PRO PHARMACEUTICALS INC
Form S-1
September 17, 2010
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As filed with the Securities and Exchange Commission on September 17, 2010

Registration No. 333-_____

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

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	**(Primary SIC**	**(I.R.S. Employer**

incorporation or organization)	Number)	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:

Jonathan C. Guest, Esq.

McCarter & English LLP

265 Franklin Street

Boston, Massachusetts 02110

Tel. (617) 449-6500

Fax (617) 607-9200

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. x

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	x

CALCULATION OF REGISTRATION FEE

Title of each Class of Securities to be Registered	Amounts to be Registered (1)	Proposed Maximum Offering price per Share (3)	Proposed Maximum Aggregate Offering Price (3)	Amount of Registration Fee
Common Stock, $.001 par value per share	52,254,130 (2)	$0.665	$34,748,996	$2,477.60

(1) This Registration statement also relates to an indeterminate number of shares that may be issued upon stock splits, stock dividends or similar transactions in accordance with Rule 416 under the Securities Act.

(2) Includes (i) 16,004,130 shares of common stock issuable upon conversion of, or as stock dividends paid or payable through the first quarter of 2012, shares of the Registrant s Series B-1 convertible redeemable preferred stock and Series B-2 convertible redeemable preferred stock and (ii) 36,250,000 shares of common stock issuable upon exercise of warrants related to such preferred stock and the Registrant s Series A 12% convertible preferred stock.

(3) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c), using the average of the high and low prices of the Registrant s common stock as reported on the Over the Counter Bulletin Board on September 15, 2010.

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.

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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 September 17, 2010

PROSPECTUS

52,254,130 Shares of Common Stock

This prospectus covers the offer and sale of up to 52,254,130 shares of our common stock from time to time by the selling stockholders named in this prospectus. The shares of common stock being offered are issuable upon the exercise of warrants or the conversion of shares of our Series B-1 convertible redeemable referred stock and Series B-2 convertible redeemable 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. 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 doubt 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 beginning on page 6 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 [_____], 2010

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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 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.

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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 beginning on page 6.

About Pro-Pharmaceuticals, Inc.

We are a development-stage company engaged in the discovery and development of therapeutics that target Galectin receptors that we believe enhance existing cancer treatments and could also be used in the 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 polysaccharide 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 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 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.

In March 2010, we granted PROCAPS S.A., or PROCAPS, exclusive rights to market and sell DAVANAT® to treat cancer in Colombia, South America, which we refer to in this prospectus as the PROCAPS Channel. PROCAPS is a large, international, privately held pharmaceutical company based in Barranquilla, Colombia. Under terms of the agreement, PROCAPS is responsible for obtaining regulatory and pricing approval in Colombia, South America. PROCAPS also will be responsible for the vial filling, packaging, marketing and distribution of DAVANAT® in the region. On June 22, 2010, we announced the initial $200,000 purchase order of DAVANAT® by PROCAPS. After receipt of the PROCAPS purchase order, we delayed shipment of DAVANAT® to PROCAPS in order to resolve matters related to first-time international shipment of drugs. We have procured the required export license, and pending completion of related technical matters (such as product code, safety documents, customs clearance, etc.), anticipate shipment of DAVANAT® in the fourth quarter of 2010 and payment from PROCAPS.

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.

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.

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The Offering

Securities Offered	52,254,130 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 stockholder 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.

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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 us. 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 such risks actually occur, our business, financial condition and operating results could be materially adversely affected. In such case you may lose part or all of your investment.

Risks Related to Our Business

We have incurred net losses to date and must raise additional capital by the end of March 2011 in order to continue to operate.

As of the date of this registration statement, we believe that we have sufficient cash to meet our financial and operating obligations into the first quarter of 2011. We will require more cash to fund our operations and believe we will be able to obtain additional financing. While we believe that we will be able to obtain such additional financing, there can be no assurance that we will be successful in obtaining it or, if available, that such financing will be obtainable on terms favorable to us.

We have incurred net losses in each year of operation since our inception in July 2000. Our accumulated deficit as of December 31, 2009 was $47.7 million and our accumulated deficit as of June 30, 2010 was $53.0 million. Also, the report of the independent registered public accounting firm on our financial statements included in our Annual Report on Form 10-K for the period ended December 31, 2009, contains an explanatory paragraph regarding going-concern uncertainty. These financial statements do not include any adjustments or charges that might be necessary should we be unable to continue as a going concern. If we are not able to continue as a going concern, it is likely that investors will lose all or a part of their investment.

Based on $2,863,000 of unrestricted cash as of June 30, 2010, combined with $359,000 received from the exercise of common stock warrants and stock options through August 10, 2010, we believe that we have sufficient cash to meet our financial and operating obligations into March 2011. We will require more cash to fund our operations and believe that we will be able to obtain additional financing. However, there can be no assurance that we will be successful in obtaining such new financing or, if available, that such financing will be obtainable on terms favorable to us. We have taken steps to reduce our administrative and clinical spending, however, we must raise additional cash by the end of March 2011, or we may not be able to continue operations and may be forced to seek bankruptcy protection.

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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.

We are a development stage company with product inventory on hand but have not yet generated any revenue.

We are a development stage company and at this time we have on hand approximately 50,000 doses of DAVANAT® that could be sold if FDA or other regulatory approval of the drug were granted. Accordingly, we have not generated any revenues to date. We expect that with the activation of the PROCAPS Channel to generate some revenue within the next six months. There is no assurance however, that we will obtain FDA approval of DAVANAT® or any other of our products in development and, even if we do so, that we will generate revenue sufficient to become profitable. Our failure to generate revenue and profit would likely lead to loss of your investment.

Our drug candidates are based on novel unproven technologies.

Our drug candidates in development are based on novel unproven technologies using proprietary compounds in combination with FDA approved drugs currently used in the treatment of cancer and other diseases. Therapeutics that target Galectin receptors are difficult to synthesize and we may not be able to synthesize them in a way that would make them usable as target delivery vehicles for the anti-cancer drugs.

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

DAVANAT® , our lead product candidate, is 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 though DAVANAT® progressed successfully through Phase I and Phase II human trials, it may fail in Phase III trials or in later stages of development. We will 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 DAVANAT® and other anticipated product candidates achieve positive results in clinical trials, we may be unable to commercialize them. Although we anticipate receipt of regulatory approvals in connection with the PROCAPS Channel, there is no assurance that such approvals would be forthcoming. Our general inability to commercialize out products would substantially impair the viability of the Company.

There are risks associated with our reliance on third parties to design trial protocols, arrange for and monitor the clinical trials, and collect and analyze data.

As we develop products eligible for clinical trials, including DAVANAT®, we will contract with independent parties to assist us in the design of 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

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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.

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

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. At this time, 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 are developing relationships with manufacturers and will 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.

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. Thus, 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.

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.

Performance milestones may not occur as contemplated by the agreement with PROCAPS S.A.

As our arrangement with PROCAPS is a collaboration, and because collaborations take place over time, milestone and performance risks are inherent and so performance milestones may not occur as contemplated by our agreement.

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. Although we have engaged a number of consultants to assist us, any additional growth may 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.

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We are exposed to product liability, pre-clinical and clinical liability risks which could place a 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, market acceptance of our proposed products may be limited and we may not achieve revenues.

The continuing efforts of governments 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. In other words, our ability to commercialize our proposed products will depend in large part on the extent to which appropriate reimbursement levels for the cost of our proposed formulations and products and related treatments are obtained by the health care providers of these products and treatments. While at this time we cannot predict the precise impact in this regard of the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Affordability Act of 2010, the comprehensive health care reform legislation passed by Congress in March 2010, the adoption of this legislation could harm our business, financial condition and results of operations.

