVERTIBLE DEBT AND WARRANT LIABILITIES

Effective January 1, 2008, the Company adopted SFAS No. 157. SFAS No. 157 establishes a new framework for measuring fair value and requires fair value to be determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset and or liability in an orderly transaction between market participants. SFAS No. 157 establishes market or observable inputs as the preferred source of values, followed by assumptions based on hypothetical transactions in the absence of market inputs. The valuation techniques and disclosures required by SFAS No. 157 are determined by the following hierarchy:

Level 1 — Quoted prices for identical instruments in active markets.

Level 2 — Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3 — Significant inputs to the valuation model are unobservable.

The Company uses the Black-Scholes pricing model to calculate fair value of its warrant liabilities.

Key assumptions used to apply these models as of December 31, 2008 and December 31, 2007 are as follows:

	Warrants	
	December 31, 2008	December 31, 2007
Risk free interest rate	0.11 – 0.91%	3.16% – 3.34%
Expected life	0.27 years – 2.62 years	0.75 years – 3.62 years
Expected volatility of common share price	95%	95%
Common share price	$ 0.09	$ 0.70

As noted above, the Debentures were repaid in full on December 14, 2007. During 2007 the Company used the same binomial financial model as in 2006 to calculate the fair value of the Debentures. The last fair value calculation was performed as of September 30, 2007. The key assumptions used to apply this model on September 30, 2007 were as follows: risk free interest rate 4.12%, expected life 0.25 years, expected volatility of common share price 100% and common price per share $0.67. When the Company repaid the Debentures, the difference between the fair value of the Debenture, the final cash payment and the remaining debt discount were recorded in the consolidated statement of operations under the caption "Change in fair value of the convertible debt instrument."

Below is a summary of our fair value measurements at December 31, 2008:

Description	Value at 12/31/2008	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Warrant Liabilities	$ 55	$ —	$ 55	$ —

8. STOCKHOLDERS' (DEFICIT) EQUITY

The Company has raised capital through a number of debt and equity financing transactions. The following provides a chronological description of the Company's equity financings and certain warrants issued in connection with such equity financings.

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 approximately $2,221,000, net of approximately $17,000 of issuance costs through a private placement of securities (the "2001 Private Placement").

In connection with the 2001 Private Placement, the Company issued 339,200 and 350,100 warrants to purchase common stock at $6.50 and $5.00 per share, respectively. The Company valued the warrants at approximately $886,000, based on a deemed fair market value of the Company's common stock of $2.28 per share. These warrants expired unexercised in 2005.

As described in Note 6, in August 2001, the Company offered warrants to holders of its outstanding convertible notes as an inducement to convert prior to the maturity of the notes. Holders representing approximately $1,126,000 of the outstanding principal and accrued interest chose to convert at a conversion price of $2.00 per share and received 598,229 common shares and 562,801 warrants. These warrants have an exercise price of $6.50 per share and are immediately exercisable. The Company valued the warrants at approximately $503,000 based on a deemed fair market value of the Company's common stock of $2.28 per share. The value of the warrants has been recorded as a debt conversion expense. These warrants expired unexercised in 2005.

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

Public Offering – On December 13, 2001, the Company commenced a public offering of 1,428,572 shares of common stock, at a price to the public of $3.50 per share. The Company concluded the offering on June 30, 2002. The Company sold 185,999 shares of common stock in this offering for proceeds of approximately $602,000, net of approximately $49,000 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 10,000,000 shares of common stock at $1.00 per share,. As of December 31, 2002, the Company had sold 3,223,360 shares for proceeds of approximately $2,861,000, net of issuance costs of approximately $212,000 and stock subscription receivable of approximately $150,000, which related to shares purchased but for which payment had not been received as of December 31, 2002. This offering was closed on January 14, 2003, although subsequent to year end the Company sold an additional 1,088,000 shares for additional proceeds of approximately $1,070,000, net of approximately $18,000 of offering costs.

The Company compensated a registered investment adviser with respect to shares purchased by its clients. As of December 31, 2002, the adviser was entitled to receive 173,500 shares of common stock. The Company also agreed to compensate a finder registered under applicable law, and such finder's agents, for identifying qualified investors. As of December 31, 2002, one of the finder's agents was entitled to receive 750 shares of common stock. On January 14, 2003, the Company closed the 2002 Private Placement, at which point the Company agreed to issue the adviser an additional 2,500 shares, and the finder and its other agent an aggregate of 9,750 additional shares and approximately $3,000 in cash in connection with the shares sold subsequent to December 31, 2002 and through the closing date.

Shares placed by such registered adviser, finder and finder's agent were accounted for as offering costs and valued at $1.00 per share, consistent with the price paid for the shares placed in the offering. Such offering costs were netted against the proceeds of the 2002 Private Placement. Since none of the 174,250 shares had been issued as of December 31, 2002, the Company recorded the obligation to issue such shares as offering costs payable. The additional 12,250 shares issued in January 2003 were also valued at $1.00 per share and included in the approximately $18,000 offering costs recorded at the closing. These shares were subsequently issued in 2003.

During 2002, the Company also agreed to issue 2,100 shares of common stock to an employee for finding investors in connection with the 2002 Private Placement. None of the shares had been issued as of December 31, 2002. These shares were subsequently issued in 2003. Accordingly, the Company recorded the obligation to general and administrative expenses in the statement of operations in the amount of approximately $6,000. On January 14, 2003, the Company closed the 2002 Private Placement, at which point the Company agreed to issue such employee an additional 7,000 shares in connection with shares sold subsequent to December 31, 2002 and through the closing date. The Company recorded an additional obligation of approximately $27,000 to general and administrative expenses in 2003 representing the fair value of the additional 7,000 shares.

2002 Related Party Transaction – As discussed in Note 5, the Company agreed to issue 25,354 shares of common stock as payment for 2002 scientific advisory services. These shares were subsequently issued in 2003.

May 2003 Private Placement – In May 2003, the Company began a private placement of up to 2.5 million shares of common stock at $2.00 per share. As of the closing on July 15, 2003, the Company had sold 2,399,500 shares of common stock for proceeds of approximately $4,671,000, net of issuance costs of approximately $128,000. In connection with this offering the Company issued 109,613 common stock warrants (exercisable at $5.40 per share) to its placement agents.

The Company valued the warrants at approximately $261,000 using the Black-Scholes pricing model and recorded the warrant value as offering costs with a corresponding increase to additional paid-in capital. These warrants expired unexercised in 2006.

October 2003 "PIPE" Transaction – On October 2, 2003 the Company closed a private offering, structured as a Private Investment, Public Equity ("PIPE"), exempt from registration under Section 4(2) of the Securities Act of 1933, in which it sold to institutional investors 1,314,571 of the 1,428,571 offered shares of common stock at $3.50 per share for proceeds of approximately $4,041,000, net of issuance costs of approximately $559,000. In connection with this offering, the Company issued warrants (defined in Note 6 as the 2003 Investor Warrants and the 2003 Placement Agent Warrants). The Company allocated proceeds from this offering in the amounts of approximately $2,531,000 and approximately $191,000 representing the fair value of the 2003 Investor Warrants and the 2003 Placement Agent Warrants, respectively. Please see Note 6 "Convertible Debt, Warrant Liabilities and Warrants" for additional description of these warrants. These warrants expired unexercised in 2008.

April 2004 "PIPE" Transaction – On April 7, 2004, the Company closed a private equity offering, structured as a "PIPE" in which it sold to certain institutional investors 1,236,111 shares of common stock at $3.60 per share for proceeds of approximately $3,983,000, net of cash issuance costs of approximately $466,000. In connection with this offering, the Company issued warrants (defined in Note 6 as the April 2004 Investor Warrants and the April 2004 Placement Agent Warrants). The Company allocated proceeds from this offering in the amounts approximately $1,931,000, and approximately $154,000 representing the relative fair value of the April 2004 Investor Warrants and the April 2004 Placement Agent Warrants, respectively. Please see Note 6. "Convertible Debt, Warrant Liabilities and Warrants" for additional description of these warrants which are recorded as derivative liabilities. The placement agent warrants expired unexercised in 2007.

August 2004 "PIPE" Transaction – On August 12, 2004, the Company closed a private offering, structured as a "PIPE" in which it sold to certain institutional investors 2,000,000 shares of common stock at $3.00 per share for proceeds of approximately $5,515,000, net of cash issuance costs of approximately $485,000. In connection with this offering the Company issued warrants (defined in Note 6 as the August 2004 Investor Warrants and the August 2004 Placement Agent Warrants). The Company allocated proceeds from this offering in the amounts of approximately $4,786,000 and approximately $239,000 representing the fair value of the August 2004 Investor Warrants and the August 2004 Placement Agent Warrants, respectively. Please see Note 6. "Convertible Debt, Warrant Liabilities and Warrants" for additional description of these warrants, which are recorded as derivative liabilities.

In 2004, the stockholders approved an increase in the number of "undesignated" shares that the Company is authorized to issue by 5,000,000 such that the total number of authorized "undesignated" shares following the effectiveness of such increase is 10,000,000 at December 31, 2006. Currently 2,000,000 shares remain undesignated. 5,000,000 have been designated for Series A 12% Convertible Preferred Stock, of which, 1,742,500 have been authorized and are outstanding, 900,000 have been designated for Series B-1 Preferred Stock and 2,100,000 have been designated for Series B-2 Preferred Stock.

February 4, 2008 Private Placement. – On February 4, 2008, the Company closed a private placement begun in October 2007 of its Series A 12% Convertible Preferred Stock ("Series A Preferred") and related warrants. In this transaction, the Company sold units of securities at $1.00 per unit, each unit comprised of (i) one share of Series A Preferred, (ii) a warrant to purchase one share of common stock for $1.50, and (iii) a warrant to purchase one share of common stock for $2.00. Each share of the Series A Preferred is entitled to dividends at the rate of 12% per annum payable at the Company's option in cash or shares of common stock valued at the higher of $1.00 per share or 100% of the value weighted average price of the Company's share price for the 20 consecutive trading days prior to the applicable dividend payment date. Dividends are payable semi-annually on March 30 and September 30. The dividend paid on the initial dividend payment date is calculated from the date the Company deposited each subscription advance. The Company recorded dividends of approximately $239,000 in 2008 and issued 187,367 shares of common stock for dividend payments in 2008.

The shares of Series A Preferred are entitled to vote as a class with the Company's common stock and each share of Series A Preferred is convertible at any time to one share of common stock, subject to adjustment in the event of a stock dividend, stock split or combination, reclassification or similar event. The Company has the right to require conversion if the closing price of the common stock exceeds $3.00 for 15 consecutive trading days and a registration statement covering the resale of the shares of common stock issuable upon conversion of the Series A Preferred is then in effect. The Series A Preferred has no liquidation preferences with respect to common stock. Each warrant is exercisable solely for cash beginning August 3, 2008 and expires on February 4, 2012. The exercise price of each warrant is adjustable in the event of a stock split or stock combination, capital reorganization, merger or similar event.

As of December 31, 2007, the Company had received subscription advances of approximately $1,667,500 for the units of securities described above. In 2008, the Company received additional subscription advances of approximately $75,000 resulting in total gross proceeds of approximately $1,742,500. On February 4, 2008 the Company closed the private placement. The Company incurred approximately $52,000 of cash transaction costs resulting in net cash proceeds of approximately $1,690,500. In addition, the Company incurred approximately $3,000 of costs for warrants issued to placement agents. Proceeds of approximately $984,000 were allocated to investor warrants using the Black-Scholes method with the following assumptions as of February 4, 2008: risk free interest rate 2.51%, volatility 95%, fair market value of the company's common stock on February 4, 2008, and the share price on the closing date of the transaction of $0.59.

The warrants were determined to have the characteristics of derivative liabilities in accordance with SFAS No. 133, "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in a Company's Own Stock" and were originally accounted for as liabilities.

In the second quarter of 2008, these warrants liabilities were marked to market resulting in a change in fair value of warrant liabilities gain in the Statement of Operations of approximately $100,000 and as a consequence of the Charter Amendment increasing the Company's authorized shares of common stock were reclassified to Stockholders' Equity. Please see Note 6. "Convertible Debt, Warrant Liabilities and Warrants" for further explanation.

