

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

**2834**  
*(Primary SIC Number)*

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

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

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

*With a copy to:*

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

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

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

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

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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. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller reporting company

### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price per Share (1)	Estimated Proposed Maximum Aggregate Offering Price (3)	Amount of Registration Fee
Subscription Rights (“Rights”) to purchase: (i) common stock, \$0.001 par value per share (“Common Stock”), and (ii) Common Stock purchase warrants (“Warrants”)	—	—	—	— (2)
Shares of Common Stock underlying the Rights	—	—	\$20,000,000	\$786 (4)
Warrants underlying the Rights	—	—	—	— (5)
Shares of Common Stock underlying the Warrants	—	—	\$20,000,000	\$786 (4)
Total	—	—	\$40,000,000	\$1,572 (6)

- (1) This registration statement relates to (a) the Rights to purchase Common Stock and Warrants, (b) the shares of Common Stock and Warrants deliverable upon the exercise of the Rights and (c) the shares of Common Stock deliverable upon the exercise of the Warrants underlying the Rights.
- (2) The Rights are being issued without consideration. Pursuant to Rule 457(g), no separate registration fee is payable with respect to the Rights being offered hereby since the Rights are being registered in the same registration statement as the securities to be offered pursuant thereto.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
- (4) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.
- (5) No separate registration fee is required pursuant to Rule 457(g).
- (6) The registrant has offset against the filing fee a credit balance on account with the Commission of \$1034.48. Accordingly, the Registrant has paid a filing fee of \$537.52 in connection with the filing of this registration statement.

**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.**

The information in this prospectus is not complete and may be changed. We 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 it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Preliminary Prospectus

Subject To Completion, Dated November 19, 2008



Up to \_\_\_\_\_ Shares of Common Stock and Series C Common Stock Purchase Warrants  
to purchase an additional \_\_\_\_\_ Shares of Common Stock  
Issuable Upon Exercise of Rights to Subscribe for such Shares and Warrants at \$ \_\_\_\_\_ per Right

We are distributing at no charge to the holders of our common stock on November \_\_\_\_\_, 2008, which we refer to as the record date, subscription rights to purchase up to an aggregate of \_\_\_\_\_ shares of our common stock and Series C common stock purchase warrants to purchase an additional \_\_\_\_\_ shares of our common stock. We will distribute to you one right for every share of common stock that you own on the record date.

Each right entitles the holder to purchase: (i) one share of common stock at the subscription price of \$ \_\_\_\_\_ per share [which will be between 90% of the five day volume weighted average price per share of our common stock, or VWAP, prior to the date of this prospectus and 115% of the 20 day VWAP prior to the date of this prospectus, but in no event less than \$0.20 unless waived by our board of directors], and (ii) a Series C warrant that will entitle the holder to purchase one share of our common stock, which we refer to as the basic subscription right. Each warrant will be immediately exercisable for twelve months following issuance to purchase one share of our common stock at 125% of the price of the basic subscription right, or initially \$ \_\_\_\_\_ per share, which may be reduced at any time in our discretion. If, during the term of the warrant, the closing price of our common stock is equal to or greater than 400% of the initial warrant exercise price, or \$ \_\_\_\_\_, for at least ten consecutive trading days, we may call, or cancel, any outstanding warrants that are not exercised during the 15 trading day period following the date we give notice to the holders of those warrants.

Holders who fully exercise their basic subscription rights will be entitled to subscribe for additional shares and warrants that remain unsubscribed as a result of any unexercised basic subscription rights, which we refer to as the over-subscription right. The over-subscription right allows a holder to subscribe for an additional amount equal to up to 400% of the shares and warrants for which such holder was otherwise entitled to subscribe. Rights may only be exercised for whole numbers of shares; no fractional shares of common stock will be issued in this offering.

The rights will expire at 5:00 p.m., New York City time, on December \_\_\_\_\_, 2008, which date we refer to as the expiration date. We may extend the period for exercising the rights for up to an additional 45 trading days in our sole discretion. Any rights not exercised at or before that time will expire worthless without any payment to the holders of those unexercised rights. We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 from the exercise of basic and over-subscription rights by the expiration date. In no event, will we raise more than \$20,000,000 in this offering.

You should carefully consider whether to exercise your subscription rights before the expiration date. All exercises of subscription rights are irrevocable. Our board of directors is making no recommendation regarding your exercise of the subscription rights.

**Investing in our securities involves a high degree of risk. In addition, your holdings in our company will be diluted if you do not exercise the full amount of your basic subscription rights. See “Risk Factors” beginning on page 17 of this prospectus.**

Our common stock is presently traded on the NYSE Alternext US under the symbol “PRW”. The closing price of our shares of common stock on November 17, 2008 was \$0.06 per share. Neither the subscription rights, nor the warrants underlying the subscription rights, will be listed for trading on any stock exchange or market or on the OTC Bulletin Board. The warrants, but not the subscription rights, may be sold, transferred or assigned in accordance with applicable law. We expect the rights, and warrants underlying the rights, will be exercisable for shares of our common stock that will be listed on the NYSE Alternext US or the OTC Bulletin Board.

	<u>Subscription Price</u>	<u>Dealer-Manager Fee (1)</u>	<u>Proceeds, Before Expenses, to us</u>
Per share	\$ _____	\$ _____	\$ _____
Total (2)	\$ _____	\$ _____	\$ _____

(1) In connection with the rights offering, we have agreed to pay Maxim Group LLC, the dealer-manager for this offering, 9.0% of the gross proceeds of this offering in cash and 8.0% of the shares of common stock sold in this offering in warrants priced at 125% of the subscription price and reimburse Maxim Group LLC for its reasonable expenses incurred in connection with this offering.

(2) Assumes that the rights offering is fully subscribed and that the maximum of \_\_\_\_\_ shares and warrants are sold.

**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.**

If you have any questions or need further information about this rights offering, please call MacKenzie Partners, Inc., our information agent for the rights offering, at (212) 929-5500 (call collect) or (800) 322-2885 (toll-free).

Dealer-Manager

**Maxim Group LLC**

The date of this prospectus is November \_\_\_\_\_, 2008

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## ABOUT THIS PROSPECTUS

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

You should rely only on the information contained in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. For further information, please see the section of this prospectus entitled “Where You Can Find More Information.” We 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.

We obtained statistical data, market data and other industry data and forecasts used throughout this prospectus from market research, publicly available information and industry publications. Industry publications generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy and completeness of the information. Similarly, while we believe that the statistical data, industry data and forecasts and market research are reliable, we have not independently verified the data, and we do not make any representation as to the accuracy of the information. We have not sought the consent of the sources to refer to their reports appearing in this prospectus.

This prospectus contains trademarks, tradenames, service marks and service names of Pro-Pharmaceuticals, Inc. and other companies.

## QUESTIONS AND ANSWERS ABOUT THE RIGHTS OFFERING

*The following are examples of what we anticipate may be common questions about the rights offering. The answers are based on selected information from this prospectus. The following questions and answers do not contain all of the information that may be important to you and may not address all of the questions that you may have about the rights offering. This prospectus contains more detailed descriptions of the terms and conditions of the rights offering and provide additional information about us and our business, including potential risks related to the rights offering, our common stock and our business.*

*Exercising the rights and investing in our securities involves a high degree of risk. We urge you to carefully read the section entitled “Risk Factors” beginning on page 17 of this prospectus and all other information included in this prospectus in its entirety before you decide whether to exercise your rights.*

**Q: What is a rights offering?**

A: A rights offering is a distribution of subscription rights on a *pro rata* basis to all existing stockholders of a company. We are distributing to holders of our common stock, at no charge, as of the close of business on the record date (November , 2008), subscription rights to purchase up to an aggregate of shares of our common stock and common stock purchase warrants to purchase an additional shares of our common stock. You will receive one subscription right for every share of common stock you own at the close of business on the record date. The subscription rights will be evidenced by subscription rights certificates, which may be physical certificates but will more likely be electronic certificates issued through the facilities of the Depository Trust Company, or DTC.

**Q: Why are you undertaking the rights offering?**

A: We are making the rights offering to raise funds for the clinical work required for, and the submission to the U.S. Food and Drug Administration of, our New Drug Application for our lead product candidate, DAVANAT®, as well as for general working capital purposes. Based on approximately \$607,000 of available cash and cash equivalents as of November 13, 2008, we believe that we have sufficient capital to fund our operations into December 2008. If we fail to raise capital in December 2008, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection.

Our board of directors has elected a rights offering over other types of financings because a rights offering provides our existing stockholders the opportunity to participate in this offering first, and our board believes this creates less percentage dilution of stockholder ownership interest in our company than if we issued shares to new investors.

**Q: How much money will the company raise as a result of the rights offering?**

A: Assuming full participation in the rights offering, we estimate that the net proceeds from the rights offering will be approximately \$ million, after deducting expenses related to this offering payable by us estimated at approximately \$ , including dealer-manager fees. However, subject to satisfying the minimum condition of raising \$2,500,000 in this offering, we may decide to close the rights offering and accept such proceeds of the basic subscription rights and over-subscription rights as we have received as of the expiration date of the rights offering whether or not they are sufficient to meet the objectives we state in this prospectus, other corporate milestones that we may set, or to avoid a “going concern” modification in future reports of our auditors as to uncertainty with respect to our ability to continue as a going concern. In no event, will we raise more than \$20,000,000 in this offering. See “Risk Factors — Completion of this offering is subject to us raising a minimum of \$2,500,000 and a maximum of \$20,000,000.”

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### **Q: What is a right?**

A: Each right carries with it a basic subscription right and an over-subscription right and entitles the holder of the right the opportunity to purchase: (i) one share of common stock at the subscription price of \$ \_\_\_\_\_ per share, [which will be between 90% of the five day volume weighted average price per share of our common stock, or VWAP, prior to the date of this prospectus and 115% of the 20 day VWAP prior to the date of this prospectus, but in no event less than \$0.20 unless waived by our board of directors], and (ii) a Series C warrant to purchase one share of our common stock, in each case, subject to adjustment to eliminate fractional rights.