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

We are dependent on Anatole Klyosov, Ph.D., our Chief Scientist, who possesses the scientific and technical expertise and experience that is important to our success. The loss of Dr. Klyosov, or failure to attract or retain other key personnel, could make it difficult for us in pursuing collaborations or developing new products and core technologies.

We are involved in litigation with Summer Street Research Partners.

In January 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. In July 2008, we filed an 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 could have a material adverse effect on our financial position.

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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 the 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.

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.

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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 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 other intellectual property, 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 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

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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.

Risks Related to Our Common 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, generally, our ability to raise capital.

Our Board of Directors has the power to designate, without shareholder approval, a series of preferred stock the shares of which could be senior to the common stock and be entitled to conversion or voting rights that adversely affect the holders of our common stock.

Our Articles of Incorporation authorizes issuance of capital stock including 20,000,000 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. Accordingly, we may authorize the issuance of additional shares or series of preferred stock that would rank senior to the shares of common stock as to dividend rights or rights upon our liquidation, winding-up, or dissolution.

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 shareholders, 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 the percentage ownership interest, which would have the effect of reducing your influence on matters on which our shareholders 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.

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 shareholders 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 shareholder who desires to sell a large number of shares of common stock to sell the shares in increments over time to mitigate any adverse impact of the sales on the market price of our stock.

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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 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 our common stock; (2) a five-year warrant to purchase one share of our common stock at an exercise price of $1.50, and (3) a five-year warrant to purchase one share of our common stock at an exercise price of $2.00, collectively these $1.50 and $2.00 warrants are referred to in this prospectus as the 2008 warrants.

In February 2009, we entered into an agreement to issue and sell to one investor (1) 900,000 shares of Series B-1 convertible redeemable preferred stock, or Series B preferred stock, each of which is convertible into four shares of our common stock for a total of 3,600,000 shares of common stock; (2) 2,100,000 shares of Series B-2 convertible redeemable preferred stock, or Series B-2 preferred stock, each of which is convertible into four shares of our common stock, for a total of 8,400,000 shares of common stock; (3) Class A-1 warrants exercisable to purchase 6,000,000 shares of our common stock; (4) Class A-2 warrants exercisable to purchase 6,000,000 warrants; and (5) Class B warrants exercisable to purchase 24,000,000 shares of our common stock. All the Class A-1 warrants, Class A-2 warrants and Class B warrants, which we refer to collectively in this prospectus as the 2009 warrants, are exercisable for five years at $0.50 per share, subject to customary anti-dilution adjustments. We have the right, upon 30-days notice and as long as a registration statement regarding the underlying common shares is then in effect, to issue a termination notice with respect to (1) each Class A-1 warrant on any day in which the market value of the common stock for each of the previous 15 trading days exceeds $1.25 per share (subject to customary anti-dilution adjustments) and (2) each Class A-2 warrant on any day in which the market value of the common stock for each of the previous 15 trading days exceeds $1.75 per share (subject to customary anti-dilution adjustments). As of the date of this prospectus, the same investor owns 1,340,798 shares of common stock, or Series B dividend shares, that we issued as stock dividends on the Series B-1 preferred stock and Series B-2 preferred stock.

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

- 250,000 shares of common stock issuable upon exercise of certain 2008 warrants;
- 12,000,000 shares of common stock issuable upon the conversion of shares of the Series B-1 preferred stock and Series B-2 preferred stock;
- 36,000,000 shares of common stock issuable upon the exercise of the 2009 warrants, comprised of the following: 6,000,000 shares upon exercise of the Class A-1 warrants, 6,000,000 shares upon exercise of the Class A-2 warrants, and 24,000,000 shares upon exercise of the Class B warrants; and
- 4,004,130 Series B dividend shares comprised of 1,340,798 shares that we have distributed prior to the date of this prospectus and 2,663,332 shares that we may distribute as Series B dividend shares prior to the redemption date for the Series B-1 preferred stock.

We issued and sold the 2008 Warrants, Series B-1 preferred stock, Series B-2 preferred stock and 2009 warrants 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

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offering. Prior to issuance, each selling stockholder represented to us that such selling stockholder was an accredited investor, as defined in Rule 501 of Regulation D under the Securities Act, and that the selling stockholder was acquiring the securities for investment purposes only and not with a view to, or sale in connection with, any distribution 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 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 affiliates 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

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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	Common Stock Owned Upon Completion of this Offering	Percentage of Common Stock Owned Upon Completion of this Offering
10X Fund, L.P.(1)	49,721,274	49,721,274	0(4)	*
David Platt(2)(3)	200,000	200,000	0	*
Yona Binder(3)	50,000	50,000	0	*

* Amounts to less than one percent.
Percentage calculations are based on 59,374,512 shares of our common stock issued and outstanding as of August 10, 2010.

(1) Represents 3,600,000 shares issuable on conversion of Series B-1 preferred stock, 8,400,000 shares issuable upon conversion of Series B-2 preferred stock, 36,000,000 shares exercisable upon exercise of 2009 warrants, 1,340,798 common shares issued as Series B dividend shares and 380,476 common shares to be issued as Series B dividend shares within 60 days. Not included are an additional 2,282,856 shares that are expected to be issued as dividends for the Series B-1 and Series B-2 preferred stock through the first quarter of 2012. The general partner of 10X Fund, L.P., a Delaware limited partnership, is 10X Capital Management, LLC, a Florida limited liability company, the managing members of which general partner are James C. Czirr and Rod D. Martin, each of whom is also a director of the Company. Messrs. Czirr and Martin in their capacity as managing members of the general partner of 10X Fund L.P. may be deemed to share voting and dispositive control of the shares of common stock owned by it but disclaim beneficial ownership of these shares.
(2) Chief Executive Officer and President of the Company until February 12, 2009.
(3) Represents shares issuable upon exercise of 2008 warrants.
(4) Assumes all Conversion Shares, Series B Dividend Shares and 2009 Warrant Shares are sold.

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;

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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 thereunder. 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 all of the shares have been sold pursuant to this prospectus. 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.

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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 thereunder, 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).

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BUSINESS

About Pro-Pharmaceuticals, Inc.

We are a development-stage company engaged in the discovery and development of therapeutics that target Galectin receptors that we believe enhance existing cancer treatments and could also be used in the 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 polysaccharide 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 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 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.

In March 2010, we granted PROCAPS, exclusive rights to market and sell DAVANAT® to treat cancer in Colombia, South America, which we refer to in this prospectus as the PROCAPS Channel. PROCAPS is a large, international, privately held pharmaceutical company based in Barranquilla, Colombia. Under terms of the agreement, PROCAPS is responsible for obtaining regulatory and pricing approval in Colombia, South America. PROCAPS also will be responsible for the vial filling, packaging, marketing and distribution of DAVANAT® in the region. On June 22, 2010, we announced the initial $200,000 purchase order of DAVANAT® by PROCAPS. After receipt of the PROCAPS purchase order, we delayed shipment of DAVANAT® to PROCAPS in order to resolve matters related to first-time international shipment of drugs. We have procured the required export license, and pending completion of related technical matters (such as product code, safety documents, customs clearance, etc.), anticipate shipment of DAVANAT® in the fourth quarter of 2010 and payment from PROCAPS.

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

Our Strengths and Strategies

Focus on novel therapeutic opportunities that target Galectin receptors. We believe our company is one of the pioneers focused on development of therapeutics that target Galectin receptors to treat cancer. 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 that target Galectin receptors. Our team has conducted research in therapeutic application of carbohydrate-based therapeutics for more than 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 his 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.

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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. 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 chemotherapies are chemical compounds, typically used in cancer treatment. Pre-clinical studies indicate that DAVANAT® and other proprietary therapeutics 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.