February 25, 2008 Offering – On February 25, 2008, the Company closed an offering in which it sold to investors (i) an aggregate of 7,500,000 shares of the Company's common stock at $0.50 per share, (ii) warrants , which expire on August 25, 2013, to purchase an aggregate of 7,500,000 share of the Company's common stock at an exercise price of $0.70 per share, and (iii) warrants, which expire on December 26, 2008, to purchase an aggregate of 3,000,000 shares of the Company's common stock at an exercise price of $0.63 per share. In addition, the Company issued to a placement agent warrants, which expire on August 25, 2013, to purchase 206,250 shares of the Company's common stock at an exercise price of $0.70. The warrants are exercisable beginning on August 25, 2008. The warrants provide for cashless exercise if at any time during the term of the warrants if there is no effective registration statement for the issuance or resale of the underlying warrant shares. The exercise price of each warrant is adjustable in the event of a stock split or stock combination, capital reorganization, merger or similar event. On December 26, 2008, the 3,000,000 warrants exercisable at $0.63 expired unexercised.

The Company received net proceeds of approximately $3,381,000 net of cash transaction costs of approximately $369,000. In addition the Company incurred approximately $56,000 of costs for warrants issued to a placement agent. Proceeds of approximately $2,281,000 were allocated to investor warrants using the Black-Scholes method with the following assumptions as of February 25, 2008.

	5 Year Warrants Exercisable at $0.70	4 Month Warrants Exercisable at $0.63
Risk Free Interest Rate	2.94%	2.13%
Volatility	95%	95%
Fair market value of the Company's common stock	$ 0.40	$ 0.40

The warrants were determined to have the characteristics of derivative liabilities in accordance with SFAS No. 133, "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in a Company's Own Stock" and were originally accounted for as liabilities.

In the second quarter of 2008, these warrants liabilities were marked to market resulting in a change in fair value of warrant liabilities gain in the Statement of Operations of approximately $356,000 and as a consequence of the Charter Amendment increasing the Company's authorized shares of common stock were reclassified to Stockholders' Equity. Please see Note

On July 2, 2008, the Company issued 300,000 warrants to Cork Investments in exchange for $20,000. The warrants are exercisable for common stock at $1.00 per share for a period of three years. The $20,000 was credited to additional paid in capital.

On November 19, 2008, the Company filed a registration statement on Form S-1 with the SEC for a rights offering to distribute, at no charge, subscription rights to purchase shares of its common stock to its existing holders. The registration statement has not yet become effective. On February 17, 2009 the Company announced that it has postponed its previously announced rights offering. Subject to market conditions, the Company will determine whether it will proceed with the rights offering after it files its Annual Report on Form 10-K with the Securities and Exchange Commission.

9. STOCK BASED COMPENSATION

Summary of Stock-Based Compensation Plans – In October 2001, the Company's Board of Directors adopted the Pro-Pharmaceuticals, Inc. 2001 Stock Incentive Plan (the "Incentive Plan"), which permits awards of incentive and nonqualified stock options and other forms of incentive compensation to employees and non-employees such as directors and consultants. The Board has 5,000,000 shares of common stock for issuance upon exercise of grants made under the Incentive Plan. Options granted under the Incentive Plan vest either immediately or over a period of up to three years, and expire 3 years to 10 years from the grant date. At December 31, 2008, 845,000 shares were available for future grant under the Incentive Plan.

In 2003, the stockholders approved the Pro-Pharmaceuticals, Inc. 2003 Non-Employee Director Stock Option Plan (the "Director Plan"), which permits awards of stock options to non-employee directors. The stockholders reserved 1,000,000 shares of common stock for issuance upon exercise of grants made under the Director Plan. At December 31, 2008, 762,750 shares were available for future grant under the Director Plan.

In addition, the Company has awarded 464,604 non-plan stock option grants to non-employees. The non-plan grants have vesting periods and expiration dates similar to those options granted under the Incentive Plan. 364,250 non-plan grants are outstanding at December 31, 2008.

Stock-based compensation expense for both employees and non-employees totaled approximately $697,000 and $616,000 in 2008 and 2007, respectively. Members of the Board of Directors receive stock options for each Board and Committee meeting attended. The options are typically granted in the year following service. The Company expenses the value of stock options as earned. In 2008 and 2007, Board members earned approximately 57,000 and 67,000 stock options respectively.

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

	2008	2007	Cumulative Period from Inception (July 10, 2000) to December 31, 2008
Risk-free interest rate	1.55% – 2.66%	3.41% – 4.45%	3.05%
Expected life of the options	5 years	5 years	3.99 years
Expected volatility of the underlying stock	95%	95%	92%
Expected dividend rate	None	None	None

As noted above, the fair value of stock options is determined by using the Black-Scholes option pricing model. In general employee options vest over a period of three years. Board of Director and other options vest upon grant. For all options granted since January 1, 2006 the Company has used five years as the option term which represents the estimated life of options granted. Prior to January 1, 2006 the Company used three years as the option term.

The volatility of the common stock is estimated using a combination of historical and implied volatility, as discussed in SEC Staff Accounting Bulletin No. 107. By using this combination, the Company is taking into consideration the historical realized volatility, as well as factoring in estimates of future volatility that the Company believes will differ from historical volatility as a result of the market performance of the common stock, the volume of activity of the underlying shares, the availability of actively traded common stock options, and overall market conditions.

The risk-free interest rate used in the Black-Scholes option pricing model is determined by reference to historical U.S. Treasury zero-coupon bond issues with terms equal to the expected terms of the equity awards. In addition, an expected dividend yield of zero is used in the option valuation model, because the Company does not expect to pay any cash dividends in the foreseeable future. Lastly, in accordance with SFAS No. 123(R), the Company is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. In order to determine an estimated pre-vesting option forfeiture rate, the Company used historical forfeiture data. This estimated forfeiture rate has been applied to all unvested options outstanding as of January 1, 2006 and to all options granted since January 1, 2006. Therefore, stock-based compensation expense is recorded only for those options that are expected to vest. At December 31, 2008, the Company does not anticipate any awards will be forfeited in the calculation of compensation expense due to the limited number of employees that receive stock option grants and the Company's historical employee turnover.

The following table summarizes the stock option activity in the stock based compensation plans from January 1, 2007 through December 31, 2008:

	Shares	Exercise Price Per Share	Weighted Average Exercise Price
Outstanding, January 1, 2007	3,059,354	$1.90 – 5.80	$ 3.60
Granted	1,048,500	0.63 – 1.01	0.94
Forfeited	(430,000)	1.01 – 5.80	2.82
Outstanding, December 31, 2007	3,677,854	$ 0.63 –4.05	$ 2.93
Granted	1,130,000	0.38 – 0.44	0.44
Forfeited	(101,354)	2.96 – 4.05	3.64
Outstanding, December 31, 2008	4,706,500	$0.38 – 4.05	$ 2.32

The following tables summarize information about stock options outstanding at December 31, 2008:

	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
$0.38 – $0.70	1,355,000	4.07	$ 0.48	1,309,667	$ 0.48
$1.01 – $2.70	955,500	3.69	$ 1.32	575,503	$ 1.52
$2.92 – $4.05	2,396,000	3.80	$ 3.75	2,301,003	$ 3.75
	4,706,500	3.86	$ 2.32	4,186,173	$ 2.42

The weighted-average grant-date fair values of options granted during 2008 and 2007 were $0.32, and $0.70, respectively. As of December 31, 2008 there were 520,327 of unvested options which will vest as follows: 307,663 in 2009 and 212,664 in 2010. Total expected unrecognized compensation cost related to such unvested options is approximately $208,000, which is expected to be recognized over a weighted–average period of 0.7 years. As of December 31, 2008, there was no aggregate intrinsic value of outstanding options based on the Company's closing common stock price of $0.09. As of December 31, 2008 there was no aggregate intrinsic value of outstanding fully vested options and exercisable options, based on the Company's closing common stock price of $0.09.

No options were exercised during the years ended December 31, 2008 and 2007. No cash has been received from the exercise of employee stock options during the cumulative period from inception to December 31, 2008. The intrinsic value of options exercised for the cumulative period from inception was $74 resulting from the cashless exercise of options in October 2003.

During the years ended December 31, 2008 and 2007, and the cumulative period from inception to December 31, 2008, 1,293,317, 485,169 and 4,186,173 stock options, net of forfeitures, vested respectively. The total fair value of options vested during the years ended December 31, 2008 and 2007 and the cumulative period from inception to December 31, 2008 was approximately $714,000, $491,000 and $6,282,000, respectively.

Other Stock Based Compensation Transactions – During 2001, the Company entered into a consulting agreement with a non-employee, who was also a Board member and former member of the Audit Committee, pursuant to which the Company granted 200,000 options to purchase common stock at an exercise price of $3.50 in consideration for services to be performed. At the time of issuance, these options were valued at approximately $239,000 based on a deemed fair market value of the Company's common stock of $2.28 per share. A portion of these options vested during fiscal years 2001 and 2002, and the remainder vested in 2003. The Company recorded fair value adjustments of approximately $28,000 and $16,000 related to the unvested consultant options during 2003 and 2002, respectively. Total expense for the years ended December 31, 2003, 2002 and 2001 related to these options was approximately $71,000, $64,000 and $147,000, respectively.

In March 2002, the Company entered into a second agreement with the same non-employee, by which the Company granted 2,000 options a month to purchase common stock at an exercise price of $3.50 in consideration for monthly consulting services. On November 11, 2002 such agreement was superseded 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 at approximately $11,000 using the Black-Scholes option-pricing model, based on a grant date fair value of the Company's common stock of $2.16 per share. During 2002, the Company recorded an approximately $41,000 charge to stock compensation expense related to the 20,000 options that vested during the year. As of December 31, 2002, the Company had deferred compensation of approximately $11,000 that related to the remaining unvested options, which was recognized in 2003.

In June 2003, the Company entered into a third agreement with the same non-employee, by which the Company granted 24,000 options effective retroactively to March 1, 2003, which vest at a rate of 2,000 options per month as services are performed. These options were valued at approximately $33,000 using the Black-Scholes option-pricing model, based on a fair market value of the Company's common stock of $3.50 per share. The consulting arrangement was concluded on March 1, 2004. The Company recorded fair value adjustments of approximately ($2,000) and $21,000 related to the unvested consultant options during 2004 and 2003, respectively. Total expense for the years ended December 31, 2004 and 2003 related to these options was approximately $17,000 and $40,000, respectively.

In January 2003, the Company granted 100,000 options at an exercise price of $3.50 to a Board member for consulting services unrelated to services performed as a director. One-third of the options vested immediately and the balance vests in equal amounts on the first and second anniversaries of the award. The options were valued at approximately $156,000 using the Black-Scholes option-pricing model, based on a fair market value of the Company's common stock of $2.80 per share. The consulting services were completed and the consulting arrangement was concluded as of March 31, 2004. The Company recorded fair value adjustments of approximately $4,000 and $82,000 related to the unvested consultant options during 2004 and 2003, respectively. Total expense for the years ended December 31, 2004 and 2003 related to these options was approximately $51,000 and $193,000, respectively.

In May 2003, the Company granted 10,000 options at an exercise price of $3.50 to a new member of the Scientific Advisory Board. One-half of the options vested immediately and the balance vests on the second anniversary. These options were valued at approximately $16,000 using the Black-Scholes option-pricing model based on a fair market value of the Company's common stock of $2.80 per share. The Company recorded fair value adjustments of approximately $2,000 and $6,000 related to the unvested consultant options during 2004 and 2003, respectively. Total expense for the years ended December 31, 2004 and 2003 related to these options was approximately $5,000 and $13,000, respectively.

In September 2003, the Company granted 25,000 options each to a Board member and to a member of the Scientific Advisory Board for consulting services. The options were exercisable immediately at $4.05 per share. These options were valued using the Black-Scholes option-pricing model based on a grant date fair value of the Company's common stock of $2.44 per share. The Company recorded an approximately $122,000 charge to stock compensation expense in 2003 related to these awards.