### **Q: What are the important terms of the Series C warrants?**

A: Each warrant will be immediately exercisable for twelve months following issuance to purchase one share of our common stock at 125% of the price of the basic subscription right, or initially \$ \_\_\_\_\_ per share, which may be reduced at any time in our discretion. If, during the term of the warrant, the closing price of our common stock is equal to or greater than 400% of the initial warrant exercise price, or \$ \_\_\_\_\_, for at least ten consecutive trading days, we may call, or cancel, any outstanding warrants that are not exercised during the 15 trading day period following the date we give notice to the holders of those warrants. The warrants will be transferable in accordance with applicable law but will not be listed for trading on any stock exchange or market or on the OTC Bulletin Board. However, we expect the warrants will be exercisable for shares of our common stock that will be listed on the NYSE Alternext US or the OTC Bulletin Board.

### **Q: What is a basic subscription right?**

A: Each basic subscription right gives you the opportunity to purchase: (i) one share of our common stock and (ii) a Series C warrant to purchase one share of our common stock. You may exercise any number of your basic subscription rights or you may choose not to exercise any subscription rights at all.

For example, if you own 1,000 shares of our common stock on the record date and you are granted one right for every share of our common stock you own at that time, then you have the right to purchase up to 1,000 shares of common stock and a warrant for an equal number of shares, in each case, subject to adjustment to eliminate fractional rights. If you hold your shares in the name of a broker, dealer, custodian bank, trustee or other nominee who uses the services of the DTC, then DTC will issue one right to the nominee for every share of our common stock you own at the record date.

### **Q: What is an over-subscription right?**

A: If you elect to purchase all of the shares and warrants available to you pursuant to your basic subscription right, you may also elect to subscribe for any number of additional shares and warrants that remain unsubscribed as a result of any other stockholders not exercising their basic subscription rights, subject to a *pro rata* adjustment if over-subscription requests exceed shares and warrants, as more fully described below. The over-subscription right allows a holder to subscribe for an additional amount equal to up to 400% of the shares and warrants for which such holder was otherwise entitled to subscribe.

For example, if you own 1,000 shares of our common stock on the record date, and exercise your basic subscription right to purchase all (but not less than all) 1,000 shares and warrants which are available for you to purchase, then, you may also *concurrently* exercise your over-subscription right to purchase up to 4,000 additional shares of common stock and Series C warrants that remain unsubscribed as a result of any other stockholders not exercising their basic subscription rights, subject to the *pro rata* adjustments described below. Accordingly, if your basic and over-subscription rights are exercised and honored in full,

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you would receive a total of 5,000 shares and warrants in this offering. Payments in respect of over-subscription rights are due at the time payment is made for the basic subscription right.

**Q. What happens if holders exercise over-subscription rights to purchase more than shares and warrants?**

- A. We will allocate the remaining available shares and warrants *pro rata* among rights holders who exercised their over-subscription rights, based on the number of over-subscription shares and Series C warrants to which they subscribed. The allocation process will assure that the total number of remaining shares and Series C warrants available for basic and over-subscriptions is distributed on a *pro rata* basis. The percentage of remaining shares each over-subscribing rights holder may acquire will be rounded down to result in delivery of whole shares.

Payments for basic subscriptions and over-subscriptions will be deposited upon receipt by the subscription agent and held in a segregated account with the subscription agent pending a final determination of the number of shares to be issued pursuant to the basic and over-subscription rights. If the pro rated amount of shares and warrants allocated to you in connection with your basic or over-subscription right is less than your basic or over-subscription request, then the excess funds held by the subscription agent on your behalf will be promptly returned to you without interest or deduction. We will deliver certificates representing your shares of our common stock and Series C warrants, or credit your account at your nominee holder with shares of our common stock and Series C warrants, that you purchased pursuant to your basic and over-subscription rights as soon as practicable after the rights offering has expired and all proration calculations and reductions contemplated by the terms of the rights offering have been effected.

**Q. Are there any circumstances in which either Pro-Pharmaceuticals could be obligated to distribute basic subscription rights that exceed its available shares or the maximum dollar amount of this offering could be exceeded? What would happen in either case?**

- A. If, on or before the record date, we issue more than \_\_\_\_\_ shares of common stock as a result of exercises of outstanding warrants and options and conversion of our existing series A preferred stock into common stock, we would be obligated to distribute basic subscription rights for shares and Series C warrants that exceed the number of our authorized shares of common stock available for issuance. We consider this an unlikely prospect given the exercise prices of our outstanding options and warrants and the preference for dividends on our Series A preferred stock. Similarly, if we receive a sufficient number of subscriptions, the aggregate dollar amount of the exercises could exceed the maximum dollar amount of this offering. In each case, we would reduce on a *pro rata* basis, the number of subscriptions we accept so that: (i) we will not become obligated to issue, upon exercise of the subscriptions and the Series C warrants, a greater number of shares of common stock than we have authorized and available for issuance and (ii) the gross proceeds of this offering will not exceed the maximum dollar amount of this offering. In the event of any *pro rata* reduction, we would first reduce over-subscriptions prior to reducing basic subscriptions.

**Q. Will the company's officers, directors and significant stockholders be exercising their rights?**

- A: Some of our officers and directors have advised us that they intend to participate in this offering, but none of our officers, directors or significant stockholders are obligated to so participate.

**Q. Will the shares of common stock that I receive upon exercise of my rights, or my warrants underlying my rights, be tradable on the NYSE Alternext US or the OTC Bulletin Board?**

- A: It depends. We expect the rights, and warrants underlying the rights, will be exercisable for shares of our common stock that will be listed on either the NYSE Alternext US or the OTC Bulletin Board. Our common

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stock is presently traded on the NYSE Alternext US. On November 7, 2008, we received notice from the NYSE Alternext US that it intends to commence proceedings to delist our common stock from trading on the exchange due to our failure to comply with its continuing listing requirements. This follows a similar notice that we received from the NYSE Alternext US in June 2007. We have notified the NYSE Alternext US that we are appealing the delisting decision and a hearing on our appeal has been scheduled for December 23, 2008. We cannot assure you that our appeal will be successful or that our shares will not be delisted. If our common stock is delisted, trading, if any, of our common stock (including the shares of common stock underlying the rights and underlying the Series C warrants) could thereafter be conducted in the over-the-counter market, the OTC Bulletin Board or on the “pink sheets”.

### **Q: How do I exercise my basic subscription right?**

A: You may exercise your subscription rights by properly completing and signing your subscription rights certificate. Your subscription rights certificate, together with full payment of the subscription price, must be received by Continental Stock Transfer & Trust Company, the subscription agent for this rights offering, on or prior to the expiration date of the rights offering. We sometimes refer to Continental Stock Transfer & Trust Company in this prospectus as the subscription agent. Continental Stock Transfer & Trust Company is also the transfer agent and registrar for our common stock and will be the warrant agent for the warrants underlying the rights.

If you use the mail, we recommend that you use insured, registered mail, return receipt requested. We will not be obligated to honor your exercise of subscription rights if the subscription agent receives the documents relating to your exercise after the rights offering expires, regardless of when you transmitted the documents.

### **Q: How do I exercise my over-subscription right?**

A: In order to properly exercise your over-subscription right, you must: (i) indicate on your subscription rights certificate that you submit with respect to the exercise of the rights issued to you how many additional shares and warrants you are willing to acquire pursuant to your over-subscription right and (ii) *concurrently* deliver the subscription payment related to your over-subscription right at the time you make payment for your basic subscription right. All funds from over-subscription rights that are not honored will be promptly returned to investors, without interest or deduction.

### **Q: Am I required to subscribe in the rights offering?**

A: No.

### **Q: If I subscribe to the rights offering, do I have any obligation to exercise the warrants?**

A: No. If you hold your warrants and do not sell or exercise them, they will expire worthless on the twelve month anniversary of the date of issuance.

### **Q: What happens if I choose not to exercise my subscription rights?**

A: You will retain your current number of shares of common stock even if you do not exercise your basic subscription rights. However, if you do not exercise your basic subscription right in full, the percentage of our common stock that you own will decrease, and your voting and other rights will be diluted to the extent that other stockholders exercise their subscription rights. We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 from the exercise of basic and over-subscription rights by the expiration date. In no event, will we raise more than \$20,000,000 in this offering.

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**Q: When will the rights offering expire?**

A: The subscription rights will expire, if not exercised, at 5:00 p.m., New York City time, on December , 2008, unless we decide to terminate the rights offering earlier or extend the expiration date for up to an additional 45 trading days in our sole discretion. If we extend the expiration date, you will have at least ten trading days during which to exercise your rights. Any rights not exercised at or before that time will expire without any payment to the holders of those unexercised rights. See “The Rights Offering — Expiration Date and Extensions.” The subscription agent must actually receive all required documents and payments before that time and date.

**Q: May I transfer or sell my subscription rights if I do not want to purchase any shares?**

A: No. The rights being distributed to the holders are not tradable or transferable.

**Q. Will Pro-Pharmaceuticals be requiring a minimum subscription to consummate the rights offering?**

A: Yes. We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 from the exercise of basic and over-subscription rights by the expiration date.

**Q. Can the board of directors cancel or terminate the rights offering?**

A: Yes. Our board of directors may decide to cancel or terminate the rights offering at any time and for any reason before the expiration date. If our board of directors cancels or terminates the rights offering, we will issue a press release notifying stockholders of the cancellation or termination, and any money received from subscribing stockholders will be promptly returned, without interest or deduction.

**Q: What should I do if I want to participate in the rights offering but my shares are held in the name of my broker, dealer, custodian bank, trustee or other nominee?**

A: Beneficial owners of our shares whose shares are held by a nominee, such as a broker, dealer custodian bank or trustee, must contact that nominee to exercise their rights. In that case, the nominee will complete the subscription rights certificate on behalf of the beneficial owner and arrange for proper payment by one of the methods described above.