Achieve sales revenue through the PROCAPS Channel. In March 2010 we entered into an agreement with PROCAPS to seek regulatory approval to sell DAVANAT® in Colombia, South America, where we anticipate regulatory approval and sales prior to commercialization in other countries. Colombian officials have made known to us a strong medical need for a co-administered drug such as DAVANAT® that reduces the toxicity of chemotherapy such as 5-FU. Approval in Colombia would enable us to commence sales in certain other South American countries that recognize Colombian regulatory authority.

Product Development

We are initially developing a pipeline of compounds that may be combined with chemotherapies, such as 5-FU and biologics, such as Avastin®, so as to improve the clinical benefit to cancer 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 a 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 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 additionally to file NDAs for DAVANAT® in combination with other chemotherapeutics and biologics.

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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, or 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 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 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 compound 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 polysaccharide polymer comprised of mannose and galactose 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, called galectins, which are abundant on the surface of tumor cells, while selectively avoiding healthy tissue. We believe the structure of DAVANAT® is such that it is attracted to Galectin receptors that are specific and over-expressed on cancer cells. The Galectin receptor effectively interacts with DAVANAT® and the 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 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

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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.

See Risk Factors Risks Related to our Company We have one drug 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.

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As of December 31, 2009, 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. See Risk Factors Risks Related to the Drug Development Industry Our competitive position depends on protection of our intellectual property.

Research

Our initial focus is on the design and analysis of Galectin targeting therapeutics 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 $18.5 million for the cumulative period from inception (July 10, 2000) through December 31, 2009. During the years ended December 31, 2009 and 2008, our expenditures for research and development were $1.1 million and $1.8 million, respectively. During the six months ended June 30, 2010 and 2009, our expenditures for research and development were $363,000 and $576,000, respectively.

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 Risk Factors Risks Related to our Business There are risks associated with reliance on third parties for manufacturing, marketing, sales, managed care and distribution infrastructure channels.

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 Galectin therapeutic platforms. Companies, such as Momenta Pharmaceuticals Inc., are developing technologies 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.

See Risk Factors 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.

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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.

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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.

See Risk Factors 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. We currently are not seeking orphan drug designation.

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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 June 30, 2010, we had six full-time employees, two of whom were involved primarily in management of our pre-clinical research and development and clinical trials and four who were involved primarily in financial management and administration of our company. We also had one part-time contractor who provides manufacture and clinical trial support and two part-time contractors, one of whom provides financial management services and the other of whom serves as our medical director.

Properties

We lease 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

Other than claims and legal proceedings that arise from time to time in the ordinary course of business which are not material, the Company has no pending legal proceedings except as follows:

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.

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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 sale prices for our common stock as reported on the NYSE Alternext US (now known as the NYSE Amex) and OTC Bulletin Board, for the periods indicated below were as follows:

	High	Low
Fiscal Year Ending December 31, 2010		
July 1 - September 15, 2010	$ 0.82	$ 0.48
Second Quarter	$ 0.89	$ 0.41
First Quarter	$ 0.50	$ 0.26
Fiscal Year Ended December 31, 2009		
Fourth Quarter	$ 0.44	$ 0.24
Third Quarter	$ 0.50	$ 0.27
Second Quarter	$ 0.59	$ 0.20
First Quarter	$ 0.42	$ 0.05
Fiscal Year Ended December 31, 2008		
Fourth Quarter	$ 0.30	$ 0.05
Third Quarter	$ 0.39	$ 0.17
Second Quarter	$ 0.48	$ 0.25
First Quarter	$ 0.70	$ 0.26

Holders of Common Stock

As of February 16, 2010, there were approximately 279 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 3,923 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 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.

As of the date of this prospectus, we have issued 900,000 shares of Series B-1 preferred stock and 2,100,000 shares of Series B-2 preferred stock, which pay dividends at the rate of 12% per share per annum payable, at our option, in cash or our common stock valued at $0.50 as amended in August 2009. It is our intent to make the dividend payments with shares of common stock.

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

In addition to historical information, the following Management s Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements as defined under federal securities laws and is subject to the safe harbor created therein for forward-looking statements. Such statements include, but are not limited to, statements concerning our anticipated operating results, research and development, clinical trials, regulatory proceedings, and financial resources, and can be identified by use of words such as, for example, anticipate, estimate, expect, project, intend, plan, believe and would, should, could or may. Forward-looking statements are based on current expecta and projections about the industry and markets in which Pro-Pharmaceuticals operates, and management s beliefs and assumptions. These statements are not guarantees of future performance and involve certain known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Such risks and uncertainties are related to, without limitation, our early stage of development, our dependence on outside capital, uncertainties of our technology and clinical trials, intellectual property litigation, uncertainties of regulatory approval requirements for our products, competition and stock price volatility in the biotechnology industry, limited trading volume for our stock, concentration of ownership of our stock, and other risks detailed herein and from time to time in our SEC reports. The following discussion should be read in conjunction with the accompanying consolidated financial statements and notes thereto of Pro-Pharmaceuticals appearing elsewhere herein.

Overview

We are a development-stage company engaged in the discovery and development of therapeutic compounds that target Galectin receptors that we believe enhance existing cancer treatments. We believe our therapeutics could also be used in the 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 polysaccharide polymers which are designed to increase survival and improve 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 chemotherapy or biologics, increases 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.

Subsequent to the quarter ended June 30, 2010, we received $359,000 from the exercise of warrants and options for 736,115 shares of our common stock. We believe that with the cash received subsequent to quarter end and the cash on hand at June 30, 2010, there is sufficient cash to fund operations into March 2011. 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.

Development of DAVANAT® Technology

In 2002, the FDA granted an Investigational New Drug (IND) application for us to administer 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 also has 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 and an IND for DAVANAT® to be administered with 5-FU to treat early stage bile duct cancer patients. In addition, the FDA also has granted us, on a case-by-case basis, the ability to treat patients with breast cancer in response to physicians requests for so-called compassionate use .

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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.

Our pre-clinical and clinical trial data also show that DAVANAT® is well tolerated, safe and non-toxic.

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

According to its published guidance, the FDA initially determines whether a New Drug Application (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.

In May 2008, we submitted a Drug Master File (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 current Good Manufacturing Process (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 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 conduct a pharmacokinetic (PK) analysis, 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.

On June 16, 2010, we announced the appointment of Peter Traber, M.D., as our interim Chief Medical Officer to, among other things, lead our FDA Phase III colorectal cancer trial for DAVANAT® as well as our overall FDA approval process. Dr. Traber has been a member of our Board of Directors since February 2009 and is President Emeritus and former Chief Executive Officer of Baylor School of Medicine. His previous positions include Senior Vice President of Clinical Development and Medical Affairs and Chief Medical Officer of GlaxoSmithKline, and Chief Executive Officer of the University of Pennsylvania Health System.

Agreement with PROCAPS S.A.

On March 25, 2010, we granted PROCAPS S.A. (PROCAPS) exclusive rights to market and sell DAVANAT® to treat cancer in Colombia, South America. PROCAPS is a large, international, privately held pharmaceutical company based in Barranquilla, Colombia. Under terms of the agreement, PROCAPS is responsible for obtaining regulatory and pricing approval in Colombia, South America. PROCAPS also will be responsible for the vial filling, packaging, marketing and distribution of DAVANAT® in the region.

Once approved for sale by regulators, we will receive a transfer payment for each dose of DAVANAT® shipped to PROCAPS, in addition to a royalty above a minimum annual sales threshold. PROCAPS will purchase an initial minimum order of DAVANAT® from Pro-Pharmaceuticals to qualify their vial-filling process and to replicate Pro-Pharmaceuticals stability study. We retain all intellectual property rights and we are the owner of the regulatory approval of DAVANAT® in the region. PROCAPS has first negotiation rights to other countries in South and Central America and the Caribbean. Based on approval in Colombia, PROCAPS may then obtain the marketing authorization in 10 countries in Latin America.