In October 2003, in connection with the resignation of its former Chief Financial Officer, the Company accelerated the vesting on 100,000 options granted to such officer in September 2003 at an exercise price of $4.05, which was equal to the fair market value of the common stock on the date of grant. As the fair market value of the common stock was $4.45 per share at the time the vesting was accelerated, the Company recorded an approximately $40,000 charge to stock compensation expense as required under APB No. 25 and related interpretations. Also, in October 2003, such officer exercised on a cashless basis 50,000 options at an exercise price of $2.97 per share resulting in the issuance of 16,629 shares. As the fair market value of the Company's common stock on the date of exercise was $4.45 per share, the Company recorded a charge of approximately $74,000 to stock compensation expense in 2003 related to the exercise of these options.

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

In April 2004, the Company entered into an agreement with an investor relations firm. The agreement obligated the Company to pay a monthly retainer and issue options at a rate of 5,000 per month up to a maximum of 60,000 options exercisable at $5.16 per share as services are performed. During 2004, 45,000 options were earned but not issued. During 2005 15,000 options were earned and the full 60,000 options were issued. The Company recorded approximately $67,000 in 2004 and $14,000 in 2005 as stock compensation expense related to this agreement. The stock compensation expense was determined based on the fair market value of the options when the options were earned. The options were exercisable immediately and expired three years from the agreement date. These options expired unexercised in 2007.

In November 2005, the Company issued 5,000 options to a member of the Scientific Advisory Board for consulting services. The options were exercisable immediately at $2.61 per share. These options were valued using the Black-Scholes option-pricing model based on a grant date fair value of the Company's common stock of $1.35 per share which was the fair market value at the date of the grant. The Company recorded an approximately $7,000 charge to stock compensation expense in 2005 related to this award.

In March 2006 the Company issued 15,000 options to a consultant for consulting services. 5,000 of the options were exercisable immediately, 5,000 options vest in March 2008 and 5,000 options vest in March 2009. The options are exercisable at $3.75 per share. These options were valued using the Black-Scholes option-pricing model based on a grant date fair value of the Company's common stock of $2.20 per share which was the fair market value at the date of the grant. The Company is recording an approximately $33,000 charge to stock compensation expense over the vesting period of the options.

In December 2007, the Company issued 5,000 options to a consultant for consulting services. The options were exercisable immediately at $0.63 per share. These options were valued using the Black-Scholes option-pricing model based on a grant date fair value of the Company's common stock of $0.46 per share which was the fair market value at the date of the grant. The Company recorded an approximately $2,000 charge to stock compensation expense in 2007 related to this award.

In April 2008, the Company issued 48,000 options to a consultant for consulting services. The options were exercisable immediately at $0.44 per share. These options were valued using the Black-Scholes option-pricing model based on a grant date fair value of the Company's common stock of $0.39 per share which was the fair market value at the date of the grant. The Company recorded an approximately $15,000 charge to stock compensation expense in 2008 related to this award.

10. EARNINGS PER SHARE

Basic loss per share is based on the weighted-average number of common shares outstanding during each period. Diluted loss per share is based on basic shares as determined above plus the incremental shares that would be issued upon the assumed exercise of in-the-money stock options and warrants using the treasury stock method and convertible debenture using the if-converted method. The computation of diluted net loss per share does not assume the issuance of common shares that have an anti-dilutive effect on net loss per share. For the years ended December 31, 2008 and 2007, all stock options and warrants were excluded from the computation of diluted net income (loss) per share. During the year ended December 31, 2007 all potential shares related to the conversion of the convertible debenture were excluded from the computation of diluted net income (loss) per share since to include them would be anti-dilutive and as of December 31, 2007 the convertible debenture has been repaid in full. Dilutive shares which could exist pursuant to the exercise of outstanding stock options and warrants at December 31, 2008 and 2007 totaled approximately 30,056,811 and 11,954,561, respectively. These amounts were not included in the calculation because their affect would have been anti-dilutive.

	2008	2007
Net Loss Applicable to Common Stock-basic and diluted	$ (3,390)	$ (9,433)
Weighted average common shares outstanding-basic and diluted	46,815,250	38,980,548
Net Loss Per Share-basic and diluted	$ (0.07)	$ (0.24)

11. COMMITMENTS AND CONTINGENCIES

Lease Commitments – The Company leases its facility under a non-cancelable operating lease that expires in August 2011. In connection with the operating lease, the Company has issued a letter of credit which is secured by restricted cash on deposit with the bank as a security deposit of approximately $59. Rent expense under these operating leases was approximately $250,000 and $259,000, for the years ended December 2008 and 2007, respectively.

Future minimum payments under this lease as of December 31, 2008 are approximately as follows:

Year ended December 31,	
2009	$267
2010	276
2011	168
Total lease payments	$711

Contingency – In January 2004, David Platt, Ph.D., the Company's former Chairman and Chief Executive Officer, filed a lawsuit in Massachusetts Superior Court against GlycoGenesys, Inc. for various claims including breach of contract. GlycoGenesys asserted counterclaims against the Company and Dr. Platt alleging tortious interference, misappropriation of proprietary rights, defamation and unfair competition, and sought monetary damages and injunctive relief related to the Company's intellectual property. Prospect Therapeutics, Inc. (formerly known as Marlborough Research and Development, Inc.) purchased certain assets including this lawsuit from the GlycoGenesys bankruptcy estate and continues prosecuting the counterclaims against the Company and Dr. Platt. Concluding that certain disputes of fact could not be resolved as a matter of law, the Court on May 27, 2008 denied the Company's motion for summary judgment. Prospect Therapeutics informed the Court that it does not seek monetary damages other than recovery of attorney fees. The trial began on March 10, 2009. The Company and Dr. Platt believe the counterclaims are without merit and intend to contest them vigorously. Additionally, the Company believes that any impact on the financial statements is neither probable nor reasonably estimable and therefore no amounts have been recorded as of December 31, 2008.

The Company's Board of directors authorized the indemnification of Dr. Platt for the expenses of his defense of the counterclaims. In the year ended December 31, 2008, Company incurred no expenses in connection with this defense. Through December 31, 2008, the Company has incurred cumulative expenses of approximately $438,000 in connection with this defense.

In January 2005, the Company filed a request with the U.S. Patent and Trademark Office for an inter partes re-examination of U.S. Patent No. 6,680,306 ("306") now owned by Prospect Therapeutics, Inc. because the Company believes that the invention claimed in this patent is anticipated by other inventions (technically, "prior art"), including the Company's U.S. Patent No. 6,645,946 for DAVANAT ® .. The Patent Office has agreed with the Company's argument throughout the re-examination that all claims stated in the '306 patent are anticipated by prior art. The Company believes that the actions of the Patent Office support the Company's position that the invention claimed in the DAVANAT ® patent is prior art relative to the '306 patent.

On January 30, 2008, Custom Equity Research, Incorporated (d/b/a Summer Street Research Partners) ("Summer Street") filed a lawsuit against the Company in the Superior Court of the Commonwealth of Massachusetts, alleging claims for breach of contract, declaratory judgment and unjust enrichment arising out of an engagement letter under which Summer Street agreed to provide institutional investment placement services to the Company. Summer Street claims it is entitled to a placement fee for each placement made during the term of the agreement and for each issuance of securities made or agreed to be made by the Company from October 17, 2007 through November 16, 2008. The Company initially responded to the lawsuit with a motion to dismiss, which the Court denied on June 23, 2008, finding that the letter agreement was ambiguous with respect to Summer Street's entitlement to compensation. The Court also denied Summer Street's motion for a prejudgment attachment and trustee process, preliminarily finding that Summer Street was not likely to prevail on any of its claims. On July 3, 2008, the Company filed its answer, denying Summer Street's material allegations. No trial date has been set for this matter. The Company believes the lawsuit is without merit and intends to contest it vigorously. Additionally, the Company believes that any impact on the financial statements is neither probable nor reasonably estimable and therefore no amounts have been recorded as of December 31, 2008.

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

12. INCOME TAXES

The Company adopted the provisions of FIN 48 on January 1, 2007. As a result of the implementation of FIN 48, the Company recognized approximately a $1,031 increase in the liability for unrecognized tax benefits, which was accounted for as a reduction to the January 1, 2007, related deferred tax asset and the corresponding valuation allowance.

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

	2008	2007
Operating loss carryforwards	$ 15,436	$ 14,187
Tax credit carryforwards	165	82
Other temporary differences	(20)	19
	15,581	14,288
Less valuation allowance	(15,581)	(14,288)
Net deferred tax asset	$ —	$ —

The primary factors affecting the Company's income tax rates were as follows:

	2008	2007
Tax benefit at U.S. statutory rates	(34.0%)	(34.0%)
State tax benefit	(6.2%)	(6.2%)
Permanent differences	(13.6%)	(12.1%)
Research and development credits	(2.5%)	(0.8%)
Valuation allowance	56.3%	28.9%
	0%	0%

As of December 31, 2008, the Company has federal and state net operating loss carryforwards totaling $40,556,000 and $31,203,000, respectively, which expire through 2028. In addition, the Company has federal and state research and development credits of $110,000 and $52,000 and investment tax credits of approximately $4,000, which expire through 2028. Changes in the Company's ownership, as defined by Section 382 of the Internal Revenue Code, could limit the amount of carryforwards which may be realized in future periods. Because of the Company's limited operating history and its recorded losses, management has provided, in each of the last two years, a 100% allowance against the Company's net deferred tax assets.

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits for the year:

Beginning Uncertain Tax Benefits	$1,082
Current Year—Increase	—
Current Year—Decrease	—
Current Year—Interest/Penalties	—
Settlements	—
Expire Statutes	—
Ending Uncertain Tax Benefits	$1,082

Included in the balance of unrecognized tax benefits at December 31, 2008, are $1,082 of tax benefits $890 of which, would affect the effective tax rate. We have not recognized an adjustment to the deficit accumulated during the development stage for unrecognized tax benefits because we have recorded a full valuation allowance against net operating loss carry forwards.

Since the Company's net deferred tax assets and the unrecognized tax benefits determined under FIN 48 would not result in a cash payment, the Company has not accrued for any interest and penalties relating to these unrecognized tax benefits. Should the Company incur interest and penalties related to income taxes, those amounts would be included in income tax expense.

Total amounts of unrecognized tax benefits are not expected to significantly increase or decrease within 12 months of the reporting date.

The Company is subject to taxation in the U.S. and various states. Based on the history of net operating losses all jurisdictions and tax years are open for examination until the operating losses are utilized or the statute of limitations expires.

13. SUBSEQUENT EVENTS

On February 12, 2009, the Company entered into a securities purchase agreement pursuant to which it agreed to issue and sell to an investor at two or more closings, (i) 3,000,000 shares its Series B convertible preferred stock with an aggregate stated value of $6.0 million and convertible into 12,000,000 shares of common stock and (ii) warrants to purchase 36,000,000 shares of common stock. On February 12, 2009, the initial closing date under the purchase agreement, the Company issued and sold (i) 900,000 shares of Series B-1 preferred stock convertible into 3,600,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 1,800,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 1,800,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 7,200,000 shares of common stock. Net proceeds from the closing of the initial tranche were approximately $1.5 million. At one or more subsequent closings under the purchase agreement, the Company has agreed to issue: (i) up to 2,100,000 shares of Series B-2 preferred stock convertible into 8,400,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase up to 4,200,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase up to 4,200,000 shares of common stock; and (iv) Class B warrants exercisable to purchase up to 16,800,000 shares of common stock for an aggregate purchase price of up to $4.2 million (less fees and expenses). The Purchase Agreement contains customary representations, warranties, covenants and closing conditions. Upon any subsequent closing under the Purchase Agreement, such representations and warranties must be accurate in all material respects, such covenants must have been performed and such closing conditions must have been satisfied or waived, including without limitation no material adverse effect having occurred with respect to the Company prior to any subsequent closing. The Company expects the subsequent closings under the purchase agreement to occur on or before June 15, 2009 (the "Final Purchase Date"). However, if Purchaser has purchased 350,000 or more shares of Series B-2 preferred stock (with a stated amount of $700,000 or more) by May 13, 2009, then the Final Purchase Date will be automatically extended until August 11, 2009.