**Q: What should I do if I want to participate in the rights offering, but I am a stockholder with a foreign address?**

A: Subscription rights certificates will not be mailed to foreign stockholders whose address of record is outside the United States and Canada, or is an Army Post Office (APO) address or Fleet Post Office (FPO). If you are a foreign stockholder, you will be sent written notice of this offering. The subscription agent will hold your rights, subject to you making satisfactory arrangements with the subscription agent for the exercise of your rights, and follow your instructions for the exercise of the rights if such instructions are received by the subscription agent at or before 11:00 a.m., New York City time, on December , 2008, three business days prior to the expiration date (or, if this offering is extended, on or before three business days prior to the extended expiration date). If no instructions are received by the subscription agent by that time, your rights will expire worthless without any payment to you of those unexercised rights.

**Q: Will I be charged a sales commission or a fee if I exercise my subscription rights?**

A: We will not charge a brokerage commission or a fee to subscription rights holders for exercising their subscription rights. However, if you exercise your subscription rights and/or sell any underlying shares of

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our common stock through a broker, dealer, custodian bank, trustee or other nominee, you will be responsible for any fees charged by your broker, dealer, custodian bank, trustee or other nominee.

**Q: What is the recommendation of the board of directors regarding the rights offering?**

A: Neither we, our board of directors, the dealer-manager, the information agent nor the subscription agent are making any recommendation as to whether or not you should exercise your subscription rights. You are urged to make your decision in consultation with your own advisors as to whether or not you should participate in the rights offering or otherwise invest in our securities and only after considering all of the information included in this prospectus, including the “Risk Factors” section that follows.

**Q: How was the \$            per share subscription price established?**

A: The subscription price per share for the rights offering was set by our board of directors. In determining the subscription price, our board of directors considered, among other things, the milestones achieved by us in our development program, the volume weighted average price per share of our common stock during the 5-day and/or 20-day period prior to the date of this prospectus, the historical and current market price of our common stock, the fact that holders of rights will have an over-subscription right and warrant component, the terms and expenses of this offering relative to other alternatives for raising capital (including fees payable to the dealer-manager and our advisors), the size of this offering and the general condition of the securities market. Based upon the factors described above, our board of directors determined that the subscription price per share represented an appropriate subscription price.

**Q: If I also own shares of Pro-Pharmaceuticals’ Series A 12% convertible preferred stock, will I receive rights on those shares?**

A: No, unless you convert one or more shares of your Series A 12% convertible preferred stock, or Series A preferred stock, into shares of our common stock before November   , 2008, the record date for this rights offering. If you elect to convert any or all of your shares of Series A preferred stock, you would no longer be entitled to dividends or other rights incident to the shares of Series A preferred stock that you converted. You will, however, receive rights with respect to any shares of common stock that have been issued to you as dividends on the Series A preferred stock prior to the record date for this rights offering.

**Q: Will holders of the Pro-Pharmaceuticals’ 2006 investor warrants issued in the February 2006 “PIPE” transaction be able to participate in the rights offering?**

A: Yes. Under the anti-dilution protection provisions of the 2006 investor warrants, holders of these warrants may choose to either: (i) have the exercise price of their 2006 investor warrants reduced in accordance with the weighted average anti-dilution protection provisions or, (ii) receive the rights that would be receivable by such holder had the shares of common stock underlying the 2006 investor warrants been issued to the holder and outstanding as of the record date. If holders of these warrants choose to have the exercise price of their 2006 investor warrants reduced, then the exercise price of the warrants will be adjusted to \$            per share following the commencement date of the rights offering.

**Q: Is exercising my subscription rights risky?**

A: The exercise of your subscription rights and over-subscription rights (and the resulting ownership of our securities) involves a high degree of risk. Exercising your subscription rights means buying additional shares of our common stock (together with the related warrants) and should be considered as carefully as you would consider any other equity investment. You should carefully consider the information under the heading “Risk Factors” and all other information included in this prospectus before deciding to exercise your subscription rights.

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**Q: After I exercise my subscription rights, can I change my mind and cancel my purchase?**

A: No. Once you send in your subscription rights certificate and payment, you cannot revoke the exercise of either your basic or over-subscription rights, even if the market price of our common stock is below the \$ \_\_\_\_\_ per share subscription price. You should not exercise your subscription rights unless you are certain that you wish to purchase additional shares of our common stock and Series C warrants at the proposed subscription price. Any rights not exercised at or before that time will expire worthless without any payment to the holders of those unexercised rights.

**Q: What are the U.S. federal income tax consequences of receiving or exercising my subscription rights?**

A: A holder should not recognize income or loss for U.S. federal income tax purposes in connection with the receipt or exercise of subscription rights in the rights offering. You should consult your own tax advisor as to the particular consequences to you of the rights offering. See “Material U.S. Federal Income Tax Considerations.”

**Q: How many shares of our common stock will be outstanding after the rights offering?**

A: The number of shares of our common stock that will be outstanding on a non-fully diluted basis immediately after the completion of the rights offering will be \_\_\_\_\_ shares, assuming full participation in the rights offering and \_\_\_\_\_ shares, assuming the minimum of \$2,500,000 is subscribed for, but in each case, excluding any issuance of shares of common stock to holders of: (i) Series C warrants upon exercise of those warrants and (ii) 2006 investor warrants exercising their exchange rights and participating in the rights offering.

**Q: If I exercise my subscription rights, when will I receive shares of common stock and Series C warrants purchased in the rights offering?**

A: If your shares are held of record by Cede & Co. or by any other depository or nominee through the facilities of DTC on your behalf or on behalf of your broker, dealer, custodian bank, trustee or other nominee, you will have any shares and warrants that you acquire credited to the account of Cede & Co. or the other depository or nominee. With respect to all other stockholders, stock certificates and warrant certificates for all shares acquired will be mailed promptly after payment for all the shares subscribed for has cleared.

**Q: Who is the subscription agent for the rights offering?**

A: The subscription agent is Continental Stock Transfer & Trust Company. Continental Stock Transfer & Trust Company is also the transfer agent and registrar for our common stock. The address for delivery to the subscription agent is as follows:

*By Mail/Commercial Courier/Hand Delivery:*

**Continental Stock Transfer & Trust Company  
Attn: Reorganization Department  
17 Battery Place, 8th Floor  
New York, NY 10004**

Your delivery to an address other than the address set forth above will not constitute valid delivery and, accordingly, may be rejected by us.

**Q: What should I do if I have other questions?**

A: If you have any questions or need further information about this rights offering, please call MacKenzie Partners, Inc., our information agent for the rights offering, at (212) 929-5500 (call collect) or (800) 322-2885 (toll-free).

In addition, Maxim Group LLC will act as dealer-manager for the rights offering. Under the terms and subject to the conditions contained in the dealer-manager agreement, the dealer-manager will provide marketing assistance and advice to our company in connection with this offering. We have agreed to pay Maxim Group 9.0% of the gross proceeds of this offering in cash and 8.0% of the shares of common stock sold in this offering in warrants priced at 125% of the subscription price. In addition, we have agreed to reimburse Maxim Group for certain expenses, including legal expenses, incurred in connection therewith. We have also agreed to indemnify Maxim Group and their respective affiliates against certain liabilities arising under the Securities Act of 1933, as amended. Maxim Group is not underwriting or placing any of the securities (including the rights) issued in this offering and does not make any recommendation with respect to such securities.

## 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. These documents contain important information you should consider when making your investment decision.*

### **About Pro-Pharmaceuticals, Inc.**

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

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

In 2002, the U.S. Food and Drug Administration, or FDA, granted us an Investigational New Drug application, or IND, for use of DAVANAT<sup>®</sup> 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. We believe that using DAVANAT<sup>®</sup> in combination with 5-FU enables greater absorption of the chemotherapy in cancer cells while reducing its toxic side effects.

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

To date, DAVANAT<sup>®</sup> has been administered to approximately 100 cancer patients in Phase I and II trials. Data from a Phase II trial for end-stage colorectal cancer patients showed that DAVANAT<sup>®</sup> 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 trials also showed that patients experienced fewer adverse side effects of the chemotherapy and required less hospitalization.

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

In early 2007, in an effort to lower clinical development costs and accelerate the approval and commercialization of DAVANAT<sup>®</sup>, we chose to change our regulatory strategy to what is known as a "505(b)(2)" New Drug Application, or NDA. Our 505(b)(2) NDA for DAVANAT<sup>®</sup> will seek FDA approval for co-administration of DAVANAT<sup>®</sup> with 5-FU for intravenous injection for the treatment of colorectal cancer. These 505(b)(2) NDAs are often used for drugs involving previously-approved products and, as a result, are less costly to prepare and file with the FDA. Although we believe, based on the outcome of our clinical trials to date, that DAVANAT<sup>®</sup> when used in combination with 5-FU or biological drugs is superior to the current standard of care, we cannot in a 505(b)(2) NDA claim superiority over the current standard of care. We believe, however,

that if and when our 505(b)(2) NDA is approved by the FDA, we are better positioned to attract a strategic partner with the resources to undertake the costly Phase III clinical trials required to produce the data on which to make a superiority claim. We plan to submit the 505(b)(2) NDA for DAVANAT<sup>®</sup> in the second quarter of 2009.

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

According to its published guidance, the FDA initially determines whether an NDA filing is complete for purposes of allowing a review, and, if allowed, then determines whether to approve the NDA, a process that takes six or ten months. Upon approval, an applicant may commence commercial marketing and distribution of the approved products. We have retained Camargo Pharmaceutical Services, LLC for regulatory support of our submission with the FDA. Camargo's expertise in regulatory affairs and submissions includes the preparation and submission of NDAs, Abbreviated NDAs, and 505(b)(2) NDAs. Camargo has assisted with more than 150 FDA approvals.