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Results of Operations

Three and Six-Months Ended June 30, 2010 Compared to Three and Six-Months Ended June 30, 2009

Research and Development Expense.

	Three Months Ended June 30,		Six Months Ended June 30,		2010 as Compared to 2009			
					Three Months		Six Months	
	2010	2009	2010	2009	$ Change	% Change	$ Change	% Change
	(In thousands, except %)							
Research and development	$ 234	$ 423	$ 363	$ 576	$ (189)	(45)%	$ (213)	(37)%

We generally categorize research and development expenses as either direct external expenses, comprised of amounts paid to third party vendors for services, or all other research and development expenses, comprised of employee payroll, stock-based compensation 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 and six-months ended June 30, 2010, as compared to the three and six-months ended June 30, 2009, were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(in thousands)			
Direct external expenses:				
Clinical programs	$ 30	$ 90	$ 38	$ 105
Pre-clinical activities		79	11	103
Stock-based compensation	103	116	112	123
All other research and development expenses	101	138	202	245
	$ 234	$ 423	$ 363	$ 576

Clinical program and pre-clinical expenses for the three and six-months ended June 30, 2010, decreased compared to the same periods in 2009, due primarily to overall lower activity, specifically, decreased pre-clinical activities. We plan to initiate a Phase III trial as soon as we raise sufficient 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

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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.

	Three Months Ended June 30,		Six Months Ended June 30,		2010 as Compared to 2009			
					Three Months		Six Months	
	2010	2009	2010	2009	$ Change	% Change	$ Change	% Change
	(In thousands, except %)							
General and administrative	$ 1,116	$ 1,569	$ 2,019	$ 3,150	$ (453)	(29)%	$ (1,131)	(36)%

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 the decrease for the three-months ended June 30, 2010 as compared to the same period in 2009 is due to decreased payroll ($92,000), decreased stock-based compensation ($294,000), and decreased legal and accounting costs ($140,000), offset by increased business development expenses ($108,000) as we increased our efforts to commercialize DAVANAT® in South America. The primary reason for the decrease for the six-months ended June 30, 2010 as compared to the same period in 2009 is due to decreased payroll ($556,000) as the result of the recognition of severance obligations in 2009 related to the departure of our former chief executive officer, decreased stock-based compensation expense ($225,000) and decreased legal and accounting costs ($539,000) primarily due to trade secrets litigation in 2009, offset by increased business development expenses ($266,000) as we increased our efforts to gain regulatory approval to commercialize DAVANAT® in South America.

Other Income and Expense. Other income and expense for the three and six-months ended June 30, 2010 was an expense of $305,000 and $1,411,000, respectively, and for the three and six-months ended June 30, 2009 was an expense of $851,000 and $1,712,000, respectively, related primarily to the change in fair value of warrant liabilities.

Year Ended December 31, 2009 Compared to Year Ended December 31, 2008

Research and Development Expense

	Year ended December 31,		2009 as Compared to 2008	
	2009	2008	$ Change	% Change
	(In thousands, except %)			
Research and development	$ 1,110	$ 1,774	$ (664)	(37)%

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

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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 years ended December 31, 2009 and 2008 were as follows:

	Year Ended December 31,	
	2009	2008
	(in thousands)	
Direct external expenses:		
Clinical programs	$ 114	$ 244
Pre-clinical activities	310	681
All other research and development expenses	686	849
	$ 1,110	$ 1,774

Clinical program and pre-clinical expenses for the year ended December 31, 2009, decreased compared to the same periods in 2008, due primarily to overall lower activity as a result of cost containment measures. Specifically, the overall decrease for the year ended December 31, 2009 as compared to 2008, is due to decreased stock-based compensation ($173,000), decreased compensation ($47,000) and decreased direct external expenses related to clinical programs and pre-clinical activities ($501,000). Also, during 2008, we incurred costs related to the filing of our DAVANAT® Drug Master File with the FDA as well as expenses related to our Phase II colorectal and biliary cancer trials which were not incurred during 2009. We expect to initiate a Phase III trial as soon as we are able to raise sufficient 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

	Year ended December 31,		2009 as Compared to 2008	
	2009	2008	$ Change	% Change
	(In thousands, except %)			
General and administrative	$ 4,983	$ 3,552	$ 1,431	40%

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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 the increased expense during the year ended December 3, 2009 as compared to 2008 is due to increased business development expenses ($172,000) as we increased our business development efforts, increased stock-based compensation in the form of employee options ($827,000) and increased compensation costs ($765,000) due primarily to the recognition of severance obligations related to the departure of our former chief executive officer. These expense increases were offset by decreased legal and accounting costs ($243,000).

Other Income and Expense

Other income and expense for the years ended December 31, 2009 and 2008 was a loss of $1,369,000 and a gain of $2,175,000, respectively, due primarily to the change in fair value of warrant liabilities.

Liquidity and Capital Resources

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 June 30, 2010, we raised a net total of $47.7 million from these offerings. At June 30, 2010, we had $2,863,000 of unrestricted cash and cash equivalents available to fund future operations.

Subsequent to the quarter ended June 30, 2010, we received $359,000 from the exercise of warrants and options for 736,115 shares of our common stock. We believe that with the funds from the cash received subsequent to quarter end and the cash on hand at June 30, 2010, there is sufficient cash to fund operations into March 2011. 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 actively seeking to raise additional capital and have significantly reduced our administrative and clinical spending. If we are unsuccessful in raising additional capital we may be required to cease operations or seek bankruptcy protection. Our Annual Report on Form 10-K for the 2009 fiscal year, which was filed with the SEC on March 12, 2010, contained an audit report that expresses doubt about our ability to continue as a going concern for a reasonable period of time. In light of our current financial position and the uncertainty of raising sufficient capital to achieve our business plan, there is substantial doubt about our ability to continue as a going concern. Net cash used in operations decreased by $266,000 to $1,692,000 for the six months ended June 30, 2010, as compared to $1,958,000 for the six months ended June 30, 2009. 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.

No cash was provided by or used in investing activities during the six-months ended June 30, 2010, unchanged from the same period in 2009.

Net cash provided by financing activities was $4,304,000 during the six-months ended June 30, 2010 as compared to $2,622,000 during the six-months ended June 30, 2009, due primarily to the transactions described below.

On January 29, 2010, we issued and sold, pursuant to the 10X Agreement: (i) 162,500 shares of Series B-2 convertible into 650,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 325,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 325,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 1,300,000 shares of common stock. Net proceeds from the closing were $308,000.

On March 8, 2010, we issued and sold, pursuant to the 10X Agreement: (i) 167,500 shares of Series B-2 convertible into 670,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 335,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 335,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 1,340,000 shares of common stock. Net proceeds from the closing were $322,000.

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On April 30, 2010, we issued and sold, pursuant to the 10X Agreement: (i) 155,000 shares of Series B-2 convertible into 620,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 310,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 310,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 1,240,000 shares of common stock. Net proceeds from the closing were $297,000.

On May 10, 2010, we issued and sold, pursuant to the 10X Agreement: (i) 285,000 shares of Series B-2 convertible into 1,140,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 570,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 570,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 2,280,000 shares of common stock. Net proceeds from the closing were $536,000.

During the six months ended June 30, 2010, warrants for common stock were exercised resulting in the issuance of 5,480,774 shares of common stock and net cash proceeds of $2,740,000. During the six months ended June 30, 2010, options for common stock were exercised resulting in the issuance of 506,000 shares of common stock and net cash proceeds of $101,000.