The terms and conditions of the Series B-1 preferred stock and Series B-2 preferred stock are identical in all respects except with respect to the Company's redemption rights. Such holders will be entitled to receive cumulative dividends at the rate of 12% per share per annum (compounding monthly) payable quarterly which may, at the Company's option, be paid in cash or common stock valued per share at 100% of the value weighted average price per share for the 20 consecutive trading days prior to the applicable dividend payment date; provided, however, that there is an effective registration statement covering the shares of the Company's common stock (for dividend payments due on September 30, 2009 or later) and the issuance of the shares does not trigger anti-dilution provisions under other agreements to which the Company is a party. If the Company does not pay any dividend on the Series B preferred stock, dividends will accrue at the rate of 15% per annum (compounding monthly). Each share of Series B preferred stock is convertible into four shares of common stock at the conversion price of $0.50 per share (subject to customary anti-dilution protection adjustments) at the option of (i) the holder, at any time and (ii) the Company, at any time after February 12, 2010 (and upon 10 days notice) if the common stock is quoted at or above $1.50 for 15 consecutive trading days and an effective registration statement regarding the underlying shares of common

stock is in effect (subject to certain monthly volume limits). Upon notice of not less than 30 trading days, a holder of Series B preferred Stock may require the Company to redeem, in whole or in part, (i) the Series B-1 preferred stock at any time on or after March 12, 2010 and (ii) the Series B-2 preferred stock at any time on or after two years from the date of issuance of such shares of Series B-2 preferred stock. The redemption price will be equal to the sum of the stated value of the Series B preferred stock, plus all accrued but unpaid dividends thereon, as of the redemption date. If the Company fails for any reason to pay the redemption price in cash on the redemption date, then the holders of the Series B preferred stock requesting redemption may, at their sole option, automatically convert their shares of Series B preferred stock into a promissory note bearing interest at the rate of 15% per year and secured by a lien on all of the Company's assets. So long as any shares of the Series B preferred stock remain outstanding, the Company is also subject to restrictions limiting, among other things, amendments to the Company's organizational documents; the purchase or redemption of the Company's capital stock; mergers, consolidations, liquidations and dissolutions; sales of assets; dividends and other restricted payments; investments and acquisitions; joint ventures, licensing agreements, exclusive marketing and other distribution agreements; issuances of securities; incurrence of indebtedness; incurrence of liens and other encumbrances and issuances of any common stock equivalents.

Each Class A-1 warrant, Class A-2 warrant and Class B warrant is exercisable at $0.50 per share of common stock (subject to customary anti-dilution protection adjustments) at any time on or after the date of issuance until the fifth anniversary of the respective issue date. The Company may, upon 30 days notice and so long as an effective registration statement regarding the underlying shares of common stock is in effect, issue a termination notice with respect to (i) each Class A-1 warrant on any trading day on which the market value of the common stock for each of the 15 previous trading days exceeded $1.25 per share (subject to customary anti-dilution protection adjustments) and (ii) each Class A-2 warrant on any trading day on which the market value of the common stock for each of the 15 previous trading days exceeded $1.75 per share (subject to customary anti-dilution protection adjustments).

The Company is required to use its commercially reasonable efforts to (i) as soon as reasonably possible, register for resale under the Securities Act of 1933 all shares of common stock underlying (x) the Series B preferred stock (including shares of common stock issued as a dividend thereon) and (y) the warrants issued under the Purchase Agreement and (ii) keep the registration statement effective for a period of ninety (90) days or until such registrable securities have been sold. The Company has agreed to pay all registration expenses incurred by it in connection with the registration.

On February 12, 2009, David Platt, Ph.D., resigned as Chairman of the Company's Board of Directors and as Chief Executive Officer of the Company and each of Dale H. Conaway, D.V.M, Henry J. Esber, Ph.D., and James T. Gourzis, M.D., resigned from the Company's Board of Directors. Theodore Zucconi, Ph.D., who is a director of the Company, was named Chief Executive Officer and President of the Company. Also, on February 12, 2009, James C. Czirr, Rod Martin, Gilbert Amelio, Ph.D., and Peter Traber, M.D., were elected to the Company's Board of Directors.

Also on February 12, 2009, in connection with the transactions described above, the Company entered into a Separation Agreement (the "Separation Agreement") with its former Chief Executive Officer, David Platt, Ph.D. In connection with the termination of Dr. Platt's employment and as contemplated by his Employment Agreement dated as of January 2, 2004 (the "Employment Agreement"), the Separation Agreement will govern the terms of Dr. Platt's termination of employment.

The Separation Agreement provides that the Company shall continue to pay Dr. Platt his current salary at the monthly rate of $21,667 for 24 months and that the Company may defer payment of a portion of such salary amounts above $10,000 per month (so long as Dr. Platt does not receive payments of less than the salary payments being made to the Company's Chief Executive Officer). However, all deferred amounts will continue to accrue and will be payable upon the earlier to occur of (i) the Company receiving a

minimum of $4.0 million of funding after February 12, 2009, or (ii) February 12, 2011. The Company also agreed to continue to (i) provide health and dental insurance benefits to Dr. Platt, until the first to occur of February 12, 2011 or the date Dr. Platt and his family become eligible to receive health and dental insurance benefits under the plans of a subsequent employer and (ii) make the current monthly lease payments on his automobile until February 12, 2011.

The Company may defer a severance payment of $1.0 million due to Dr. Platt under his Employment Agreement until the occurrence of any of the following events (each, a "Milestone Event"): (i) approval by the Food and Drug Administration of a new drug application ("NDA") for any drug candidate or drug delivery candidate based on the DAVANAT ® technology (whether or not such technology is patented); (ii) consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50.0 million of royalty revenue to the Company; or (iii) the renewed listing of our securities on a national securities exchange and the achievement of a market capitalization of $100.0 million. Payment upon the events referred to in clause (i) and (iii) may be deferred up to six months, and if the Company has insufficient cash at the time of any of such events, it may issue Dr. Platt a secured promissory note for such amount. If the Company files a voluntary or involuntary petition for bankruptcy, whether or not a Milestone Event has occurred, such event shall trigger the Company's obligation to pay the $1.0 million with the result that Dr. Platt may assert a claim for such obligation against the bankruptcy estate.

The Separation Agreement also provides that upon (i) the consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50.0 million of royalty revenue, the Company will grant Dr. Platt fully vested cashless-exercise stock options exercisable to purchase at least 300,000 shares of the Company's common stock for ten (10) years at an exercise price not less than the fair market value of the Common Stock determined as of the date of the grant ("Cashless Stock Options") and (ii) approval by the FDA of the first NDA for any of the Company's drug or drug delivery candidates based on DAVANAT ® technology (whether or not such technology is patented), the Company will grant Dr. Platt fully vested Cashless Stock Options to purchase at least 500,000 shares of common stock.

PRO-PHARMACEUTICALS, INC.

(A Development-Stage Company)

CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

	March 31, 2009	December 31, 2008
	(in thousands)	
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 861	$ 318
Prepaid expenses and other current assets	65	62
Total current assets	926	380
PROPERTY AND EQUIPMENT – NET	33	40
RESTRICTED CASH	59	59
INTANGIBLE ASSETS – NET	221	225
TOTAL ASSETS	$ 1,239	$ 704
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Accounts payable	$ 805	$ 447
Accrued expenses	379	380
Accrued dividends payable	134	52
Advances received for equity consideration	—	200
Total current liabilities	1,318	1,079
WARRANT LIABILITIES	1,121	55
OTHER LONG-TERM LIABILITIES	444	39
Total liabilities	2,883	1,173
COMMITMENTS AND CONTINGENCIES (NOTE 7)		
SERIES B-1 12% REDEEMABLE CONVERTIBLE PREFERRED STOCK; 900,000 shares authorized, 900,000 shares issued and outstanding at March 31, 2009, none issued and outstanding at December 31, 2008, redemption value: $1,800,000	459	—
SERIES B-2 12% REDEEMABLE CONVERTIBLE PREFERRED STOCK; 2,100,000 shares authorized, none issued and outstanding at March 31, 2009 and December 31, 2008	—	—
STOCKHOLDERS' DEFICIT:		
Series A 12% Convertible Preferred Stock; 5,000,000 shares authorized, 1,742,500 issued and outstanding at March 31, 2009 and December 31, 2008	704	704
Common stock, $0.001 par value; 200,000,000 shares authorized, 50,252,159 and 48,052,159 issued and outstanding at March 31, 2009 and December 31, 2008 respectively;	50	48
Additional paid-in capital	38,298	37,329
Deficit accumulated during the development stage	(41,155)	(38,550)
Total stockholders' deficit	(2,103)	(469)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 1,239	$ 704

See notes to unaudited condensed consolidated financial statements.

PRO-PHARMACEUTICALS, INC.

(A Development-Stage Company)

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

	Three Months Ended March 31,		Cumulative Period from Inception (July 10, 2000) to March 31, 2009
	2009	2008	
	(in thousands except share and per share data)		
OPERATING EXPENSES:			
Research and development	$ 153	$ 422	$ 17,508
General and administrative	1,581	990	27,588
Total operating expenses	1,734	1,412	45,096
Total operating loss	(1,734)	(1,412)	(45,096)
OTHER INCOME AND (EXPENSE):			
Interest income	1	13	768
Interest expense	—	—	(4,451)
Change in fair value of convertible debt instrument	—	—	(3,426)
Change in fair value of warrant liabilities	(862)	(587)	11,299
Total other income (expense)	(861)	(574)	4,190
NET LOSS	$ (2,595)	$ (1,986)	$ (40,906)
SERIES A 12% CONVERTIBLE PREFERRED STOCK DIVIDEND	(52)	(83)	(291)
SERIES B-1 12% REDEEMABLE CONVERTIBLE PREFERRED STOCK DIVIDEND	(30)	—	(30)
SERIES B-1 REDEEMABLE CONVERTIBLE PREFERRED STOCK ACCRETION	(182)	—	(182)
NET LOSS APPLICABLE TO COMMON STOCK	$ (2,859)	$ (2,069)	$ (41,409)
NET LOSS PER COMMON SHARE – BASIC AND DILUTED	$ (0.06)	$ (0.05)	
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING – BASIC AND DILUTED	48,165,492	43,331,825	

See notes to unaudited condensed consolidated financial statements.

PRO-PHARMACEUTICALS, INC.

(A Development-Stage Company)

CONDENSED CONSOLIDATED STATEMENT OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT

THREE MONTHS ENDED MARCH 31, 2009 (UNAUDITED)
(in thousands except share data)

	Series B-1 12% Redeemable Convertible Preferred Stock		Stockholders' Deficit						
			Series A 12% Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Deficit Accumulated During the Development Stage	Total Stockholders' Deficit
	Number of Shares	Amount	Number of Shares	Amount	Number of Shares	Amount			
Balance at December 31, 2008	—	$ —	1,742,500	$ 704	48,052,159	$ 48	$ 37,329	$ (38,550)	$ (469)
Cumulative effect of adoption of new accounting principle							(458)	254	(204)
Issuance of Series B-1 Redeemable Convertible Preferred Stock and warrants, net of cash issuance costs of $300	900,000	277					1,223		1,223
Accretion of Series B-1 Redeemable Convertible Preferred Stock to redemption value		182						(182)	(182)
Series A 12% Convertible Preferred dividend								(52)	(52)
Series B-1 Redeemable Convertible Preferred dividend								(30)	(30)
Issuance of restricted common stock					2,000,000	2	(2)		—
Issuance of common stock upon exercise of options					200,000				—
Stock-based compensation expense							206		206
Net loss								(2,595)	(2,595)
Balance at March 31, 2009	900,000	$ 459	1,742,500	$ 704	50,252,159	$ 50	$ 38,298	$ (41,155)	$ (2,103)

See notes to unaudited condensed consolidated financial statements

PRO-PHARMACEUTICALS, INC.