### **Recent Developments**

In May 2008, we submitted a Drug Master File, or DMF, for DAVANAT<sup>®</sup> to the FDA. This is an important step toward the filing of our DAVANAT<sup>®</sup> NDA because a DMF contains confidential detailed information in support of the NDA about facilities, processes or articles used in the manufacturing, processing, packaging, and storing or stability of drugs. We believe the DMF represents a significant milestone in our eventual commercialization of DAVANAT<sup>®</sup> because we believe it demonstrates our ability to produce commercial quantities of pharmaceutical-grade DAVANAT<sup>®</sup> under standards known as Good Manufacturing Practice, or GMP. A DMF can be cross-referenced by 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<sup>®</sup> NDA. The FDA has granted a pre-NDA meeting with us on December 22, 2008 and recently advised us that the agency has reviewed our package and found that no additional data is needed for the upcoming meeting. As noted above, using the 505(b)(2) regulatory pathway, which allows us to rely on previous FDA findings, is important to our near-term product development strategy because it enables us to lower the clinical development costs and accelerate the approval and commercialization of DAVANAT<sup>®</sup>.

On October 31, 2008, our board of directors authorized Medi-Pharmaceuticals, Inc., our wholly-owned Nevada subsidiary, to enter into a joint venture to deploy certain technology we own, as well as original technology to be developed by the joint venture, for use in nutraceutical cardiovascular therapies. We expect that this deployment will be accomplished by: (i) a merger of FOD Enterprises, Inc., a Nevada corporation, with and into Medi-Pharmaceuticals, following which Medi-Pharmaceuticals will be the surviving corporation and we will be the owner of 10% of the outstanding capital stock of Medi-Pharmaceuticals; and (ii) our entering into a license agreement with Medi-Pharmaceuticals. Pursuant to the proposed terms of the license agreement, we would grant Medi-Pharmaceuticals a worldwide perpetual license to commercialize all of our polysaccharide technology exclusively in the field of cardiovascular therapies (both preventive and therapeutic) in exchange for a royalty equal to 10% of Medi-Pharmaceuticals' net revenues from products sold based on the licensed technology. Medi-Pharmaceuticals would advance \$1.0 million in cash from the royalty payments to us within six months of the effective date of the license agreement or we would have the ability to terminate the license agreement. None of the parties have entered into definitive documents with respect to these transactions.

On November 7, 2008, we received notice from the NYSE Alternext US that it intends to commence proceedings to delist our common stock from trading on the exchange due to our failure to comply with its

continuing listing requirements. Specifically, the delisting notice states that we have failed to meet the exchange's minimum stockholders' equity requirement with losses in three of the last four years and have failed to make progress consistent with our plan to regain and sustain compliance with the listing requirements. This follows a similar notice that we received from the NYSE Alternext US in June 2007. We have notified the NYSE Alternext US that we are appealing the delisting decision and a hearing on our appeal has been scheduled for December 23, 2008. We cannot assure you that our appeal will be successful or that our shares will not be delisted. If our common stock is delisted, trading, if any, of our common stock (including the shares of common stock underlying the rights and underlying the Series C warrants) could thereafter be conducted in the over-the-counter market, the OTC Bulletin Board or on the "pink sheets".

**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](http://www.pro-pharmaceuticals.com). The information on our website is not incorporated by reference into this prospectus and should not be relied upon with respect to this offering.

**The Rights Offering**

**Securities Offered**

We are distributing at no charge to the holders of our common stock on November , 2008, which we refer to as the record date, subscription rights to purchase up to an aggregate of shares of our common stock and common stock purchase warrants to purchase an additional shares of our common stock. We will distribute one right to the holder of record of every share of common stock that is held by the holder of record on the record date. We expect the total purchase price for the securities offered in this rights offering to be \$ , assuming full participation in the rights offering but excluding any issuance of shares of common stock to holders of: (i) Series C warrants upon exercise of those warrants and (ii) 2006 investor warrants exercising their exchange rights and participating in the rights offering.

**Basic Subscription Right**

Each right entitles the holder to purchase: (i) one share of common stock at the subscription price of \$ per share and (ii) a Series C warrant that will entitle the holder to purchase one share of our common stock, which we refer to as the basic subscription right.

Each warrant will be immediately exercisable for twelve months following issuance to purchase one share of our common stock at 125% of the price of the basic subscription right, or initially \$ per share, which may be reduced at any time in our discretion. If, during the term of the warrant, the closing price of our common stock is equal to or greater than 400% of the initial warrant exercise price, or \$ , for at least ten consecutive trading days, we may call, or cancel, any outstanding warrants that are not exercised during the 15 trading day period following the date we give notice to the holders of those warrants.

**Over-Subscription Right**

Holders who fully exercise their basic subscription rights will be entitled to subscribe for additional shares and warrants that remain unsubscribed as a result of any unexercised basic subscription rights, which we refer to as the over-subscription right. The over-subscription right allows a holder to subscribe for an additional amount equal to up to 400% of the shares and warrants for which such holder was otherwise entitled to subscribe. Rights may only be exercised for whole numbers of shares; no fractional shares of common stock will be issued in this offering. The percentage of remaining shares each over-subscribing rights holder may acquire will be rounded down to result in delivery of whole shares.

**Record Date**

Close of business on November , 2008.

**Commencement Date of Subscription Period**

November , 2008.

<b>Expiration Date of Subscription Period</b>	5:00 p.m., New York City time, on December , 2008, unless extended by us as described in this summary below under “—Extension, termination and cancellation.” Any rights not exercised at or before that time will have no value and expire without any payment to the holders of those unexercised rights.
<b>Subscription Price</b>	\$ per share, payable in immediately available funds[, which will be between 90% of the five day volume weighted average price per share of our common stock, or VWAP, prior to the date of this prospectus and 115% of the 20 day VWAP prior to the date of this prospectus, but in no event less than \$0.20 unless waived by our board of directors].
<b>Use of Proceeds</b>	The proceeds from the rights offering, less fees and expenses incurred in connection with the rights offering, will be used primarily for concluding the clinical work required for, and the submission to the FDA of, our NDA for DAVANAT <sup>®</sup> , as well as for general working capital purposes.
<b>Transferability</b>	The rights being distributed to the holders are not tradable or transferable and may not be sold, transferred or assigned. The warrants will be transferable in accordance with applicable law but will not be listed for trading on any stock exchange or market or on the OTC Bulletin Board.
<b>No Recommendation</b>	Neither our board of directors nor the dealer-manager of this offering makes any recommendation to you about whether you should exercise any rights. You are urged to consult your own financial advisors in order to make an independent investment decision about whether to exercise your rights. Please see the section of this prospectus entitled “Risk Factors” for a discussion of some of the risks involved in investing in our securities.
<b>Minimum Condition</b>	We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 from the exercise of basic and over-subscription rights by the expiration date.
<b>Maximum Offering Size</b>	In no event, will we raise more than \$20,000,000 in this offering.
<b>No revocation</b>	If you exercise any of your basic or over-subscription rights, you will not be permitted to revoke or change the exercise or request a refund of monies paid.
<b>U.S. federal income tax considerations</b>	A holder should not recognize income, gain, or loss for U.S. federal income tax purposes in connection with the receipt or exercise of subscription rights in the rights offering. You should consult your own tax advisor as to the particular consequences to you of the rights offering. For a detailed discussion, see “Material U.S. Federal Income Tax Considerations.”

**Extension, termination and cancellation**

*Extension.* Our board of directors may extend the expiration date for exercising your subscription rights for up to an additional 45 trading days in their sole discretion. If we extend the expiration date, you will have at least ten trading days during which to exercise your rights. Any extension of this offering will be followed as promptly as practicable by an announcement, and in no event later than 9:00 a.m., New York City time, on the next business day following the previously scheduled expiration date.

*Termination; Cancellation.* We may cancel or terminate the rights offering at any time and for any reason prior to the expiration date. Any termination or cancellation of this offering will be followed as promptly as practicable by announcement thereof, and in no event later than 9:00 a.m., New York City time, on the next business day following the termination or cancellation.

**Procedure for Exercising Rights**

If you are the record holder of shares of our common stock, to exercise your rights you must complete the subscription rights certificate and deliver it to the subscription agent, Continental Stock Transfer & Trust Company, together with full payment for all the subscription rights (pursuant to both the basic subscription right and the over-subscription right) you elect to exercise. The subscription agent must receive the proper forms and payments on or before the expiration date. You may deliver the documents and payments by mail or commercial courier. If regular mail is used for this purpose, we recommend using registered mail, properly insured, with return receipt requested. If you are a beneficial owner of shares of our common stock, you should instruct your broker, dealer, custodian bank, trustee or other nominee in accordance with the procedures described in the section of this prospectus entitled “The Rights Offering—Record Date Stockholders Whose Shares are Held by a Nominee.”

**Subscription Agent**

Continental Stock Transfer & Trust Company.

**Information Agent**

MacKenzie Partners, Inc.

**Dealer-manager**

Maxim Group LLC.

**Questions**

If you have any questions or need further information about this rights offering, please call MacKenzie Partners, Inc. at (212) 929-5500 (collect) or (800) 322-2885 (toll-free).

**Shares outstanding on the date hereof**

shares as of November , 2008.

**Shares outstanding after completion of the rights offering**

Up to shares of our common stock will be outstanding, assuming full participation in the rights offering, and shares, assuming the minimum of \$2,500,000 is subscribed for, but in each case, excluding any issuance of shares of common stock to holders of:

(i) Series C warrants upon exercise of those warrants and (ii) 2006 investor warrants exercising their exchange rights and participating in the rights offering.

**Issuance of our common stock and Series C warrants**

If you purchase shares and warrants pursuant to the basic or over-subscription right, we will issue certificates representing the shares of common stock and Series C warrants to you or DTC on your behalf, as the case may be, promptly after receipt of payment after payment for all the shares subscribed for has cleared.

**Risk Factors**

Investing in our securities involves a high degree of risk. Stockholders considering making an investment in our securities should consider the risk factors described in the section of this prospectus entitled "Risk Factors."

**Fees and Expenses**

We will bear the fees and expenses relating to the rights offering.