On February 12, 2009, the initial closing date under the purchase agreement with 10X Fund LP, we 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 cash proceeds from the closing of this offering was $1,548,000. Concurrent with the closing of the Series B-1 transaction, we repaid an investor $200,000 of advances received in 2008.

On May 13 , 2009, we issued and sold, pursuant to the 10X Agreement: (i) 450,000 shares of Series B-2 convertible preferred stock (Series B-2 redeemable convertible preferred stock or Series B-2) convertible into 1,800,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 900,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 900,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 3,600,000 shares of common stock. Net proceeds from the closing were $801,000.

On June 30, 2009, we issued and sold, pursuant to the 10X Agreement: (i) 250,000 shares of Series B-2 convertible into 1,000,000 shares of common stock; (ii) Class A-1 warrants exercisable to purchase 500,000 shares of common stock; (iii) Class A-2 warrants exercisable to purchase 500,000 shares of common stock; and (iv) Class B warrants exercisable to purchase 2,000,000 shares of common stock. Net proceeds from the closing were $473,000.

Payments Due Under Contractual Obligations

The following table summarizes the payments due under our contractual obligations at June 30, 2010, 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	$ 302	$ 272	$ 30	$	$
Separation agreement	357	357			
Total payments due under contractual obligations	$ 659	$ 629	$ 30	$	$

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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 $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, we entered into a Separation Agreement in connection with the resignation of David Platt, Ph.D., our former Chief Executive Officer and Chairman of the Board of Directors. 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 first quarter of 2009. The remaining liability related to this severance is reflected in accrued expenses ($357,000) at June 30, 2010.

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 nine 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 June 30, 2010. 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 June 30, 2010. 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.

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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.

Critical Accounting Policies and Estimates

Our significant accounting policies are more fully described in Note 2 to our audited 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 and performance vesting features of certain of these instruments, useful lives and potential impairment of property and equipment and intangible assets, accrued liabilities, deferred income taxes and cash flow. 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.

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. We review the intangible assets for potential impairment on an annual basis or whenever events or changes in circumstances indicate that the asset may be impaired.

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.

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. Such warrants do not meet the criteria 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 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.

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Stock-Based Compensation. Through December 31, 2005, we accounted for stock-based compensation to employees and non-employee directors under the intrinsic value method under which no compensation expense was recognized for stock options granted at fair market value and with fixed terms. On January 1, 2006, we adopted rules requiring companies to recognize stock-based compensation awards as compensation expense on a fair value method. These rules were adopted using the modified prospective method, which applied the rules to the consolidated financial statements on a going-forward basis. Under the fair value recognition provisions, 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. For awards that have performance based vesting conditions we recognize the expense over the estimated period that the awards are expected to be earned. We use 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, we recorded the impact of forfeitures as they occurred.

Recent Accounting Pronouncements

In June 2009, the Financial Accounting Standards Board (FASB) issued the FASB Accounting Standards Codification (the Codification) as the single source of authoritative U.S. GAAP recognized by the FASB to be applied by nongovernmental entities in preparation of financial statements in conformity with U.S. GAAP. While the adoption of the Codification as of September 30, 2009 changes how the Company references accounting standards, the adoption did not have an impact on its financial position, results of operations, or cash flows.

On January 1, 2009, the principles and requirements for how an acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any noncontrolling interest in the acquiree and the goodwill acquired were revised. Disclosure requirements were also established, which will enable financial statement users to evaluate the nature and financial effects of business combinations. Among other things, the amendments to the accounting principles and requirements expand the definitions of a business and business combination, require recognition of contingent consideration at fair value on the acquisition date and require acquisition-related transaction costs to be expensed as incurred. The adoption of these amendments did not have a significant impact on the Company s financial position, results of operations, or cash flows.

On January 1, 2009, the Company adopted the fair value measurements and disclosures provisions for nonfinancial assets and nonfinancial liabilities, which were previously deferred. These provisions establish a framework for measuring fair value and expand financial statement disclosures about fair value measurements. Items to which these provisions apply include nonrecurring fair value measurements of nonfinancial assets and nonfinancial liabilities, or recurring fair value measurements of nonfinancial assets and nonfinancial liabilities, which are not disclosed at fair value in the consolidated financial statements. The Company did not have nonfinancial assets or nonfinancial liabilities covered by these provisions which required remeasurement upon adoption or during the year ended December 31, 2009, and therefore there was no impact of adoption on its financial position, results of operations, or cash flows.

On January 1, 2009, the Company adopted the accounting standard for ownership interests in subsidiaries held by parties other than the parent, which establishes accounting for the amount of consolidated net income attributable to the parent and to the noncontrolling interest, changes in a parent s ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. This accounting standard also establishes reporting requirements that provide enhanced disclosures that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. The impact of adopting this accounting standard on the Company s financial position, results of operations, and cash flows was not significant.

On January 1, 2009, the Company adopted amendments to the accounting standard addressing derivatives and hedging. The amendments change the disclosure requirements for derivative instruments and hedging activities, requiring enhanced disclosures about how and why an entity uses derivative instruments, how instruments are accounted for under U.S. GAAP, and how derivatives and hedging activities affect an entity s financial position, financial performance and cash flows. The adoption of these amendments required additional disclosure only, and therefore did not have an impact on the Company s financial position, results of operations, or cash flows.

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On January 1, 2009, the Company adopted amendments to the accounting standard addressing intangibles, goodwill and other assets. The amendments provided new guidance to improve the consistency between the useful life of a recognized intangible asset and the period of expected cash flows used to measure the fair value of the asset under U.S. GAAP. The adoption of these amendments did not have a significant impact on the Company s financial position, results of operations, or cash flows.

On June 30, 2009, the Company adopted amendments to the accounting standard for financial instruments. The amendments require disclosures about the fair value of financial instruments in interim as well as in annual financial statements. The adoption of these amendments has resulted in additional disclosures only in the Company s interim financial statements, and therefore did not impact its financial position, results of operations or cash flows.

On June 30, 2009, the Company adopted amendments to the accounting standard addressing subsequent events. The amendments provide guidance to establish general standards of accounting for and disclosures of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. The amendments require entities to disclose the date through which subsequent events were evaluated as well as the rationale for why that date was selected. This disclosure should alert all users of financial statements that an entity has not evaluated subsequent events after that date in the set of financial statements being presented. The amendments required additional disclosures only, and therefore did not have an impact on our financial position, results of operations, or cash flows. The Company has evaluated events and transactions that occurred between December 31, 2009 and the date of this filing. During this period, the Company did not have any material subsequent events that impacted the Company s consolidated financial statements.

In January 2010, the Financial Accounting Standards Board issued Accounting Standards Update No. 2010-06 for Fair Value Measurements and Disclosures (Topic 820): *Improving Disclosures about Fair Value Measurements*. This Update requires new disclosures for transfers in and out of Level 1 and 2 and activity in Level 3. This Update also clarifies existing disclosures for level of disaggregation and about inputs and valuation techniques. The new disclosures are effective for interim and annual periods beginning after December 15, 2009, except for the Level 3 disclosures, which are effective for fiscal years beginning after December 15, 2010 and for interim periods within those years. Other than requiring additional disclosures, adoption of this new guidance did not have a material impact on our financial statements and is not expected to have a significant impact on the reporting of our financial condition or results of operations.