(A Development-Stage Company)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Three Months Ended March 31,		Cumulative Period from Inception (July 10, 2000) to March 31, 2009
	2009	2008	
		(in thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$(2,595)	$(1,986)	$ (40,906)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	11	15	499
Stock-based compensation expense	206	81	2,991
Non-cash interest expense	—	—	4,279
Change in fair value of convertible debt instrument	—	—	3,426
Change in fair value of warrant liabilities	862	587	(11,299)
Write off of intangible assets	—	—	181
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(3)	(135)	(62)
Accounts payable and accrued expenses	357	(62)	1,302
Other long-term liabilities	405	1	444
Net cash used in operating activities	(757)	(1,499)	(39,145)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property and equipment	—	—	(421)
Change in restricted cash	—	1	(59)
Increase in patents costs and other assets	—	—	(404)
Net cash provided by (used in) investing activities	—	1	(884)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from issuance of common stock and warrants	—	3,381	28,690
Net proceeds from issuance of Series A 12% Convertible Preferred Stock and related warrants	—	53	1,691
Net proceeds from issuance of Series B-1 12% Redeemable Convertible Preferred Stock and related warrants	1,500	—	1,500
Net proceeds from issuance of convertible debt instruments	—	—	10,621
Repayment of convertible debt instruments	—	—	(1,641)
Proceeds from issuance of common stock warrants	—	—	20
Proceeds from (repayments of) shareholder advances	(200)	—	9
Net cash provided by financing activities	1,300	3,434	40,890
NET INCREASE IN CASH AND CASH EQUIVALENTS	543	1,936	861
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	318	1,319	—
CASH AND CASH EQUIVALENTS, END OF PERIOD	$ 861	$ 3,255	$ 861
SUPPLEMENTAL DISCLOSURE – Cash paid for interest	$ —	$ —	$ 114
NONCASH FINANCING ACTIVITIES:			
Issuance of equity warrants in connection with equity offerings	$ 1,223	$ —	$ 2,395
Conversion of accrued expenses into common stock	—	—	303
Cashless exercise of stock options	24	—	98
Conversion and redemptions of convertible notes and accrued interest into common stock	—	—	12,243
Conversion of extension costs related to convertible notes into common stock		—	171
Payment of Series A12% Convertible Preferred Stock dividend in common stock	—	—	187
Dividends payable on preferred stock	134		186
Issuance of warrants to induce conversion of notes payable	—	—	503
Issuance of stock to acquire Pro-Pharmaceuticals-NV	—	—	107

See notes to unaudited condensed consolidated financial statements.

PRO-PHARMACEUTICALS, INC.

(A DEVELOPMENT-STAGE COMPANY)

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation

The unaudited condensed consolidated financial statements as reported in the Company's Quarterly Report on Form 10-Q reflect all adjustments which are, in the opinion of management, necessary to present fairly the financial position of Pro-Pharmaceuticals, Inc. (the "Company") as of March 31, 2009 and the results of its operations for the three months ended March 31, 2009 and 2008 and the cumulative period from inception (July 10, 2000) through March 31, 2009, the statement of stockholders' deficit for the three months ended March 31, 2009 and its cash flows for the three months ended March 31, 2009 and 2008 and for the cumulative period from inception (July 10, 2000) to March 31, 2009. All adjustments made to the interim financial statements include all those of a normal and recurring nature. The results for interim periods are not necessarily indicative of results which may be expected for any other interim period or for the full year.

The unaudited condensed consolidated financial statements of the Company should be read in conjunction with its Annual Report on Form 10-K for the year ended December 31, 2008.

The financial statements of the Company have been prepared assuming that the Company will continue as a going concern. As shown in the unaudited condensed consolidated financial statements, the Company incurred net losses of approximately $41.4 million for the cumulative period from inception (July 10, 2000) through March 31, 2009. The Company's net losses have resulted principally from costs associated with (i) research and development expenses, including clinical trial costs, (ii) general and administrative activities and (iii) the Company's financing transactions including interest and the costs related to fair value accounting for the Company's convertible debt instrument and warrant liabilities. As a result of planned expenditures for future research, discovery, development and commercialization activities and potential legal cost to protect its intellectual property, the Company expects to incur additional losses and use additional cash in its operations for the foreseeable future. From inception (July 10, 2000) through March 31, 2009, the Company has raised a net total of approximately $40.9 million in capital through sale and issuance of common stock, common stock purchase warrants, convertible preferred stock, redeemable convertible preferred stock and debt securities in public and private offerings. From inception (July 10, 2000) through March 31, 2009, the Company has used approximately $39.1 million of cash in its operations.

At March 31, 2009, the Company had approximately $861,000 of unrestricted cash and cash equivalents available to fund future operations. On May 13, 2009, the Company completed a closing for gross proceeds of $900,000 (net proceeds of approximately $801,000) on its offering of Series B-2 Redeemable Convertible Preferred Stock ("Series B-2") for a total of 450,000 shares of Series B-2 and warrants to purchase shares of common stock (see Note 5 for further details of terms). With the completion of the closing of the Series B-2 offering, combined with cash on hand, the Company believes there is sufficient cash to fund operations into October 2009.

On January 9, 2009, the common stock of the Company was delisted from the NYSE Alternext US ("Exchange"), formerly the American Stock Exchange, due to non-compliance with the Exchange rules concerning minimum shareholders' equity requirements. On January 21, 2009 the Company's common stock began trading on the Over-the-Counter Bulletin Board ("OTCBB") under the symbol PRWP.

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

Recent Accounting Pronouncements

The Financial Accounting Standards Board (FASB) Statement No. 157, Fair Value Measurements ("SFAS 157") defines fair value, establishes a framework for measuring fair value in U.S. generally accepted accounting principles, and expands disclosures about fair value measurements. This Statement emphasizes that fair value is a market-based measurement, not an entity-specific measurement. In February 2008, the FASB issued FASB Staff Position ("FSP") No. 157-2, Effective Date of FASB Statement No. 157 ("FSP FAS 157-2"). FSP FAS 157-2 amends SFAS 157 to delay the effective date for nonfinancial assets and liabilities, except for those that are recognized or disclosed at fair value on a recurring basis. The deferred effective date for such nonfinancial assets and liabilities is for fiscal years beginning after November 15, 2008. The Company adopted the provisions of FSP FAS 157-2 at the beginning of 2009 and the adoption of this statement did not have a material effect on the Company's financial condition or results of operations.

In April 2009, FSP FAS 157-4, *Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly,* ("FSP FAS 157-4") was issued. FSP FAS 157-4 provides guidelines for estimating fair value when the volume and level of activity has significantly decreased. FSP FAS 157-4 provides additional authoritative guidance in determining whether a market is active or inactive and whether a transaction is distressed. It is applicable to all assets and liabilities (i.e. financial and nonfinancial) and will require enhanced disclosures. This standard is effective for periods ending after June 15, 2009. The Company is currently evaluating the impact, if any, that this standard will have on its financial statements.

In April 2009, FSP FAS 115-2 and FAS 124-2, *Recognition and Presentation of Other-Than-Temporary Impairments*, was issued. This standard provides additional guidance to provide greater clarity about the credit and noncredit component of an other than temporary impairment event and modifies the presentation and disclosures when an other than temporary impairment event has occurred. This FSP applies to debt securities. This standard is effective for periods ending after June 15, 2009. The Company is currently evaluating the impact, if any, that this standard will have on its financial statements.

In April 2009, FSP FAS 107-1 and APB 28-1, *Interim Disclosures about Fair Value of Financial Instruments*, ("FSP FAS 107-1") and APB 28-1, was issued. FSP FAS 107-1 and APB 28-1, amends FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*, to require disclosures about fair value of financial instruments in interim as well as in annual financial statements. This FSP also amends APB Opinion No. 28, *Interim Financial Reporting*, to require those disclosures in all interim financial statements. This standard is effective for periods ending after June 15, 2009. The Company is currently evaluating the impact that this standard will have on its financial statements.

In December 2007, the FASB issued SFAS No. 160, *Non-controlling Interests in Consolidated Financial Statements—an amendment of ARB No. 51* (SFAS 160). This statement is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008, with earlier adoption prohibited. This statement requires the recognition of a non-controlling interest (minority interest) as equity in the consolidated financial statements and separate from the parent's equity. The amount of net income attributable to the non-controlling interest will be included in consolidated net income on the face of the income statement. It also amends certain of ARB No. 51's consolidation procedures for consistency with the requirements of SFAS 141(R). This statement also includes expanded disclosure requirements regarding the interests of the parent and its non-controlling interest. The adoption of this statement did not have a material effect on the Company's financial condition or results of operations.

In December 2007, the FASB issued SFAS No. 141R, *Business Combinations*, ("SFAS 141R") which changes how business acquisitions are accounted for. SFAS No. 141R requires the acquiring entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction and establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed in a business combination. Certain provisions of this standard will, among other things, impact the determination of acquisition-date fair value of consideration paid in a business combination (including contingent consideration); exclude transaction costs from acquisition accounting; and change accounting practices for acquired contingencies, acquisition-related restructuring costs, in-process research and development, indemnification assets and tax benefits. The adoption of this statement did not have a material effect on the Company's financial condition or results of operations.

2. Stock-Based Compensation

As December 31, 2008, the Company had two stock-based compensation plans where the Company's common stock has been made available for equity-based incentive grants as part of the Company's compensation programs (the "Plans"). These Plans are described in more detail in the Company's 2008 Annual Report on Form 10-K. In February, 2009, the Company adopted, subject to shareholder approval, the 2009 Incentive Compensation Plan which provides for the issuance of up to 10,000,000 shares of the Company's common stock in the form of options, stock appreciation rights, restricted stock and other stock-based awards to employees, officers, directors, consultants and other eligible persons.

The fair value of the options granted is determined using the Black-Scholes option-pricing model. Key assumptions used to apply this option-pricing model are as follows:

	Three Months Ended March 31,		Cumulative Period from Inception (July 10, 2000) to December 31, 2009
	2009	2008	
Risk-free interest rate	1.91%	2.53%	2.56%
Expected life of the options	5 years	5 years	5 years
Expected volatility of the underlying stock	122%	95%	105%
Expected dividend rate	0%	0%	0%

Stock-based compensation expense for both employees and non-employees totaled approximately $208,000 and $81,000 for the three months ended March 31, 2009 and 2008.

The following table summarizes the stock option activity in the Company's equity incentive plans from December 31, 2008 through March 31, 2009:

	Shares	Exercise Price Per Share	Weighted Average Exercise Price
Outstanding, December 31, 2008	4,706,500	$0.38 – 4.05	$ 2.32
Granted	3,756,500	0.00 – 0.23	0.19
Exercised	(200,000)	0.00	0.00
Options forfeited	(125,000)	1.01 – 3.75	0.56
Outstanding, March 31, 2009	8,138,000	$0.12 – 4.05	$ 1.40

As of March 31, 2009 there were 2,685,331 unvested options. Total expected unrecognized compensation cost related to such unvested options is approximately $514,000, which is expected to be recognized over a weighted–average period of approximately 1.3 years.

Restricted Stock. During the three-months ended March 31, 2009, the Company granted 2,000,000 shares of restricted common stock to members of its Board of Directors. These shares are restricted and any unvested shares are subject to forfeiture upon termination and would revert back to the Company. Of the 2,000,000 shares, 1,875,000 will vest in 2010 and 125,000 will vest in 2011. There were no shares vested at March 31, 2009. The restricted shares were valued at $360,000 ($0.18 per share) at the date of grant and will be recognized over the vesting period.