**Trading Symbol/NYSE Alternext US Delisting Notice**

Our common stock is presently traded on the NYSE Alternext US under the symbol "PRW", and the shares to be issued in connection with the rights offering are expected to be eligible for trading on either the NYSE Alternext US or OTC Bulletin Board.

On November 7, 2008, we received notice from the NYSE Alternext US that it intends to commence proceedings to delist our common stock from trading on the exchange due to our failure to comply with its continuing listing requirements. Specifically, the delisting notice states that we have failed to meet the exchange's minimum stockholders' equity requirement with losses in three of the last four years and have failed to make progress consistent with our plan to regain and sustain compliance with the listing requirements. This follows a similar notice that we received from the NYSE Alternext US in June 2007. We have notified the NYSE Alternext US that we are appealing the delisting decision and a hearing on our appeal has been scheduled for December 23, 2008. We cannot assure you that our appeal will be successful or that our shares will not be delisted. If our common stock is delisted, trading, if any, of our common stock (including the shares of common stock underlying the rights and underlying the Series C warrants) could thereafter be conducted in the over-the-counter market, the OTC Bulletin Board or on the "pink sheets".

**Stockholder Lock-Ups**

Each of Dr. Platt, our chief executive officer and chairman of the Board, and Dr. Klyosov, our chief scientist, who collectively own an aggregate of 10.6% of the outstanding shares of our common stock on the date of this prospectus, have entered into a lock-up agreement with us which prevents each of them from selling any shares of our common stock and Series C warrants until the expiration of one year from the date of this prospectus.

**Distribution Arrangements**

Maxim Group LLC will act as dealer-manager for this rights offering. Under the terms and subject to the conditions contained in the dealer-manager agreement, the dealer-manager will provide marketing assistance in connection with this offering. We have agreed to pay Maxim Group certain fees for acting as dealer-manager and to reimburse the dealer-manager for its reasonable expenses incurred in connection with this offering. Maxim Group LLC is not underwriting or placing any of the rights or the shares of our common stock and Series C warrants being sold in this offering and does not make any recommendation with respect to such rights or shares (including with respect to the exercise of such rights). Maxim Group will not be subject to any liability to us in rendering the services contemplated by the dealer-manager agreement except for any act of bad faith or gross negligence of the dealer-manager.

**Key Dates**

Record Date:	November	, 2008.
Distribution Date:	November	, 2008.
Subscription Period:	November	, 2008 through December , 2008.
Expiration Date:	December	, 2008 (unless extended by us).

## RISK FACTORS

*An investment in our securities involves a high degree of risk. You should carefully consider the risks described below and the other information before deciding to purchase the securities offered in this rights offering. The risks described below are not the only ones facing our company. Additional risks not presently known to us or that we currently consider immaterial may also adversely affect our business. If any of the following risks actually happen, our business, financial condition and operating results could be materially adversely affected. In this case, you could lose all or part of your investment.*

### **Risks Related to the Rights Offering**

***Your interest in our company may be diluted as a result of this offering.***

Stockholders who do not fully exercise their rights should expect that they will, at the completion of this offering, own a smaller proportional interest in our company than would otherwise be the case had they fully exercised their basic subscription rights.

***None of our officers, directors or significant stockholders are obligated to exercise their subscription rights.***

Some of our officers and directors have advised us that they intend to participate in this offering, but none of our officers, directors or significant stockholders are obligated to so participate. We cannot guarantee you that any of our officers or directors will exercise their basic or over-subscription rights to purchase any shares and warrants issued in connection with this offering.

***This offering may cause the price of our common stock to decrease.***

The subscription price, together with the number of shares of common stock and Series C warrants we propose to issue and ultimately will issue if this offering is completed, may result in an immediate decrease in the market value of our common stock. This decrease may continue after the completion of this offering. If that occurs, you may have committed to buy shares of common stock in the rights offering at a price greater than the prevailing market price. Further, if a substantial number of rights are exercised and the holders of the shares and warrants received upon exercise of those rights (and the shares received upon exercise of the warrants) choose to sell some or all of those shares, the resulting sales could depress the market price of our common stock. There is no assurance that following the exercise of your rights you will be able to sell your common stock at a price equal to or greater than the subscription price.

***You could be committed to buying shares of common stock, and warrants the exercise price for which is, above the prevailing market price.***

Once you exercise your basic and any over-subscription rights, you may not revoke such exercise even if you later learn information that you consider to be unfavorable to the exercise of your rights. Our common stock is presently traded on the NYSE Alternext US under the symbol "PRW". On November 7, 2008, we received notice from the NYSE Alternext US that it intends to commence proceedings to delist our common stock from trading on the exchange due to our failure to comply with its continuing listing requirements. We have notified the NYSE Alternext US that we are appealing the delisting decision and a hearing on our appeal has been scheduled for December 23, 2008. We cannot assure you that our appeal will be successful or that our shares will not be delisted. On November 13, 2008, the last trading day before this offering was publicly announced, the closing price for our shares of common stock on the NYSE Alternext US was \$0.10 per share. On November 12, 2008, the last trading day before the date of this prospectus, the closing sales price of our shares of common stock was \$0.10 per share. We cannot assure you that the market price of our shares of common stock will not decline prior to the expiration of this offering or that, after shares of common stock and Series C warrants are

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issued upon exercise of the rights, a subscribing rights holder will be able to sell shares of common stock purchased in this offering at a price equal to or greater than the subscription price, or that the trading price of our common stock will exceed the exercise price of the warrants.

***If we terminate this offering for any reason, we will have no obligation other than to return subscription monies promptly.***

We may decide, in our discretion and for any reason, to cancel or terminate the rights offering at any time prior to the expiration date. If this offering is terminated, we will have no obligation with respect to rights that have been exercised except to return promptly, without interest or deduction, the subscription monies deposited with the subscription agent. If we terminate this offering and you have not exercised any rights, such rights will expire worthless.

***Our common stock price may be volatile as a result of this rights offering.***

The trading price of our common stock may fluctuate substantially. The price of the common stock that will prevail in the market after this offering may be higher or lower than the subscription price depending on many factors, some of which are beyond our control and may not be directly related to our operating performance. These factors include, but are not limited to, the following:

- price and volume fluctuations in the overall stock market from time to time, including increased volatility due to the worldwide credit crisis;
- significant volatility in the market price and trading volume of our securities, including increased volatility due to the worldwide credit crisis;
- actual or anticipated changes or fluctuations in our operating results;
- material announcements by us regarding business performance, financings, mergers and acquisitions or other transactions;
- general economic conditions and trends;
- the results of our drug development and commercialization efforts;
- competitive factors; or
- departures of key personnel.

***The subscription price determined for this offering and the exercise price of the warrants is not an indication of the value of our common stock.***

The subscription price for the shares and the exercise price of the warrants in this offering was set by our board of directors and does not necessarily bear any relationship to the book value of our assets, results of operations, cash flows, losses, financial condition or any other established criteria for value. You should not consider the subscription price as an indication of the value of our common stock. After the date of this prospectus, our common stock may trade at prices above or below the subscription price and the exercise price of the warrants.

***Completion of this offering is subject to us raising a minimum of \$2,500,000 and a maximum of \$20,000,000.***

We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 from the exercise of basic and over-subscription rights by the expiration date (as the same may be extended by us for up to an additional 45 trading days, in our sole discretion), but in no event will we raise more than \$20,000,000. Accordingly, we may not close this offering and accept such proceeds of the basic subscriptions unless and until we have received subscriptions as of the expiration date for \$2,500,000 of shares and warrants. If we fail to raise an amount sufficient to satisfy the stated minimum requirement, then the funds held by the subscription agent on your behalf will be returned to you promptly without interest or deduction and we will have no further obligations to you.

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### ***We will have broad discretion in the use of the net proceeds from this offering and may not use the proceeds effectively.***

Although we plan to use the proceeds of this offering primarily for concluding the clinical work required for, and the submission to the FDA of, our NDA for DAVANAT<sup>®</sup>, we will not be restricted to such use and will have broad discretion in determining how the proceeds of this offering will be used. Our discretion is not substantially limited by the uses set forth in this prospectus in the section entitled “Use of Proceeds.” While our board of directors believes the flexibility in application of the net proceeds is prudent, the broad discretion it affords entails increased risks to the investors in this offering. Investors in this offering have no current basis to evaluate the possible merits or risks of any application of the net proceeds of this offering. Our stockholders may not agree with the manner in which we choose to allocate and spend the net proceeds.

### ***If you do not act on a timely basis and follow subscription instructions, your exercise of rights may be rejected.***

Holders of shares of common stock who desire to purchase shares of our common stock and Series C warrants in this offering must act on a timely basis to ensure that all required forms and payments are actually received by the subscription agent prior to 5:00 p.m., New York City time, on the expiration date, unless extended. If you are a beneficial owner of shares of common stock and you wish to exercise your rights, you must act promptly to ensure that your broker, dealer, custodian bank, trustee or other nominee acts for you and that all required forms and payments are actually received by your broker, dealer, custodian bank, trustee or other nominee in sufficient time to deliver such forms and payments to the subscription agent to exercise the rights granted in this offering that you beneficially own prior to 5:00 p.m., New York City time on the expiration date, as may be extended. We will not be responsible if your broker, dealer, custodian bank, trustee or other nominee fails to ensure that all required forms and payments are actually received by the subscription agent prior to 5:00 p.m., New York City time, on the expiration date, as may be extended.

If you fail to complete and sign the required subscription forms, send an incorrect payment amount, or otherwise fail to follow the subscription procedures that apply to your exercise in this offering, the subscription agent may, depending on the circumstances, reject your subscription or accept it only to the extent of the payment received. Neither we nor the subscription agent undertakes to contact you concerning an incomplete or incorrect subscription form or payment, nor are we under any obligation to correct such forms or payment. We have the sole discretion to determine whether a subscription exercise properly follows the subscription procedures.