DIRECTORS AND EXECUTIVE OFFICERS

Board of Directors:

Name	Age as of 3/12/10	Position
Gilbert F. Amelio, Ph.D.	67	Director
James C. Czirr	56	Executive Chairman
Arthur R. Greenberg	63	Director
Rod D. Martin	40	Vice Chairman
S. Colin Neill	63	Director
Steven Prelack	52	Director
Jerald K. Rome	75	Director
Peter G. Traber, M.D.	54	Director
Theodore D. Zucconi	63	Chief Executive Officer, President and Director

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

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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. in 1996 and 1997, and from 1991 to 1996, he was chief executive officer of National Semiconductor Corporation. He was a director of Chiron, now a part of Novartis, from 1991 to 1996. We believe Dr. Amelio s qualifications to sit on our Board of Directors include his executive leadership and management experience, as well as his extensive experience with global companies, his financial expertise and his years of experience providing strategic advisory services to complex organizations.

Mr. Czirr, a Series B director, was appointed a director and became Chairman of the Board of Directors on February 12, 2009 and Executive Chairman of the Board on February 11, 2010. Mr. Czirr, age 56, is a co-founder of 10X Fund, L.P. and is a managing member of 10X Capital Management LLC, the general partner of 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.B.A. degree from the University of Michigan. We believe Mr. Czirr s qualifications to sit on our Board of Directors include his extensive experience with developing entrepreneurial biotech companies, his financial expertise and his years of experience providing strategic advisory services to development stage organizations.

Mr. Greenberg was appointed a director in August 2009. With 37 successful years in the semiconductor equipment and materials industries, Mr. Greenberg is the President and Founder of Prism Technologies, Inc. Prism provides professional sales & marketing services and business development consulting services. Mr. Greenberg is a member of the board of UV Tech Systems, a designer and manufacturer of equipment used to fabricate semiconductor devices. Previously, he was the first President of SEMI, North America, a semiconductor equipment and materials industry trade association representing the interests, including public policy, of more than 2000 members doing business in North America. Mr. Greenberg received his Bachelor of Science degree in Business Administration from Henderson State University. We believe Mr. Greenberg s qualifications to serve on our Board of Directors include his experience in leading technology enterprises, as well as his experience as a CEO of a technology company.

Mr. Martin, a Series B director, was appointed a director and became a member of the Nominating and Corporate Governance Committee and of the Compensation Committee on February 12, 2009. Mr. Martin was appointed Vice Chairman of the Board on February 11, 2010. Mr. Martin, age 40, is a co-founder of 10X Fund, L.P. and is a managing member of 10X Capital Management LLC, the general partner of 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 was 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. We believe Mr. Martin s qualifications to sit on our Board of Directors include his extensive experience with developing entrepreneurial technology companies and his years of experience providing strategic legal and advisory services to development stage organizations.

Mr. Neill, a director since May 2007, became President of Pharmos Corp. (PARS.PK) 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 developed 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.

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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. We believe Mr. Neill s qualifications to sit on our Board of Directors include his executive leadership and management experience, as well as his financial expertise with public and financial accounting matters for technology and life science organizations.

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 software solutions for the pharmaceutical industry. In this capacity, Mr. Prelack oversees sales, business development, operations and finance. Mr. Prelack is a director of Codeco Corporation, a designer and manufacturer of custom resisters and switches, and is a member of the Strategic Advisory Board of BioVex, a Biotechnology company focused on cancer. Mr. Prelack served as Director and Audit Committee Chair for BioVex from 2007 through 2009. Mr. Prelack, a Certified Public Accountant, received a B.B.A. degree from the University of Massachusetts at Amherst in 1979. We believe Mr. Prelack s qualifications to sit on our Board of Directors include his extensive experience with public and financial accounting matters for technology organizations.

Mr. Rome, a director 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. We believe Mr. Rome s qualifications to serve on our Board of Directors include his experience as a CEO of a pharmaceutical company, as well as his executive management and corporate governance expertise.

Dr. Traber was appointed a director on February 12, 2009. Dr. Traber is Chair of the Board and Chief Executive Officer of TerraSep, LLC, a Mountain View, CA biotechnology start-up company. 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 from the University of Michigan. We believe Dr. Traber s qualifications to sit on our Board of Directors include his years of medical experience in the pharmaceutical and healthcare industries, as well as the deep understanding of our patients and our products.

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 senior management capacities at Motorola, including Director of Motorola University. Prior to Motorola, Dr. Zucconi held technical, operational, and senior management positions at high technology companies, including IBM and Nortel Networks. Dr. Zucconi led a number of successful turnaround projects. 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 is a certified project manager from Stanford University. We believe Dr. Zucconi s qualifications to sit on our Board of Directors include his three decades of technical, operational and management experience with technology companies, including three years as our President.

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Executive officers and key employees:

Theodore Zucconi, Ph.D., Chief Executive Officer and President (see Board of Directors)

Anatole Klyosov, Ph.D., D.Sc., our Chief Scientist, is 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 250 peer-reviewed articles in scientific journals, authored books on enzymes, carbohydrates, and biotechnology, edited two books: *Carbohydrates in Drug Design* and *Galectins*, 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 capital, 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 Fisher Scientific, Inc. 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.

Certain Relationships and Related Transactions

Since the beginning of fiscal 2008 and through June 30, 2010, the Company did not participate in any transactions in which any of the director nominees, Class B directors, executive officers, any beneficial owner of more than 5% of the Company s common stock, nor any of their immediate family members, had a direct or indirect material interest other than as described below.

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In June 2010 we agreed in principle to engage PGT BioMedical Consulting, LLC, for a four-year consulting arrangement for services customarily provided by a chief medical officer, with terms to be negotiated but with an effective date of June 15, 2010. PGT BioMedical Consulting is controlled by Peter Traber, M.D., who is a member of our Board of Directors. On June 16, 2010, we announced the appointment of Dr. Traber as our interim Chief Medical Officer. As of August 3, 2010, we entered into a Consulting Agreement pursuant to which PGT BioMedical Consulting, agrees to provide services, which are to be performed by Dr. Traber, related to, among other things, approvals of DAVANAT® in the field of oncology, completing a plan for the development and approval of a drug for liver fibrosis/cirrhosis, and overseeing the conduct of our clinical trials. The Consulting Agreement is terminable by either party on 90 days notice and contains customary provisions for assignment of inventions and protection of confidential information.

The Consulting Agreement provides that we will pay PGT BioMedical Consulting $5,000 per month for the first two years of the four-year term, and, following approval by our Board of Directors, grant a five-year common stock purchase warrant to Dr. Traber for 600,000 shares of our common stock exercisable as follows: 150,000 warrants upon signing the Consulting Agreement, 150,000 warrants at the its first anniversary with satisfactory performance of the objectives contemplated by the Consulting Agreement, 150,000 warrants when the first patient is dosed in our Phase III trials, and 150,000 warrants when an investigational new drug application is approved for fibrosis. Following approval by our Board as of July 1, 2010, we issued a warrant dated August 3, 2010, to Dr. Traber exercisable at $0.71 per share to purchase 600,000 shares of our common stock upon achievement of such milestones.

COMPENSATION OF NAMED EXECUTIVE OFFICERS

The following table summarizes the compensation paid to our Named Executive Officers for the fiscal years ended December 31, 2009 and 2008.

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($) [1]	All Other Compensation ($)	Total ($)
Theodore D. Zucconi, Ph.D.,	2009	111,988	10,000	905,736	53,737[4]	1,081,461
Chief Executive Officer & President[2]	2008	137,169		48,215	39,502[5]	224,886
David Platt, Ph.D.,	2009	14,000		41,605	134,917[6]	190,522
Former Chief Executive Officer[3]	2008	141,000		64,287	40,244[7]	245,531
Eliezer Zomer, Ph.D.,	2009	104,833		70,724	28,756[8]	204,313
Executive Vice President of Manufacturing and Product Development	2008	124,333		48,215	29,271[9]	201,819

(1) These amounts represent the aggregate grant date fair value of option awards for fiscal 2009 and 2008, respectively. These amounts do not represent the actual amounts paid to or realized by the named executive officer for these awards during fiscal years 2009 and 2008. The value of as of the grant date for stock options is recognized over the number of days of service required or the achievement of certain specified milestones for the grant to become vested.