3. Accrued Expenses

Accrued expenses consist of the following:

	March 31, 2009	December 31, 2008
	(in thousands)	
Legal and accounting fees	$ 65	$ 247
Scientific and clinical fees	40	29
Accrued payroll and benefits	44	27
Accrued severance, current portion (see Note 7)	154	—
Other	76	77
Total	$ 379	$ 380

4. Common Stock Warrants

The following table summarizes information with regard to outstanding warrants issued in connection with equity and debt financings as of March 31, 2009. The 2001 Placement Agents, 7,988,082 of the February 2006, the February 4, 2008 and the February 25, 2008 Transaction Warrants, Cork Investments, Investor Relations Group Warrants and the February 12, 2009 Transaction Warrants are classified as equity. The April 2004, August 2004 and 9,985,097 of the February 2006 Transaction Warrants do not meet the requirements of equity classification and are classified as liabilities:

Issued in Connection With	Number Issued	Exercise Price	Exercisable Date	Expiration Date
April 2004 Transaction (1)				
Investor Warrants	618,056	$ 3.23	April 7, 2004	April 7, 2009
August 2004 Transaction				
Investor Warrants	2,000,000	$ 4.20	February 13, 2005	August 12, 2009
Placement Agent Warrants	100,000	$ 4.20	February 13, 2005	August 12, 2009
February 2006 Transaction				
Investor Warrants (classified as Warrant Liabilities) (2)	6,989,574	$ 0.50	August 15, 2006	August 14, 2011
Investor Warrants (classified as Warrant Liabilities) (3)	2,995,523	$ 0.50	August 15, 2006	August 14, 2011
Placement Agent Warrants (classified as equity) (4)	998,508	$ 0.50	August 15, 2006	August 14, 2011
2001 Placement Agents	110,000	$ 3.50	February 1, 2002	February 1, 2012
February 4, 2008 Transaction				
$1.50 Investor Warrants	1,742,500	$ 1.50	August 3, 2008	February 4, 2012
$2.00 Investor Warrants	1,742,500	$ 2.00	August 3, 2008	February 4, 2012
$1.50 Placement Agent Warrants	8,400	$ 1.50	August 3, 2008	February 4, 2012
February 25, 2008 Transaction				
$0.70 Investor Warrants	7,500,000	$ 0.70	August 25, 2008	August 25, 2013
$0.70 Placement Agent Warrants	206,250	$ 0.70	August 25, 2008	August 25, 2013
Investor Relations Group	39,000	$ 0.50	September 30, 2008	September 30, 2011
Cork Investments	300,000	$ 1.00	July 2, 2008	July 2, 2011
February 12, 2009 Transaction				
$0.50 Investor Warrants—Class A-1	1,800,000	$ 0.50	February 12, 2009	February 12, 2014
$0.50 Investor Warrants—Class A-2	1,800,000	$ 0.50	February 12, 2009	February 12, 2014
$0.50 Investor Warrants—Class B	7,200,000	$ 0.50	February 12, 2009	February 12, 2014
Total	36,150,311			

(1) The exercise price of the warrants has been adjusted from $5.30 per share to $3.25 per share due to the subsequent issuance of equity related instruments.

(2) The exercise price of the warrants has been adjusted from $3.35 per share to $0.50 per share and an additional 2,548,430 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments. The warrants were classified as equity at December 31, 2008 but have been reclassified as warrant liabilities as a result of the adoption of EITF 07-5 on January 1, 2009.

(3) The exercise price of the warrants has been adjusted from $3.35 per share to $0.50 per share and an additional 5,946,354 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments.

(4) The exercise price of the warrants has been adjusted from $3.35 per share to $0.50 per share and an additional 849,477 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments.

Impact of Adopting EITF 07-5

In June 2008, the Financial Accounting Standards Board ("FASB") ratified EITF Issue No. 07-5, *Determining Whether an Instrument (or an Embedded Feature) Is Indexed to an Entity's Own Stock* ("EITF 07-5"). EITF 07-5 provides that an entity should use a two step approach to evaluate whether an equity-linked financial instrument (or

embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. It also clarifies on the impact of foreign currency denominated strike prices and market-based employee stock option valuation instruments on the evaluation. EITF 07-5 is effective for fiscal years beginning after December 15, 2008. The Company adopted EITF 07-5 on January 1, 2009 and determined that the 6,989,574 warrants issued in connection with the February 2006 Transaction that had been classified as equity and included in additional paid-in capital at December 31, 2008, should be classified as liabilities due to repricing and anti-dilution provisions contained in the warrant agreements. The impact of adopting EITF 07-5 on January 1, 2009, was a decrease in additional paid-in-capital by $458,000, which was the fair value recorded at the time the warrants were transferred from a liability to equity during the year ended December 31, 2008, an increase of warrant liabilities by $204,000, the fair value of the warrants as of January 1, 2009 and a credit to accumulated deficit for the difference.

During the three-months ended March 31, 2009, the Company recognized a total expense of $862,000 in its condensed consolidated statements of operations related to the change in fair value of warrant liabilities, which was comprised of $581,000 related to warrants reclassified as liabilities due to the adoption of EITF 07-5 on January 1, 2009 and $281,000 related to warrants classified as liabilities prior to January 1, 2009. During the three-months ended March 31, 2008, the Company recognized expense of $587,000 related to the change in fair value of warrant liabilities.

Fair Value of Warrant Liabilities

Effective January 1, 2008, the Company adopted SFAS 157. SFAS 157 establishes a new framework for measuring fair value and requires fair value to be determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset and or liability in an orderly transaction between market participants. SFAS 157 establishes market or observable inputs as the preferred source of values, followed by assumptions based on hypothetical transactions in the absence of market inputs. The valuation techniques and disclosures required by SFAS 157 are determined by the following hierarchy:

Level 1 – Quoted prices for identical instruments in active markets.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3 – Significant inputs to the valuation model are unobservable.

The Company uses the Black-Scholes pricing model to calculate fair value of its warrant liabilities

Key assumptions used to apply these models are as follows:

	Warrants	
	March 31, 2009	December 31, 2008
Risk free interest rate	0.17% – 0.94%	0.11% – 0.91%
Expected life	0.02 years – 2.37 years	0.27 years – 2.62 years
Expected volatility of common share price	123%	95%
Common share price	$0.22	$0.09

Below is a summary of our fair value measurements at March 31, 2009:

	Value at March 31, 2009	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
	(in thousands)			
Warrant liabilities	$ 1,121	$ —	$ 1,121	$ —

5. Series B Redeemable Convertible Preferred Stock

On February 10, 2009, the Company entered into a securities purchase agreement pursuant to which it agreed to issue and sell to 10X Fund, at two or more closings,: (i) 3,000,000 shares its Series B convertible preferred stock ("Series B Redeemable Convertible Preferred Stock" or "Series B") with an aggregate stated value of $6.0 million and convertible into 12,000,000 shares of common stock and (ii) warrants to purchase 36,000,000 shares of common stock.

On February 12, 2009, the initial closing date under the purchase agreement, the Company issued and sold: (i) 900,000 shares of Series B-1 convertible preferred stock ("Series B-1 Redeemable Convertible Preferred Stock" or "Series B-1") convertible into 3,600,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 1,800,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 1,800,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 7,200,000 shares of common stock. Net proceeds from the closing of the initial tranche were approximately $1.5 million.

At one or more subsequent closings under the purchase agreement, the Company has agreed to issue: (i) up to 2,100,000 shares of Series B-2 convertible preferred stock ("Series B-2 Redeemable Convertible Preferred Stock" or "Series B-2") convertible into 8,400,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase up to 4,200,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase up to 4,200,000 shares of common stock; and (iv) Class B warrants exercisable to purchase up to 16,800,000 shares of common stock for an aggregate purchase price of up to $4.2 million (less fees and expenses). The Company expects the subsequent closings under the purchase agreement to occur on or before June 15, 2009 (the "Final Purchase Date"). However, if 10X Fund has purchased 350,000 or more shares of Series B-2 (with a stated amount of $700,000 or more) by May 13, 2009, then the final purchase date will be automatically extended until August 11, 2009.

The terms of the Series B are as follows:

Dividends. Holders of the Series B will be entitled to receive cumulative dividends at the rate of 12% per share per annum (compounding monthly) payable quarterly which may, at the Company's option, be paid in cash or common stock valued per share at 100% of the value weighted average price per share for the 20 consecutive trading days prior to the applicable dividend payment date; provided, however, that there is an effective registration statement covering the shares of the Company's common stock (for dividend payments due on September 30, 2009 or later) and the issuance of the shares does not trigger anti-dilution provisions under other agreements to which the Company is a party. If the Company does not pay any dividend on the Series B, dividends will accrue at the rate of 15% per annum (compounding monthly).

Conversion Rights. Each share of Series B is convertible into four shares of common stock at the conversion price of $0.50 per share (subject to customary anti-dilution protection adjustments) at the option of (i) the holder, at any time and (ii) the Company, at any time after February 12, 2010 (and upon 10 days notice) if the common stock is quoted at or above $1.50 for 15 consecutive trading days and an effective registration statement regarding the underlying shares of common stock is in effect (subject to certain monthly volume limits).

Redemption Rights. Upon notice of not less than 30 trading days, a holder of Series B may require the Company to redeem, in whole or in part, (i) the Series B-1 at any time on or after March 12, 2010 and (ii) the Series B-2 at any time on or after two years from the date of issuance of such shares of Series B-2. The redemption price will be equal to the sum of the stated value of the Series B, plus all accrued but unpaid dividends thereon, as of the redemption date. If the Company fails for any reason to pay the redemption price in cash on the redemption date, then the holders of the Series B requesting redemption may, at their sole option, automatically convert their shares of Series B into a promissory note bearing interest at the rate of 15% per year and secured by a lien on all of the Company's assets. So long as any shares of the Series B remain outstanding, the Company is also subject to restrictions limiting, among other things, amendments to the Company's organizational documents; the purchase or redemption of the Company's capital stock; mergers, consolidations, liquidations and dissolutions; sales of assets; dividends and other restricted payments; investments and acquisitions; joint ventures, licensing agreements, exclusive marketing and other distribution agreements; issuances of securities; incurrence of indebtedness; incurrence of liens and other encumbrances and issuances of any common stock equivalents.

Warrants. Each Class A-1 warrant, Class A-2 warrant and Class B warrant is exercisable at $0.50 per share of common stock (subject to customary anti-dilution protection adjustments) at any time on or after the date of issuance until the fifth anniversary of the respective issue date. The Company may, upon 30 days notice and so long as an effective registration statement regarding the underlying shares of common stock is in effect, issue a termination notice with respect to (i) each Class A-1 warrant on any trading day on which the market value of the common stock for each of the 15 previous trading days exceeded $1.25 per share (subject to customary anti-dilution protection adjustments) and (ii) each Class A-2 warrant on any trading day on which the market value of the common stock for each of the 15 previous trading days exceeded $1.75 per share (subject to customary anti-dilution protection adjustments).

The fair value of the warrants issued in connection with the Series B-1 was approximately $1,296,000 at the date of issuance based on the following assumptions: an expected life of 5 years, volatility of 118%, risk free interest rate of 1.79% and zero dividends. The Company allocated the gross proceeds based on the relative fair value of the Series B-1 and the related warrants, resulting in approximately $1,223,000 of the proceeds being allocated to additional paid-in capital. The Company analyzed the Series B-1, post-allocation of the gross proceeds, and determined that there was no beneficial conversion feature at the date of issuance. The issuance costs of the Series B-1 were recorded as a reduction to the carrying value of the Series B-1 when issued, and are accreted to Series B-1 through the earliest redemption date (March 12, 2010). Due to the redemption feature, the Company has presented the Series B-1 outside of permanent equity, in the mezzanine of the condensed consolidated balance sheet at March 31, 2009.

6. Loss Per Share

Basic loss per share is based on the weighted-average number of common shares outstanding during each period. Diluted loss per share is based on basic shares as determined above plus the incremental shares that would be issued upon the assumed exercise of in-the-money stock options and warrants using the treasury stock method. The computation of diluted net loss per share does not assume the issuance of common shares that have an anti-dilutive effect on net loss per share. For the three month periods ended March 31, 2009 and 2008, all stock options, warrants and potential shares related to conversion of the Series A Preferred and the Series B Preferred were excluded from the computation of diluted net loss per share. Dilutive shares which could exist pursuant to the exercise of outstanding stock options and warrants, Series A Preferred and Series B-1 Preferred at March 31, 2009 and 2008 totaled 56,858,311 and 34,130,958 respectively. These amounts were not included in the calculation because their affect would have been anti-dilutive.