### ***We cannot guarantee that you will receive any or all of the amount of shares and warrants for which you over-subscribed.***

Holders who fully exercise their basic subscription rights will be entitled to subscribe for an additional amount of shares and warrants equal to up to 400% of the shares and warrants for which such holder was otherwise entitled to subscribe. Over-subscription rights will be allocated *pro rata* among rights holders who over-subscribed, based on the number of over-subscription shares and warrants to which they subscribed. We cannot guarantee that you will receive any or all of the amount of shares and warrants for which you over-subscribed. If the pro rated amount of shares and warrants allocated to you in connection with your over-subscription right is less than your over-subscription request, then the excess funds held by the subscription agent on your behalf will be returned to you promptly without interest or deduction and we will have no further obligations to you.

### ***We could reduce the number of subscriptions that we accept in this offering if we become obligated to distribute shares of common stock and warrants pursuant to basic subscription rights that exceed our available shares or the maximum dollar amount of this offering could be exceeded.***

If, on or before the record date, we issue more than \_\_\_\_\_ shares of common stock as a result of exercises of outstanding warrants and options and conversion of our existing series A preferred stock into common stock, we would be obligated to distribute basic subscription rights for shares and Series C warrants that exceed the number

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of our authorized shares of common stock available for issuance. Similarly, if we receive a sufficient number of subscriptions, the aggregate dollar amount of the exercises could exceed the maximum dollar amount of this offering. In each case, we would reduce on a *pro rata* basis, the number of subscriptions we accept so that: (i) we will not become obligated to issue, upon exercise of the subscriptions and the Series C warrants, a greater number of shares of common stock than we have authorized and available for issuance and (ii) the gross proceeds of this offering will not exceed the maximum dollar amount of this offering. In the event of any *pro rata* reduction, we would first reduce over-subscriptions prior to reducing basic subscriptions.

***If you make payment of the subscription price by uncertified check, your check may not clear in sufficient time to enable you to purchase shares in this rights offering.***

Any uncertified check used to pay for shares to be issued in this rights offering must clear prior to the expiration date of this rights offering, and the clearing process may require five or more business days. If you choose to exercise your subscription rights, in whole or in part, and to pay for shares by uncertified check and your check has not cleared prior to the expiration date of this rights offering, you will not have satisfied the conditions to exercise your subscription rights and will not receive the shares you wish to purchase.

***The receipt of rights may be treated as a taxable distribution to you.***

The distribution of the rights in this offering should be a non-taxable distribution under Section 305(a) of the Internal Revenue Code of 1986, as amended (the "Code"). Please see the discussion on the "Material U.S. Federal Income Tax Considerations" below. This position is not binding on the IRS, or the courts, however. If this offering is part of a "disproportionate distribution" under Section 305 of the Code, your receipt of rights in this offering may be treated as the receipt of a taxable distribution to you equal to the fair market value of the rights. Any such distribution would be treated as dividend income to the extent of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent thereof and then as capital gain. Each holder of common stock is urged to consult his, her or its own tax advisor with respect to the particular tax consequences of this offering.

***The dealer-manager is not underwriting, nor acting as a placement agent of, the rights or the securities underlying the rights.***

Maxim Group LLC, as the dealer-manager of this rights offering, is not an underwriter, nor acting as a placement agent, of the rights or the shares of common stock and Series C warrants issuable upon exercise of the basic subscription or over subscription rights. Under our agreement with the dealer-manager, Maxim Group is solely providing marketing assistance and advice to our company in connection with this offering. Its services to us in this connection cannot be construed as any assurance that this offering will be successful. Maxim Group does not make any recommendation with respect to whether you should exercise the basic subscription or over subscription rights or to otherwise invest in our company.

***Some of our outstanding warrants to purchase shares of our common stock will experience reductions in their exercise price as a result of the rights offering.***

As of November 17, 2008, we have outstanding warrants to purchase 28,350,311 shares of our common stock at a weighted average exercise price of \$1.07 per share. The exercise price per share for approximately 22,307,911 of these warrants will be reduced as a result of the consummation of this offering and the resulting triggering of the anti-dilution protection provisions contained in these warrants. Following the consummation of this offering, we will have outstanding warrants to purchase approximately \_\_\_\_\_ shares of our common stock at a weighted average exercise price of \$ \_\_\_\_\_ per share (assuming no further warrants are exercised after the date of this prospectus).

## **Risks Related to Our Company**

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

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

### ***As a result of our current lack of financial liquidity and negative stockholders' equity, our auditors have expressed substantial concern about our ability to continue as a "going concern."***

Based on approximately \$607,000 of available cash and cash equivalents as of November 13, 2008 and strategic reductions in operating expenses, we believe that we have sufficient capital to fund our operations into December 2008. Our cash burn rate is approximately \$200,000 per month. If we fail to raise capital in December 2008, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection.

As a result of our current lack of financial liquidity, continued losses and negative stockholders' equity, our auditors' report for our consolidated financial statements for the year ended December 31, 2007, which are included elsewhere in this prospectus, contains a statement concerning the uncertainty of our ability to continue as a "going concern." Our lack of sufficient liquidity could make it more difficult for us to secure additional financing or enter into strategic relationships on terms acceptable to us, if at all, and may materially and adversely affect the terms of any financing that we may obtain and our public stock price generally. Our continuation as a "going concern" is dependent upon, among other things, achieving positive cash flow from operations and, if necessary, augmenting such cash flow using external resources to satisfy our cash needs. No assurances can be given, however, that we will be able to achieve these goals or that we will be able to continue as a going concern.

### ***We have incurred net losses to date and must raise additional capital in December 2008.***

We have incurred net losses in each year of operation since our inception in July 2000. Our accumulated deficit as of September 30, 2008 was approximately \$37.7 million. We will need to continue to conduct significant research, development, testing and regulatory compliance activities that, together with projected general and administrative expenses, we expect will result in substantial operating losses for the foreseeable future. Accordingly, we do not expect to be generating sales or other revenue and will remain dependent on outside sources of financing until that time. Due to our current cash position, if we do not raise additional capital in December 2008, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection.

We may raise capital through public or private equity financings, partnerships, debt financings, bank borrowings, or other sources. Additional funding necessary to continue our operations may not be available on favorable terms or at all. 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 counterclaim defendant in a lawsuit instituted by David Platt, and by court order could be subject to a default judgment if we cannot restore our relationship with current defense counsel or retain new counsel by December 12, 2008.***

In January 2004, David Platt, our Chief Executive Officer, filed a lawsuit in Massachusetts against GlycoGenesys, Inc. for claims including breach of contract. GlycoGenesys subsequently named us as a counterclaim defendant alleging, among other things, tortious interference and misappropriation of proprietary

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rights, and sought monetary damages and injunctive relief related to our intellectual property. We and Dr. Platt are contesting these counterclaims vigorously. In October 2006, Marlborough Research and Development, Inc. (now known as Prospect Therapeutics, Inc.) purchased certain assets including this lawsuit from the GlycoGenesys bankruptcy estate and continues prosecuting the counterclaims against us and Dr. Platt. Concluding that certain disputes of fact could not be resolved as a matter of law, the court on May 27, 2008 denied our motion for summary judgment. Prospect Therapeutics informed the Court that it does not seek monetary damages other than recovery of attorney fees. In response to a motion for withdrawal by counsel in this case, the court on October 6, 2008 issued an order stating that on December 12, 2008, a default judgment will be entered against us if new defense counsel has not entered an appearance on our behalf or we have not restored our relationship with our current counsel. We have engaged successor counsel for certain matters related to but not the trial in this case, and continue our discussions with present counsel. The lawsuit is expected to proceed to trial in March 2009. We believe the lawsuit is without merit and intend to contest it vigorously. If we are defaulted by inability to engage counsel, or do not prevail at trial, we could be prevented from the exclusive use of the intellectual property that is the subject of the litigation and accordingly there could be a material adverse impact on our financial position, results of operations and cash flows.

### ***We are involved in litigation with Summer Street Research Partners.***

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

### ***Our drug candidates are based on novel unproven technologies.***

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

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

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

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### ***We may be unable to commercialize our product candidates.***

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

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

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

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

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

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

Moreover, 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.

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

Our business exposes us to potential product liability and other liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical formulations and products. Such 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 cannot assure you that we will be able to obtain or maintain adequate product liability insurance on acceptable terms, if at all, or that such insurance will provide adequate coverage against our potential liabilities. Furthermore, our current and potential partners with

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whom we have collaborative agreements or our future licensees may not be willing to indemnify us against these types of liabilities and may not themselves be sufficiently insured or have sufficient liquidity to satisfy any product liability claims. Claims or losses in excess of any product liability insurance coverage that may be obtained by us could have a material adverse effect on our business, financial condition and results of operations.

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

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

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

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

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

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

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

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

***We will be subject to risks if we seek to develop our own sales force.***

If we choose at some point to develop our own sales and marketing capability, our experience in developing a fully integrated commercial organization is limited. If we choose to establish a fully integrated commercial organization, we will likely incur substantial expenses in developing, training and managing such an organization. We may be unable to build a fully integrated commercial organization on a cost effective basis, or at all. Any such direct marketing and sales efforts may prove to be unsuccessful. In addition, we will compete with many other companies that currently have extensive and well-funded marketing and sales operations. Our marketing and sales efforts may be unable to compete against these other companies. We may be unable to establish a sufficient sales and marketing organization on a timely basis, if at all.

***If we are unable to convince physicians as to the benefits of our proposed products, we may incur delays or additional expense in our attempt to establish market acceptance.***

Broad use of our proposed products may require physicians to be informed regarding our proposed products and the intended benefits. This educational process may require substantial cost and time, and in the near term have limited results because a drug based on a 505(b)(2) NDA (which we are utilizing for DAVANAT®) cannot claim product superiority. Inability to carry out this physician education process may adversely affect market acceptance of our proposed products. We may be unable to timely educate physicians regarding our proposed products in sufficient numbers to achieve our marketing plans or to achieve product acceptance. Any delay in physician education may materially delay or reduce demand for our products. In addition, we may expend significant funds toward physician education before any acceptance or demand for our proposed products is created, if at all.