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The following table includes the assumptions used to calculate the grant date fair value reported for fiscal years 2009 and 2008 on a grant by grant basis.

				Assumptions				
Name	Grant Date	Shares Granted (#)	Exercise Price ($)	Volatility (%)	Expected Life (Years)	Risk-Free Interest Rate (%)	Dividend Yield (%)	Grant Date Fair Value Per Share ($)
Theodore D. Zucconi, Ph.D.	5/21/2009	2,000,000	0.48	124	5.0	2.16	0	0.40
	3/24/2009	500,000	0.23	123	5.0	1.70	0	0.19
	4/10/2008	150,000	0.44	95	5.0	2.66	0	0.32
David Platt, Ph.D.	2/25/2009[10]	250,000	0.20	121	5.0	2.06	0	0.17
	4/10/2008[11]	200,000	0.44	95	5.0	1.70	0	0.32
Eliezer Zomer, Ph.D.	4/21/2009	175,000	0.48	124	5.0	1.87	0	0.40
	4/10/2008	150,000	0.44	95	5.0	1.70	0	0.32

(2) Appointed Chief Executive Officer effective February 12, 2009.
(3) Resigned effective February 12, 2009.
(4) Includes $44,861 for local housing and travel to permanent residence, $6,010 for health insurance and $2,866 for automobile expenses.
(5) Includes $34,744 for local housing and travel to permanent residence and $4,758 for automobile expenses.
(6) Includes $100,000 of severance payments, $25,157 for health insurance expenses ($20,000 paid after resignation per Dr. Platt s severance agreement), $9,600 for automobile expenses ($8,000 paid after resignation) and $160 for retirement plan contributions.
(7) Includes $27,403 for health insurance expenses, $7,201 for automobile expenses and $5,640 for retirement plan contributions.
(8) Includes $24,563 for health insurance expenses and $4,193 for retirement plan contributions.
(9) Includes $24,568 for health insurance expenses and $4,703 for retirement plan contributions.
(10) Granted for service as an outgoing board member.
(11) Options cancelled, unexercised during 2009.

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 2009 and 2008.

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 amended and restated his prior employment agreement effective October 1, 2007. Although Dr. Zucconi s 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 sale of our Series B preferred stock to the 10X Fund, Dr. Zucconi was appointed as our Chief Executive Officer and President effective February 12, 2009.

On May 21, 2009, the Company and Zucconi entered into an Employment Agreement (the Agreement) which shall be in effect until May 31, 2011. The Agreement provides for an annual salary of $260,000, retroactive to February 12, 2009, which may be adjusted proportionately to the adjustments for other executives, provided that any reductions of 2009 compensation shall be paid no later than the first calendar quarter of 2010. Due to cash conservation efforts, Dr. Zucconi agreed to work for a base monthly salary of $10,000 in 2009. On December 31, 2009, Dr. Zucconi and the Company agreed that we owe him no unpaid 2009 salary except for accrued vacation. As incentives, Dr. Zucconi is entitled to grants of up to 2,000,000 stock options, which at his election may be incentive stock options or non-qualified stock options, to purchase shares of our common stock as follows: (i) 400,000 as of the effective date of the Agreement, (ii) 150,000 with a vesting date of December 31, 2009; (iii) 200,000 with a vesting date of December 31, 2010; and upon achieving the following milestones: (a) 100,000 after the effective date of an investigational new drug application by the U.S. Food and Drug Administration (FDA), e.g., for fibrosis or anti-hypoxia, filed by the Company, a partner, an agent or subsidiary; (b) 300,000 for any FDA approval of marketing and sales of DAVANAT® ; (c) 100,000 for each of first three agreements to sell/distribute a product; (d) 150,000 for the initiation of sales of DAVANAT® anywhere in the world; (e) 150,000 for

the initiation of sales of DAVANAT® specifically in the United States; and (f) 250,000 following the first calendar quarter in which we achieve profitability. The stock options are exercisable for seven years whether or not Dr. Zucconi is then employed by us, are priced on the date of approval of this agreement, shall vest as indicated and contain a cashless exercise provision. Dr. Zucconi may elect to take stock instead of stock options.

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The Agreement provides that Dr. Zucconi shall be entitled to cash bonus payments as follows: (i) $100,000 of which $20,000 is paid when an additional $1 million is raised and $40,000 when each additional $1 million is received until the total is paid; (ii) 2% of financing introduced from sources identified by Dr. Zucconi and not from sources, or their successors, previously identified by us or 10X Capital Management; and (iii) 1% of the upfront fees and milestone payments in the event a partnership or joint venture is formed to sell or distribute a Company drug or reached with another company with upfront fees and milestone payments. In 2009, Dr. Zucconi received $20,000 cash bonus.

The Agreement entitles Dr. Zucconi to: (i) an automobile allowance of $500 per month; (ii) use of an apartment within reasonable commuting distance of our principal offices, and up to $20,000 per year additional temporary living costs; (iii) fourteen round trip single passenger airline tickets (by coach) per year between Massachusetts and Phoenix, Arizona; (iv) participation in our 401(k) plan with an employer match; and (v) medical insurance through us or reimbursement for premiums paid by Dr. Zucconi.

The Agreement provides for (i) severance compensation in the event Dr. Zucconi s employment is terminated without cause; (ii) payments and eligibility for continuation of benefits to his spouse and eligible dependents in the event of his death; (iii) continued compensation and eligibility of his spouse and dependents for benefits in the event of his termination by reason of disability; and (iv) rights to indemnification if Dr. Zucconi is made a party or threatened to be made a party to a proceeding by virtue of his capacity as a director or employee of us. The Agreement contains covenants binding on Zucconi with respect to, among others, assignment of inventions, confidentiality, non-solicitation, and non-competition.

The Agreement in certain events obligates us with respect to certain payments and other coverages for the benefit of Dr. Zucconi s spouse and eligible dependents upon written certification from the Board of Directors of the Company that the Company s financial condition can support such expense, which shall be revisited at each meeting until the certification is made.

The Agreement required Dr. Zucconi to assign inventions and other intellectual property to us that 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.

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 2009 under the Platt Employment Agreement, and, accordingly, we did not pay a bonus to Dr. Platt in 2009.

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.

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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 Fiscal Year-End 2009

The following table provides information with respect to outstanding stock options held by the officers named in the Summary Compensation Table as of December 31, 2009.

		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
Theodore D. Zucconi, Ph.D.	12/09/2007	200,000		0.70	12/09/2012
	04/10/2008	150,000		0.44	04/10/2013
	03/24/2009		500,000(1)	0.23	03/24/2014
	05/21/2009	550,000(2)	1,450,000(2)	0.48	05/21/2016
Eliezer Zomer, Ph.D.	11/14/2002	120,000		3.50	11/14/2012
	09/02/2003	425,000		4.05	09/02/2013
	12/21/2004	75,000		1.90	12/21/2014
	03/09/2006	50,000(3)		3.75	03/09/2011
	03/08/2007	66,667(3)	33,333(3)	1.01	03/08/2012
	04/10/2008	150,000		0.44	04/10/2013
	04/21/2009	175,000		0.48	04/21/2014
David Platt, Ph.D. (4)	02/25/2009	250,000		0.20	02/25/2014

(1) Options vest at the rate of 50% after one year, 25% on 6/24/2010, 12.5% on 9/24/2010, 6.25% on 12/24/2010 and 6.25% on 3/24/2011.