7. Commitments and Contingencies

Separation Agreement – Former Chief Executive Officer and Chairman of the Board of Directors

In February 2009, in connection with the resignation of David Platt, Ph.D., the Company's former Chief Executive Officer and Chairman of the Company's Board of Directors, the Company entered into a Separation Agreement with Dr. Platt. The Separation Agreement provides that the Company shall continue to pay Dr. Platt his current salary at a monthly rate of $21,667 for 24 months and that the Company may defer payment of a portion of such salary amounts greater than $10,000 per month (so long as Dr. Platt does not receive payments of less than the salary payments being made to the Company's Chief Executive Officer). However, all deferred amounts will continue to accrue and will be payable on the earlier of (i) the Company receiving a minimum of $4.0 million of funding after February 12, 2009, or (ii) February 12, 2011. The Company also agreed to continue to (i) provide health and dental insurance benefits to Dr. Platt, until the first to occur of February 12, 2011 or the date Dr. Platt and his family become eligible to receive health and dental insurance benefits under the plans of a subsequent employer and (ii) make the current monthly lease payments on his automobile until February 12, 2011. The Company recognized the full amount of the obligation related to the salary, health insurance and automobile during the three months ended March 31, 2009. The remaining liability related to this severance is reflected in accrued expenses ($154,000) and Other long-term liabilities ($408,000) on the condensed consolidated balance sheet at March 31, 2009.

The Separation Agreement provides for the deferral of a $1.0 million severance payment due to Dr. Platt under his employment agreement until the occurrence of any of the following milestone events: (i) the approval by the Food and Drug Administration for a new drug application ("NDA") for any drug candidate or drug delivery candidate based on the DAVANAT® technology (whether or not such technology is patented); (ii) consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50 million of royalty revenue to the Company; or (iii) the renewed listing of the Company's securities on a national securities exchange. Payment upon the events (i) and (iii) may be deferred up to six months, and if the Company has insufficient cash at the time of any of such events, it may issue Dr. Platt a secured promissory note for such amount. If the Company files a voluntary or involuntary petition for bankruptcy, whether or not a milestone event has occurred, such event shall trigger the Company's obligation to pay the $1.0 million with the result that Dr. Platt may assert a claim for such obligation against the bankruptcy estate. Due to the uncertainties regarding the achievement of any of the milestone events as described, the Company has not accrued for the $1.0 million severance as of March 31, 2009. When it is deemed probable that one of the milestone events will be achieved, the Company will recognize the $1.0 million severance at that time.

The Separation Agreement also provides that upon (i) the consummation of a transaction with a pharmaceutical company expected to result in at least $10.0 million of equity investment or $50.0 million of royalty revenue, the Company will grant Dr. Platt fully vested cashless-exercise stock options exercisable to purchase at least 300,000 shares of the Company's common stock for ten (10) years at an exercise price not less than the fair market value of the Common Stock determined as of the date of the grant ("Cashless Stock Options") and (ii) approval by the FDA of the first NDA for any of the Company's drug or drug delivery candidates based on DAVANAT® technology (whether or not such technology is patented), the Company will grant Dr. Platt fully vested Cashless Stock Options to purchase at least 500,000 shares of common stock. Due to the uncertainties regarding the achievement of any of the milestones as described, the Company has not recognized the value of the unissued stock options as of March 31, 2009. When it is deemed probable that one of the milestones will be achieved, the Company will recognize the expense related to the issuance of the stock options at that time based on the then current fair value.

Legal Proceedings

The Company records accruals for such contingencies to the extent that the Company concludes that their occurrence is probable and the related damages are estimable. Other than claims and legal proceedings that arise from time to time in the ordinary course of business which are not material, and matters described below, there has been no change in the matters reported in our Annual Report on Form 10-K for the year ended December 31, 2008.

In January 2004, David Platt, Ph.D., the Company's former Chairman and Chief Executive Officer, filed a lawsuit in Massachusetts Superior Court against GlycoGenesys, Inc. for various claims including breach of contract. GlycoGenesys asserted counterclaims against the Company and Dr. Platt alleging tortious interference, misappropriation of proprietary rights, defamation and unfair competition, and sought monetary damages and injunctive relief related to the Company's intellectual property. Prospect Therapeutics, Inc. (formerly known as Marlborough Research and Development, Inc.) ("Prospect") purchased certain assets including this lawsuit from the GlycoGenesys bankruptcy estate and continues prosecuting the counterclaims against the Company and Dr. Platt. Concluding that certain disputes of fact could not be resolved as a matter of law, the Court on May 27, 2008 denied the Company's motion for summary judgment. The court also determined that Prospect could pursue the counterclaims to the extent they relate to the protection of the intellectual property assets purchased from the bankruptcy estate. Prospect Therapeutics informed the Court that it does not seek monetary damages other than recovery of attorney fees. The trial began and concluded in March 2009. Post trial briefing is ongoing and closing arguments are scheduled for June 1, 2009. The Company and Dr. Platt believe the counterclaims are without merit and intend to contest them vigorously. Additionally, the Company believes that any impact on the financial statements is neither probable nor reasonably estimable and therefore no amounts have been recorded as of March 31, 2009.

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ALTERNATE

The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject To Completion, Dated June 11, 2009

PROSPECTUS

7,800,000 Shares of Common Stock

This prospectus covers the offer of 7,500,000 shares of our common stock issuable upon the exercise of warrants we sold to investors in February 2008, and 300,000 shares of our common stock issuable upon the exercise of a warrant issued to the placement agent in connection with that February 2008 transaction.

The warrants became exercisable in August 2008, have an exercise price of $0.70 per share, and are exercisable until August 16, 2013.

To the extent that the warrants are exercised for cash, rather than by cashless exercise, we will receive proceeds constituting the exercise price of such warrants.

We urge you to carefully read this prospectus and any accompanying prospectus supplement before you make an investment decision.

Investing in our securities involves a high degree of risk. As a result of our current lack of financial liquidity and negative stockholders' equity, our auditors have expressed substantial concern about our ability to continue as a "going concern." You should purchase these securities only if you can afford a complete loss of your investment. See "Risk Factors" on page 4 of this prospectus.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is [_____], 2009

ALTERNATE

The Offering

Securities Offered	7,500,000 shares of our common stock issuable upon the exercise of warrants we sold to investors in February 2008, and 300,000 shares of our common stock issuable upon the exercise of a warrant issued to the placement agent (as described below) in connection with that February 2008 transaction.
Description of Warrants	The warrants, including the warrant issued to the placement agent, are exercisable until August 16, 2013 to purchase an aggregate of 7,800,000 shares of our common stock at an exercise price of $0.70 per share. The warrants became exercisable in August 2008.
Use of Proceeds	To the extent that the warrants are exercised for cash, rather than by cashless exercise, we will receive proceeds constituting the exercise price of such warrants. Any such proceeds received by us through warrant exercises will be used for working capital.
Placement Agent	Maxim Group, LLC acted as the sole placement agent and book runner on the February 2008 transaction in which the warrants were sold. We paid the placement agent at closing a cash fee equal to 7% of all cash proceeds received by us from investors it introduced to us, or approximately $262,500. We also issued to the placement agent a warrant, with a term of five years, to purchase 300,000 shares of our common stock at an exercise price of $0.70 per share. As described above, this prospectus covers the shares of common stock issuable upon the exercise of this warrant.

ALTERNATE

USE OF PROCEEDS

To the extent that the warrants are exercised for cash, rather than by cashless exercise, we will receive proceeds constituting the exercise price of such warrants. Any such proceeds received by us through warrant exercises will be used for working capital.

DETERMINATION OF OFFERING PRICE

The terms and conditions of the warrants, including the exercise price, were determined by negotiation between us and the placement agent at the time of the February 2008 transaction in which the warrants were sold. The principal factors considered at the time of the February 2008 transaction in determining these terms and conditions included:

1. the market price of our common stock;
2. the information set forth in this prospectus and otherwise available to the placement agent;
3. our history and prospects and the history of, and prospects for, the industry in which we compete;
4. our past and present financial performance and an assessment of our management;
5. our prospects for future earnings and the state of our development;
6. the general condition of the securities markets;
7. the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
8. other factors deemed relevant by the placement agent and us.

PLAN OF DISTRIBUTION

The warrants, including the warrant issued to the placement agent, became exercisable on August 16, 2008 and are exercisable, in whole or in part, until August 16, 2013 to purchase an aggregate of 7,800,000 shares of our common stock at an exercise price of $0.70 per share. Upon proper exercise of the warrants in accordance with their terms, we will issue the shares of our common stock being offered hereby to the holders of the exercised warrants.

PART II. INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses payable by us in connection with this offering of securities described in this registration statement. All amounts shown are estimates. The Registrant will bear all expenses shown below.

Accounting fees and expenses	$25,000
Legal fees and expenses	$20,000
Printing and engraving expenses	$ 1,000
Other	$ 500
Total	$46,500

Item 14. Indemnification of Directors and Officers.

The registrant's By-laws, as amended to date, provide for indemnification of officers and directors to the fullest extent permitted by Section 7502 of Chapter 78 of the Nevada Revised Statutes ("NRS") (as from time to time amended), provided such officer or director acts in good faith and in a manner which such person reasonably believes to be in or not opposed to the best interests of the registrant, and with respect to any criminal matter, had no reasonable cause to believe such person's conduct was unlawful.

NRS 78.7502 states:

"1. A corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, except an action by or in the right of the corporation, by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit or proceeding if he:

(a) Is not liable pursuant to NRS 78.138; or

(b) Acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of *nolo contendere* or its equivalent, does not, of itself, create a presumption that the person is liable pursuant to NRS 78.138 or did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, or that, with respect to any criminal action or proceeding, he had reasonable cause to believe that his conduct was unlawful.

2. A corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by him in connection with the defense or settlement of the action or suit if he:

(a) Is not liable pursuant to NRS 78.138; or

(b) Acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation.

Indemnification may not be made for any claim, issue or matter as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

3. To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections 1 and 2, or in defense of any claim, issue or matter therein, the corporation shall indemnify him against expenses, including attorneys' fees, actually and reasonably incurred by him in connection with the defense."

The registrant's By-laws also provide that to the fullest extent permitted by NRS 78.751 (as from time to time amended), the registrant shall pay the expenses of officers and directors of the Corporation incurred in defending a civil or criminal action, suit or proceeding, as they are incurred and in advance of the final disposition of such matter, upon receipt of an undertaking in form and substance acceptable to the board of directors for the repayment of such advances if it is ultimately determined by a court of competent jurisdiction that the officer or director is not entitled to be indemnified.

NRS 78.751 states:

"1. Any discretionary indemnification pursuant to NRS 78.7502, unless ordered by a court or advanced pursuant to subsection 2, may be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. The determination must be made:

(a) By the stockholders;

(b) By the board of directors by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding;

(c) If a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding so orders, by independent legal counsel in a written opinion; or

(d) If a quorum consisting of directors who were not parties to the action, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion.

2. The articles of incorporation, the bylaws or an agreement made by the corporation may provide that the expenses of officers and directors incurred in defending a civil or criminal action, suit or proceeding must be paid by the corporation as they are incurred and in advance of the final disposition of the action, suit or proceeding, upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he is not entitled to be indemnified by the corporation. The provisions of this subsection do not affect any rights to advancement of expenses to which corporate personnel other than directors or officers may be entitled under any contract or otherwise by law.

3. The indemnification pursuant to NRS 78.7502 and advancement of expenses authorized in or ordered by a court pursuant to this section:

(a) Does not exclude any other rights to which a person seeking indemnification or advancement of expenses may be entitled under the articles of incorporation or any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, for either an action in his official capacity or an action in another capacity while holding his office, except that indemnification, unless ordered by a court pursuant to NRS 78.7502 or for the advancement of expenses made pursuant to subsection 2, may not be made to or on behalf of any director or officer if a final adjudication establishes that his acts or omissions involved intentional misconduct, fraud or a knowing violation of the law and was material to the cause of action.

(b) Continues for a person who has ceased to be a director, officer, employee or agent and inures to the benefit of the heirs, executors and administrators of such a person."

In addition, the registrant maintains directors' and officers' liability insurance which insures against liabilities that its directors and officers may incur in such capacities.

Reference is made to "Undertakings," below, for the registrant's undertakings in this registration statement with respect to indemnification of liabilities arising under the Securities Act of 1933, as amended (the "Securities Act").

Item 15. Recent Sales of Unregistered Securities.