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

We are highly dependent on David Platt, Ph.D., Chief Executive Officer; Anatole Klyosov, Ph.D., Chief Scientist; and Eliezer Zomer, Ph.D., Executive Vice President, Manufacturing and Product Development, each of whom has scientific, technical or other business expertise and experience that is critical to our success. The loss of any of these persons, or failure to attract or retain other key personnel, could prevent us from pursuing collaborations or developing our products and core technologies.

### **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.

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

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

### ***Our competitive position depends on protection of our intellectual property.***

Development and protection of our intellectual property are critical to our business. All of our intellectual property, patented or otherwise, has been invented and/or developed by employees of our company. If we do not adequately protect our intellectual property, competitors may be able to practice our technologies. Our success depends in part on our ability to obtain patent protection for our products or processes in the U.S. and other countries, protect trade secrets, and prevent others from infringing on our proprietary rights.

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.

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

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

We are a counterclaim defendant in a lawsuit instituted by our chief executive officer that relates to our intellectual property. See “Risks Related to Our Company” above.

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

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

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

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

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

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

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

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

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

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

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

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

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

**Risks Related to Our Common Stock**

***We are not in compliance with the continuing listing requirements of, and have received a notice of delisting from, the NYSE Alternext US.***

On November 7, 2008, we received notice from the NYSE Alternext US that it intends to commence proceedings to delist our common stock from trading on the exchange due to our failure to comply with its continuing listing requirements. Specifically, the delisting notice states that we have failed to meet the exchange's minimum stockholders' equity requirement with losses in three of the last four years and have failed to make progress consistent with our plan to regain and sustain compliance with the listing requirements. This follows a similar notice that we received from the NYSE Alternext US in June 2007. We have notified the NYSE Alternext US that we are appealing the delisting decision and a hearing on our appeal has been scheduled for December 23, 2008. We cannot assure you that our appeal will be successful or that our shares will not be delisted. If our common stock is delisted, trading, if any, of our common stock (including the shares of common stock underlying the rights and underlying the Series C warrants) could thereafter be conducted in the over-the-counter market, the OTC Bulletin Board or on the "pink sheets".

***Stock prices for pharmaceutical and biotechnology companies are volatile.***

The market price for securities of pharmaceutical and biotechnology companies historically has been highly volatile, and the market from time to time has experienced significant price and volume fluctuations that are unrelated to the operating performance of such companies. Fluctuations in the trading price or liquidity of our common stock may adversely affect, among other things, the interest in our stock by purchasers on the open market and our ability to raise capital.

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

Our board of directors has authority, without action or vote of our stockholders, to issue all or a part of our authorized but unissued shares. Such stock issuances could be made at a price that reflects a discount or a premium from the then-current trading price of our common stock. In addition, in order to raise capital, we may need to issue securities that are convertible into or exchangeable for a significant amount of our common stock. These issuances would dilute your percentage ownership interest, which would have the effect of reducing your influence on matters on which our stockholders vote, and might dilute the book value of our common stock. You may incur additional dilution if holders of stock options, whether currently outstanding or subsequently granted, exercise their options, or if warrant holders exercise their warrants to purchase shares of our common stock. If this rights offering is fully subscribed, we may have insufficient authorized and unissued shares of common stock to issue in connection with a subsequent equity financing transaction, as a result of which we may be required to call a special meeting of our shareholders to authorize additional shares before undertaking or as a condition to completing an offering.

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

We are authorized to issue 200,000,000 shares of common stock, of which 48,052,159 shares were issued and outstanding on November 17, 2008. Assuming full participation in the rights offering (but excluding any issuance of shares of common stock to holders of Series C warrants upon exercise of those warrants and 2006 investor warrants exercising their exchange rights and participating in the rights offering), we would have \_\_\_\_\_ shares issued and outstanding. An additional 76,502,470 shares would be reserved for issuance upon exercise of stock options and warrants outstanding prior to this rights offering, and upon exercise of warrants issued upon exercise of the basic and over subscription rights. If this rights offering is fully subscribed, we may have insufficient available shares of common stock to issue in connection with a subsequent equity financing transaction, as a result of which we may be required to call a special meeting of our shareholders to authorize additional shares before undertaking or as a condition to completing an offering. We cannot assure you that our shareholders would authorize an increase in the number of shares of our common stock.

### ***As a “thinly-traded” stock, large sales can place downward pressure on our stock price.***

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

### ***Shares eligible for future sale may adversely affect the market for our common stock.***

We presently have a significant number of convertible or derivative securities outstanding, including: (i) 1,742,500 shares of our Series A 12% convertible preferred stock which are convertible immediately without payment to 1,742,500 shares of our common stock, (ii) 4,707,500 shares of common stock issuable upon exercise of outstanding stock options at a weighted average exercise price of \$2.32 per share, and (iii) 28,350,311 shares of common stock issuable upon exercise of our outstanding warrants at a weighted average exercise price of \$1.07 per share. If and when these securities are converted or exercised into shares of our common stock, the number of our shares of common stock outstanding will increase. Such increase in our outstanding share, and any sales of such shares, could have a material adverse effect on the market for our common stock and the market price of our common stock.

In addition, from time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144, promulgated under the Securities Act of 1933, which we refer to in this prospectus as the Securities Act, subject to certain limitations. In general, pursuant to Rule 144, after satisfying a six month holding period: (i) affiliated stockholders (or stockholders whose shares are aggregated) may, under certain circumstances, sell within any three month period a number of securities which does not exceed the greater of 1% of the then outstanding shares of common stock or the average weekly trading volume of the class during the four calendar weeks prior to such sale and (ii) non-affiliated stockholders may sell without such limitations, provided we are current in our public reporting obligations. Rule 144 also permits the sale of securities by non-affiliates that have satisfied a one year holding period without any limitation or restriction. Any substantial sale of our common stock pursuant to Rule 144 or pursuant to any resale prospectus may have a material adverse effect on the market price of our securities.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, 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 “project,” “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. The following are some of the important factors that could cause our actual performance to differ materially from those discussed in the forward-looking statements:

- We have incurred significant operating losses since our inception and cannot assure you that we will generate revenue or profit.
- As a result of our lack of financial liquidity and negative stockholders’ equity, our auditors have indicated there is uncertainty of our ability to continue as a “going concern.”
- If we fail to raise capital in December 2008, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection.
- We are subject to extensive and costly regulation by the FDA, which must approve our product candidates in development and could restrict the sales and marketing of such products in development.
- We may be unable to achieve commercial viability and acceptance of our proposed products.
- We may be unable to improve upon, protect and/or enforce our intellectual property.
- We may be unable to enter into strategic partnerships for the development, commercialization, manufacturing and distribution of our proposed product candidates.
- We are subject to significant competition.
- As a public company, we must implement additional and expensive finance and accounting systems, procedures and controls as we grow our business and organization to satisfy new reporting requirements, which will increase our costs and require additional management resources.

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 above and in the Risk Factors section of this prospectus. We cannot assure you that we have identified all the factors that create uncertainties. Moreover, new risks emerge from time to time and it is not possible for our management to predict all risks, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements. 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.

## USE OF PROCEEDS

Assuming full participation in the rights offering, but excluding any issuance of shares of common stock to holders of (i) Series C warrants upon exercise of those warrants and (ii) 2006 investor warrants exercising their exchange rights and participating in the rights offering, we estimate that the net proceeds from the rights offering will be approximately \$            million, after deducting expenses related to this offering payable by us estimated at approximately \$            , including dealer-manager fees.

We intend to use the net proceeds received from the exercise of the rights (as well as up to \$            if all warrants issued in connection with this offering are exercised) primarily for concluding the clinical work required for, and the submission to the FDA of, our NDA for DAVANAT<sup>®</sup>, as well as for general working capital purposes.

If we fail to raise capital in December 2008, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection.

## CAPITALIZATION

The following table sets forth our capitalization, cash and cash equivalents:

- on an actual basis as of September 30, 2008; and
- on a pro forma as adjusted basis to give effect to the sale of        shares of our common stock in this rights offering (but excluding any issuance of shares of common stock to holders of: (i) Series C warrants upon exercise of those warrants and (ii) 2006 investor warrants exercising their exchange rights and participating in the rights offering), assuming a subscription price of \$        per share, and our receipt of the net proceeds from that sale.

This table should be read in conjunction with our “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included elsewhere in this prospectus.

	At September 30, 2008	
	Actual	Pro Forma As Adjusted
	(dollars in thousands)	
Cash and cash equivalents	\$ 816	\$
Total liabilities	\$ 1,616	\$
Common stock, \$0.001 par value (200,000,000 shares authorized; 47,947,609 issued and outstanding at September 30, 2008)	48	
Series A 12% Convertible Preferred Stock (5,000,000 shares designated; 1,742,500 issued and outstanding at September 30, 2008)	704	
Additional paid-in capital	36,547	
Deficit accumulated during the development stage	(37,682)	
Total stockholders’ deficit	\$ (383)	\$
Total liabilities and stockholders’ deficit	\$ 1,233	\$

## DILUTION

Purchasers of our common stock in the rights offering will experience an immediate dilution of the net tangible book value per share of our common stock. Our net tangible book value as of September 30, 2008 was approximately \$(0.6) million, or \$(0.01) per share of our common stock (based upon 47,947,609 shares of our common stock outstanding). Net tangible book value per share is equal to our total net tangible book value, which is our total tangible assets less our total liabilities, divided by the number of shares of our outstanding common stock. Dilution per share equals the difference between the amount per share paid by purchasers of shares of common stock in the rights offering and the net tangible book value per share of our common stock immediately after the rights offering.