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(2) Options vest at the rate of 400,000 upon grant, 150,000 on 12/31/2009, 200,000 on 12/31/2010 and 1,250,000 upon the achievement of certain defined milestones. None of the milestone options have been achieved as of December 31, 2009.
(3) Options vest annually, in equal increments, over three years beginning the first anniversary of the grant date, provided the grantee is then an employee.
(4) Resigned on February 12, 2009.

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 2009.

DIRECTOR COMPENSATION

The following table details the total compensation earned by our non-employee directors in fiscal 2009.

2009 Director Compensation

Name[1]	Fees Earned or Paid in Cash ($)	Option Awards ($)[2][4]	Restricted Stock Awards ($)[2]	All Other Compensation ($)	Total ($)
Gilbert F. Amelio, Ph.D.			90,000		90,000
James C. Czirr	126,000[5]		90,000	37,913[3]	253,913
Rod D. Martin			90,000		90,000
S. Colin Neill		83,800			83,800
Steven Prelack	60,000[6]	83,603			143,603
Jerald K. Rome		84,586			84,586
Peter Traber, M.D.			90,000		90,000
Arthur R. Greenberg			90,000		90,000

(1) Theodore Zucconi was the only director during 2009 who was also an employee of Pro-Pharmaceuticals. He did not receive any compensation in his capacity as a director.
(2) These amounts represent the aggregate grant date fair value of awards for grants of options or restricted stock awards to each listed director in fiscal 2009. These amounts do not represent the actual amounts paid to or realized by the directors during fiscal 2009. The value as of the grant date for stock options is recognized over the period of service required for the stock awards to vest in full.
(3) Amount represents expense reimbursement for travel.
(4) The aggregate number of shares subject to option awards held by each director (representing unexercised options awards both exercisable and un-exercisable) at December 31, 2009 is as follows:

Name	Number of Shares Subject to Option Awards held as of December 31, 2009	Number of Shares of Restricted Stock Held as of December 31, 2009
Gilbert F. Amelio, Ph.D.		500,000
James C. Czirr		500,000
Rod D. Martin		500,000
S. Colin Neill	511,500	
Steven Prelack	536,750	
Jerald K. Rome	570,500	
Peter Traber, M.D.		500,000
Arthur R. Greenberg		500,000
TOTAL	1,618,750	2,500,000

(5) Compensation paid to Mr. Czirr was for his service as Chairman of the Company.
(6) Compensation paid to Mr. Prelack was for his service as Audit Committee Chairman.

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The following table includes the assumptions used to calculate the fiscal 2009 grant date fair value on a grant by grant basis for option awards for our directors.

				Assumptions				
Name	Grant Date	Shares Granted (#)	Exercise Price ($)	Volatility (%)	Expected Life (Years)	Risk-Free Interest Rate (%)	Dividend Yield (%)	Grant Date Fair Value Per Share ($)
S. Colin Neill	2/25/2009	500,000	0.20	121	5.0	2.06	0	0.17
	2/06/2009	6,000	0.12	117	5.0	1.97	0	0.10
Steven Prelack	2/25/2009	500,000	0.20	121	5.0	2.06	0	0.17
	2/06/2009	4,000	0.12	117	5.0	1.97	0	0.10
Jerald K. Rome	2/25/2009	500,000	0.20	121	5.0	2.06	0	0.17
	2/06/2009	14,000	0.12	117	5.0	1.97	0	0.10

For a more detailed description of the assumptions used for purposes of determining grant date fair value, see Note 10 to the Financial Statements and Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates Stock-Based Compensation, included elsewhere herein.

We also reimburse our directors for travel and other related expenses.

After the end of fiscal 2009, on February 1, 2010, we granted the following stock options to our non-employee directors. Stock options were granted at an exercise price of $0.30 per share, which was the closing price of our stock on the date of the grant.

Name	Number of Stock Options
James C. Czirr	1,000,000[1]
Rod D. Martin	500,000[2]

(1) Granted for Mr. Czirr s service as Chairman of the Board during 2009 and as Executive Chairman for 2010. Options vest: 500,000 vested on grant and 500,000 will vest over one year.

(2) Granted for Mr. Martin s service as the Chairman of the Compensation Committee and the Nominating and Corporate Governance Committee during 2009 and as Vice Chairman of the Board for 2010. Options vest: 250,000 vested on grant and 250,000 will vest over one year.

Equity Award Policy for Non-Employee Directors

Prior to 2009, as provided for in our 2003 Non-employee Directors Stock Incentive Plan, each non-employee director received 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.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of December 31, 2009 about the securities issued, or authorized for future issuance, under our equity compensation plans, consisting of our 2001 Stock Incentive Plan, our 2003 Non-Employee Director Stock Option Plan, and our 2009 Incentive Compensation Plan.

Plan Category	Number of Securities to be issued upon exercise	Weighted-average exercise price of	Number of securities remaining available for

	of outstanding options, warrants and rights		outstanding options, warrants and rights	future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	9,896,000	$	1.20	3,404,000
Equity compensation plans not approved by security holders	364,250	$	3.23	
Total	10,260,250	$	1.20	3,404,000

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of August 10, 2010, 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 August 10, 2010 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							
James C. Czirr	55,817,379[7]	51.3%			3,000,000	100%	7.1%[8]
10X Fund, L.P., c/o 10X Capital Management, LLC 1099 Forest Lake Terrace Niceville, FL 32578	49,721,274[9]	45.6%			3,000,000	100%	18.7%
Rod D. Martin, J.D.	50,655,268[10]	46.8%			3,000,000	100%	*[8]
James C. Czirr Trust, c/o James C. Czirr 425 Janish Drive, Sandpoint, ID 83864	334,700[14]	*	100,000	6.3%			*
David Smith 34 Shorehaven Road E. Norwalk, CT 06855			175,000	11.0%			*
Fivex LLC c/o David Smith 34 Shorehaven Road E. Norwalk, CT 06855			100,000[13]	6.3%			*

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.	507,500[11]	*					*
James C. Czirr	55,817,379[7]	51.3%	100,000	6.3%	3,000,000	100%	7.1%[8]
Rod D. Martin, J.D.	50,655,268[10]	46.8%			3,000,000	100%	*[8]
Arthur R. Greenberg	500,000[11]	*					*
S. Colin Neill	449,000	*					*
Steven Prelack	463,250	*					*
Jerald K. Rome	659,844	*					*
Peter G. Traber, M.D.	650,000[11]	1.1%					*
Theodore D. Zucconi, Ph.D.	1,433,343	2.4%					*
Eliezer Zomer, Ph.D.	1,095,000	1.8%					*
All executive officers and directors as a group (10 persons)	62,509,810[12]	55.2%	100,000	6.31%	3,000,000	100%	28.8%

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* 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, Suite 34, 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 August 10, 2010:

Directors and Named Executive Officers	Options Exercisable Within 60 Days
Mr. Czirr	830,137
Mr. Martin	415,068
Mr. Neill:	449,000
Mr. Prelack:	463,250
Mr. Rome:	500,500
Dr. Zucconi:	1,337,500
Dr. Zomer:	1,095,000
All executive officers and directors as a group	5,090,455

(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) 59,374,512 shares of our common stock outstanding as of August 10, 2010 and (ii) the number of shares of our common stock that such person has the right to acquire within 60 days after August 10, 2010.

(4) For each named person and group included in this table, percentage ownership of our Series A preferred stock is based on 1,592,500 shares of Series A preferred stock outstanding as of August 10, 2010.

(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 issued and outstanding that as of August 10, 2010, we have sold 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.

(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 and B-2 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 outstanding shares of Series B-2 preferred stock and related warrants that have not been issued pursuant to the 10X Purchase Agreement as of the record date.