The following information relates to all securities issued or sold by the Registrant within the past three years and not registered under the Securities Act. Each of the transactions described below was conducted in reliance upon the exemptions from registration provided in Section 4(2) of the Securities Act and the rules and regulations promulgated thereunder. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

1. On February 14, 2006, the Registrant completed a private placement in which it issued and sold to institutional accredited investors 7% Convertible Debentures (the "Debentures") and related common stock purchase warrants exercisable to purchase approximately 1,490,000 shares of the Registrant's common stock (the "Warrants"). The Warrants were exercisable at $3.35 per share, subject to adjustment, for five years beginning August 15, 2006. The Registrant subsequently registered the resale of the shares issuable upon redemption of, or as interest payments on, the Debentures, and upon exercise of the Warrants. On March 20, 2007, the Registrant entered into Waiver and Exchange Agreements (together, the "Exchange Agreement") with certain investors to whom it issued the Debentures and Warrants pursuant to the terms and conditions of a Securities Purchase Agreement dated as of February 14, 2006.

2. On June 19, 2007, the Registrant entered into a Securities Purchase Agreement (the "Securities Purchase Agreement") with certain institutional investors named therein to sell shares of the Registrant's common stock and related common stock purchase warrants exercisable to purchase approximately 4,173,460 shares of the Registrant's common stock. On June 29, 2007, the Securities Purchase Agreement was terminated following the notice received from the NYSE Alternext US (then known as the American Stock Exchange) that the Registrant was not in compliance with certain listing standards.

3. On February 4, 2008, the Registrant completed a private placement begun in October 2007 in which it sold an aggregate of 1,742,500 units of securities, each unit comprised of one share of our Series A 12% Convertible Preferred Stock ("Series A Preferred Stock"), a warrant exercisable at $1.50 to purchase one share of its common stock, and a warrant exercisable at $2.00 to purchase one share of its common stock. Each unit was offered and sold for $1.00. As of December 31, 2007, the Registrant had received gross proceeds of $1,667,500, and during 2008, the Registrant received an additional $75,000, resulting in total advance gross proceeds of $1,742,500. Net proceeds after transaction costs were approximately $1.7 million.

4. On February 12, 2009, the Registrant entered into a Securities Purchase Agreement (the "Purchase Agreement") with 10X Fund, L.P. (the "Purchaser"), the Company has agreed to issue and sell to Purchaser, and Purchaser has agreed to purchase, at two or more closings, (i) 3,000,000 shares of the Company's Series B Convertible Preferred Stock with an aggregate stated value of $6.0 million and convertible into 12,000,000 shares of the Company's common stockand (ii) warrants to purchase 36,000,000 shares of Common Stock.

On February 12, 2009, the initial closing date under the Purchase Agreement, the Company issued and sold to Purchaser: (i) 900,000 shares of Series B-1 Preferred Stock convertible into 3,600,000 shares of Common Stock; (ii) Class A-1 Warrants exercisable to purchase 1,800,000 shares of Common Stock; (iii) Class A-2 Warrants exercisable to purchase 1,800,000 shares of Common Stock; and (iv) Class B Warrants exercisable to purchase 7,200,000 shares of Common Stock for an aggregate purchase price of $1.8 million.

At one or more subsequent closings under the Purchase Agreement, the Company has agreed to issue and sell to Purchaser, and Purchaser has agreed to purchase: (i) up to 2,100,000 shares of Series B-2 Preferred Stock (the "Series B-2 Preferred Stock") convertible into 8,400,000 shares of Common Stock; (ii) Class A-1 Warrants exercisable to purchase up to 4,200,000 shares of Common Stock; (iii) Class A-2 Warrants exercisable to purchase up to 4,200,000 shares of Common Stock; and (iv) Class B Warrants exercisable to purchase up to 16,800,000 shares of Common Stock for an aggregate purchase price of up to $4.2 million.

In a subsequent closing on May 13, 2009, pursuant to the Purchase Agreement, the Company issued and sold an aggregate of (i) 450,000 shares of Series B-2 Preferred Stock convertible into 1,800,000 shares of Common Stock, (ii) Class A-1 Warrants exercisable to purchase 1,800,000 shares of Common Stock, (iii) Class A-2 Warrants exercisable to purchase 1,800,000 shares of Common Stock, and (iv) Class B Warrants exercisable to purchase 3,600,000 shares of Common Stock for gross proceeds of $900,000. Net proceeds of these sales were approximately $801,000 after reimbursement of the Purchaser's expenses (including legal expenses) in connection with the subsequent closing and an origination fee in the amount of three percent of the gross proceeds from the sale of these securities. As a result of the closing held on May 13, 2009, under the terms of the Purchase Agreement, the final purchase date for the remaining shares of Series B-2 Preferred Stock, Series A-1 Warrants, Series A-2 Warrants and Series B Warrants has been extended to August 11, 2009.

Item 16. Exhibits.

The following exhibits are filed herewith or incorporated by reference herein:

Exhibit Number	Description
4.1	Form of Registration Rights Agreement, dated February 14, 2006 (incorporated by reference to Exhibit 4.3 to the registrant's Current report on Form 8-K filed February 15, 2006).
4.2	Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.2 to the registrant's Current report on Form 8-K filed February 15, 2006).
4.3	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.1 to the registrant's Current report on Form 8-K filed October 9, 2007).
4.4	Form of Common Stock Purchase Warrant ($1.50 exercise price) (incorporated by reference to Exhibit 10.3 to the registrant's Current report on Form 8-K filed October 9, 2007).
4.5	Form of Common Stock Purchase Warrant ($2.00 exercise price) (incorporated by reference to Exhibit 10.4 to the registrant's Current report on Form 8-K filed October 9, 2007).
4.6	Securities Purchase Agreement dated February 14, 2008, by and among Pro-Pharmaceuticals, Inc. and the Purchasers named therein (incorporated by reference to Exhibit 10.1 to the registrant's Current report on Form 8-K filed February 15, 2008).
4.7	Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the registrant's Current report on Form 8-K filed February 15, 2008).
5.1	Opinion of Eilenberg & Krause LLP (including the consent of such firm) regarding the legality of the securities being offered. (previously filed)
23.1	Consent of Caturano and Company, P.C., an independent registered public accounting firm.
23.2	Consent of Deloitte & Touche LLP, an independent registered public accounting firm.
23.3	Consent of Eilenberg & Krause LLP (included as part of Exhibit 5.1 hereto).
24	Powers of Attorney (previously filed)

Item 17. Undertakings.

Insofar as indemnification by the registrant for liabilities arising under the Securities Act, may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions referenced in Item 14 of this registration statement, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. If a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered hereunder, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act, and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

2. That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and this offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of this offering;

4. That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use; and

5. That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of an undersigned registrant relating to this offering required to be filed pursuant to Rule 424;

(ii) any free writing prospectus relating to this offering prepared by, or on behalf of, the undersigned registrant or used or referred to by the undersigned registrant;

(iii) the portion of any other free writing prospectus relating to this offering containing material information about an undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) any other communication that is an offer in this offering made by the undersigned registrant to the purchaser.

6. The undersigned registrant hereby undertakes to file, during any period in which offers or sales are being made, a supplement to the prospectus included in this Registration Statement which sets forth, with respect to a particular offering, the specific number of shares of common stock to be sold, the name of the holder, the sales price, the name of any participating broker, dealer, underwriter or agent, any applicable commission or discount and any other material information with respect to the plan of distribution not previously disclosed.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Post-Effective Amendment No. 2 on Form S-1 to the Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Newton, State of Massachusetts on June 11, 2009.

PRO-PHARMACEUTICALS, INC.

By: /S/ THEODORE D. ZUCCONI
Name: Theodore D. Zucconi, Ph.D.
Title: Chief Executive Officer and President

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 2 to the Registration Statement has been signed by the following persons in the capacities and on the dates stated.

Signature	Title	Date
/S/ THEODORE D. ZUCCONI Theodore D. Zucconi, Ph.D.	Chief Executive Officer, President and Director (Principal Executive Officer)	June 11, 2009
/S/ ANTHONY D. SQUEGLIA Anthony D. Squeglia	Chief Financial Officer (Principal Financial and Accounting Officer)	June 11, 2009
* Gilbert Amelio, Ph.D.	Director	June 11, 2009
* James C. Czirr	Director	June 11, 2009
* Rod D. Martin	Director	June 11, 2009
* S. Colin Neill	Director	June 11, 2009
* Steven Prelack	Director	June 11, 2009

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Signature	Title	Date
*	Director	June 11, 2009
Jerald K. Rome		
*	Director	June 11, 2009
Peter Traber, M.D.		

* By: /s/ ANTHONY D. SQUEGLIA
Anthony D. Squeglia
Attorney-in-Fact

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

As independent registered public accountants, we hereby consent to the use of the report of Vitale, Caturano & Company, P.C. (whose name has been changed to Caturano and Company, P.C. effective May 1, 2009) dated March 30, 2009 relating to the financial statements of Pro-Pharmaceuticals, Inc. as of and for the year ended December 31, 2008 and for the period from inception (July 10, 2000) to December 31, 2008 (which report expresses an unqualified opinion and includes explanatory paragraphs relating to the adoption of Statement of Financial Accounting Standards No. 157, *Fair Value Measurements*, on January 1, 2008, and to the substantial doubt about the Company's ability to continue as a going concern) in, and to all references to our Firm included in or made a part of, this Post-Effective Amendment No. 2 on Form S-1 to Form S-3 (Registration Nos. 333-150898 and 333-148911).

Caturano and Company, P.C.
June 11, 2009

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Post-Effective Amendment No. 2 on Form S-1 to Form S-3 to Registration Statement Nos. 333-150898 and 333-148911 of our report dated March 28, 2008, relating to the consolidated financial statements of Pro-Pharmaceuticals, Inc. (the "Company") for the year ended December 31, 2007, (which report expresses an unqualified opinion and includes explanatory paragraphs relating to the adoption of Financial Accounting Standards Board ("FASB") Interpretation ("FIN") No. 48, "Accounting For Uncertainty in Income Taxes" on January 1, 2007, and to the substantial doubt about the Company's ability to continue as a going concern), appearing in the Prospectus which is part of this Registration Statement, and to the reference to us under the heading "Experts" in the Prospectus.

/s/ DELOITTE & TOUCHE LLP

Boston, Massachusetts
June 11, 2009

Eilenberg & Krause LLP

11 East 44th Street

New York, New York 10017

Telephone: (212) 986-9700

Facsimile: (212) 986-2399

June 11, 2009

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street NE
Washington DC 20549
Mail Stop 4720
Attention: Ms. Jennifer Riegel

Re: Pro-Pharmaceuticals, Inc.
Post-Effective Amendment on Form S-1
Filed May 14, 2009
File No. 333-150898

Dear Ms. Riegel:

This letter is submitted on behalf of Pro-Pharmaceuticals, Inc. (the "Company"), in response to the comments of the Staff of the Division of Corporation Finance of the Securities and Exchange Commission regarding the Company's Post-Effective Amendment No.1 on Form S-1 to Form S-3, Registration No. 333-150898, filed on May 14, 2009 (the "Registration Statement"). Today we are filing Post-Effective Amendment No. 2 to the Registration Statement with the Securities and Exchange Commission. The amended registration statement, which reflects the Company's response to the comment contained in your letter of May 29, 2009, has been marked to show changes from the initial filing.

We have provided the text of the comment included in your letter for convenience purposes. We respond to the Staff's comment as follows:

"We note that your post-effective amendment on Form S-1 includes a post-effective amendment to Form S-3 (333-148911). The Form S-3 (333-148911) filed on January 29, 2008 registered an unallocated primary shelf offering of up to $10,000,000 of shares of common stock, preferred stock, warrants and/or units. This Form S-3 did not register the resale of these securities. Since the resale offering of these securities has not yet been registered, it is impermissible to register this offering in a post-effective amendment. Please amend your filing to remove the post-effective amendment to Form S-3 (333-148911) seeking to register the resale offering."

We have removed the alternate prospectus pages forming the post-effective amendment to Form S-3 (333-148911) seeking to register the resale offering. We have included new alternate prospectus pages (pages A-1 through A-3) for the prospectus to be included in the post-effective amendment to Form S-3 (333-148911) to cover the ongoing offering by the Company of the shares underlying the warrants sold in the registered February 2008 offering pursuant to that Form S-3 (333-148911).

Please do not hesitate to contact the undersigned with any questions you might have on the new amendment.

Very truly yours,

/s/ Ted Chastain

Ted Chastain