Based on the aggregate offering of \$            million and after deducting estimated offering expenses payable by us of \$            million, and the application of the estimated \$            million of net proceeds from the rights offering, our pro forma net tangible book value as of September 30, 2008 would have been approximately \$            million, or \$            per share. This represents an immediate increase in pro forma net tangible book value to existing stockholders of \$            per share and an immediate dilution to purchasers in the rights offering of \$            per share.

The following table illustrates this per share dilution (assuming a fully subscribed for rights offering of            shares at the subscription price of \$            per share but excluding any issuance of shares of common stock to holders of: (i) Series C warrants upon exercise of the Series C warrants, (ii) 2006 investor warrants exercising their exchange rights and participating in the rights offering and (iii) shares of Series A preferred stock upon conversion of these shares):

Subscription price	\$
Net tangible book value per share prior to the rights offering	
Increase per share attributable to the rights offering	_____
Pro forma net tangible book value per share after the rights offering	_____
Dilution in net tangible book value per share to purchasers	\$

### SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data presented below as of and for the fiscal years ended December 31, 2007, 2006, 2005, 2004, 2003 and for the cumulative period since inception (July 10, 2000) through December 31, 2007 have been derived from our consolidated financial statements. Our consolidated financial statements as of December 31, 2007 and 2006 and for the fiscal years ended December 31, 2007, 2006 and 2005 are included elsewhere in this prospectus. Our consolidated financial statements as of December 31, 2005, 2004 and 2003 and for the fiscal years ended December 31, 2004 and 2003 are not included in this prospectus. The selected condensed consolidated financial data presented below as of September 30, 2008 and for the nine months ended September 30, 2008 and 2007 have been derived from our condensed financial statements included elsewhere in this prospectus, and include, in the opinion of management, all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of our financial position and results of operations as of and for these periods. Data from interim periods are not necessarily indicative of the results to be expected for a full year. This selected consolidated financial data should be read in conjunction with “Capitalization,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included elsewhere in this prospectus.

	Fiscal Year Ended December 31,					Cumulative Period from Inception (July 10, 2000) to December 31, 2007	Nine Months Ended September 30,	
	2007	2006	2005	2004	2003		2008	2007
	(dollar in thousands)							
<b>Consolidated Statements of Operations Data:</b>								
Operating expenses:								
Research and development	\$ 2,053	\$ 3,019	\$ 3,040	\$ 3,042	\$ 1,950	\$ 15,581	\$ 1,504	\$ 1,668
General and administrative	4,402	4,029	3,615	4,262	2,988	22,455	2,721	3,396
Operating loss	(6,455)	(7,048)	(6,655)	(7,304)	(4,938)	(38,036)	(4,225)	(5,064)
Interest and other income	102	281	111	124	69	737	27	91
Interest and other expenses	(3,080)	3,574	(311)	3,410	793	2,139	—	(343)
Change in fair value of convertible debt instrument	—	—	—	—	—	—	—	(1,091)
Change in fair value of warrant liabilities	—	—	—	—	—	—	1,863	(1,717)
Total other income and (expense)	(2,978)	3,855	(200)	3,534	862	2,876	1,890	(3,060)
Net loss	<u>\$ (9,433)</u>	<u>\$ (3,193)</u>	<u>\$ (6,855)</u>	<u>\$ (3,770)</u>	<u>\$ (4,076)</u>	<u>\$ (35,160)</u>	<u>\$ (2,335)</u>	<u>\$ (8,124)</u>
Series A 12% convertible preferred stock dividend	—	—	—	—	—	—	187	—
Net income (loss) applicable to common stock	—	—	—	—	—	—	(2,522)	—
Net loss per share: basic and diluted (1)	<u>\$ (0.24)</u>	<u>\$ (0.11)</u>	<u>\$ (0.25)</u>	<u>\$ (0.15)</u>	<u>\$ (0.19)</u>		<u>(0.05)</u>	<u>(0.21)</u>
Weighted average shares outstanding: basic and diluted	38,980,548	28,472,898	27,315,411	25,750,789	21,360,572		46,402,947	38,519,133

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	As of December 31,					As of
	2007	2006	2005	2004	2003	September 30, 2008
	(dollars in thousands)					
<b>Consolidated Balance Sheet Data:</b>						
Working capital	\$ 426	\$ (53)	\$ 3,314	\$ 9,819	\$ 7,318	\$ 187
Total assets	1,782	6,363	4,963	11,110	8,002	1,233
Advances received from subscribers for shares of Series A 12% Convertible Preferred Stock and related warrants	1,637	—	—	—	—	—
Advances received for equity consideration	—	—	—	—	—	200
Convertible debt instrument	—	5,137	—	—	—	—
Warrant liabilities	2,069	371	5,936	5,625	1,925	868
Stockholders' (deficit) equity	(2,924)	(22)	(2,353)	4,480	5,699	(383)

(1) Basic and net loss per share is the same for each reporting period as the anti-dilutive shares were not included in the per-share calculations.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Overview

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

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

In 2002, the FDA granted us an IND for use of DAVANAT<sup>®</sup> 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<sup>®</sup> in combination with 5-FU enables greater absorption of the chemotherapy in cancer cells while reducing its toxic side effects.

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

To date, DAVANAT<sup>®</sup> has been administered to approximately 100 cancer patients in Phase I and II trials. Data from a Phase II trial for end-stage colorectal cancer patients showed that DAVANAT<sup>®</sup> 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 trials also showed that patients experienced fewer adverse side effects of the chemotherapy and required less hospitalization.

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

In early 2007, in an effort to lower clinical development costs and accelerate the approval and commercialization of DAVANAT<sup>®</sup>, we chose to change our regulatory strategy to what is known as a "505(b)(2)" NDA. Our 505(b)(2) NDA for DAVANAT<sup>®</sup> will seek FDA approval for co-administration of DAVANAT<sup>®</sup> with 5-FU for intravenous injection for the treatment of colorectal cancer. These 505(b)(2) NDAs are often used for drugs involving previously-approved products and, as a result, are less costly to prepare and file with the FDA. Although we believe, based on the outcome of our clinical trials to date, that DAVANAT<sup>®</sup> when used in combination with 5-FU or biological drugs is superior to the current standard of care, we cannot in a 505(b)(2) NDA claim superiority over the current standard of care. We believe, however, that if and when our 505(b)(2) NDA is approved by the FDA, we are better positioned to attract a strategic partner with the resources to undertake the costly Phase III clinical trials required to produce the data on which to make a superiority claim. We plan to submit the 505(b)(2) NDA for DAVANAT<sup>®</sup> in the second quarter of 2009.

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

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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 or ten months. Upon approval, an applicant may commence commercial marketing and distribution of the approved products. We have retained Camargo Pharmaceutical Services, LLC for regulatory support of our submission with the FDA. Camargo's expertise in regulatory affairs and submissions includes the preparation and submission of NDAs, Abbreviated NDAs, and 505(b)(2) NDAs. Camargo has assisted with more than 150 FDA approvals.

### **Recent Developments**

In May 2008, we submitted a DMF for DAVANAT<sup>®</sup> to the FDA. This is an important step toward the filing of our DAVANAT<sup>®</sup> NDA because a DMF contains confidential detailed information in support of the NDA about facilities, processes or articles used in the manufacturing, processing, packaging, and storing or stability of drugs. We believe the DMF represents a significant milestone in our eventual commercialization of DAVANAT<sup>®</sup> because we believe it demonstrates our ability to produce commercial quantities of pharmaceutical-grade DAVANAT<sup>®</sup> under GMP standards. A DMF can be cross-referenced by 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<sup>®</sup> NDA. The FDA has granted a pre-NDA meeting with us on December 22, 2008 and recently advised us that the agency has reviewed our package and found that no additional data is needed for the upcoming meeting. As noted above, using the 505(b)(2) regulatory pathway, which allows us to rely on previous FDA findings, is important to our near-term product development strategy because it enables us to lower the clinical development costs and accelerate the approval and commercialization of DAVANAT<sup>®</sup>.

On October 31, 2008, our board of directors authorized Medi-Pharmaceuticals, Inc., our wholly-owned Nevada subsidiary, to enter into a joint venture to deploy certain technology we own, as well as original technology to be developed by the joint venture, for use in nutraceutical cardiovascular therapies. We expect that this deployment will be accomplished by: (i) a merger of FOD Enterprises, Inc., a Nevada corporation, with and into Medi-Pharmaceuticals, following which Medi-Pharmaceuticals will be the surviving corporation and we will be the owner of 10% of the outstanding capital stock of Medi-Pharmaceuticals; and (ii) our entering into a license agreement with Medi-Pharmaceuticals. Pursuant to the proposed terms of the license agreement, we would grant Medi-Pharmaceuticals a worldwide perpetual license to commercialize all of our polysaccharide technology exclusively in the field of cardiovascular therapies (both preventive and therapeutic) in exchange for a royalty equal to 10% of Medi-Pharmaceuticals' net revenues from products sold based on the licensed technology. Medi-Pharmaceuticals would advance \$1.0 million in cash from the royalty payments to us within six months of the effective date of the license agreement or we would have the ability to terminate the license agreement. None of the parties have entered into definitive documents with respect to these transactions.

On November 7, 2008, we received notice from the NYSE Alternext US that it intends to commence proceedings to delist our common stock from trading on the exchange due to our failure to comply with its continuing listing requirements. Specifically, the delisting notice states that we have failed to meet the exchange's minimum stockholders' equity requirement with losses in three of the last four years and have failed to make progress consistent with our plan to regain and sustain compliance with the listing requirements. This follows a similar notice that we received from the NYSE Alternext US in June 2007. We have notified the NYSE Alternext US that we are appealing the delisting decision and a hearing on our appeal has been scheduled for December 23, 2008. We cannot assure you that our appeal will be successful or that our shares will not be delisted. If our common stock is delisted, trading, if any, of our common stock (including the shares of common stock underlying the rights and underlying the Series C warrants) could thereafter be conducted in the over-the-counter market, the OTC Bulletin Board or on the "pink sheets".

## Critical Accounting Policies and Estimates

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

*Accrued Expenses.* As part of the process of preparing our consolidated financial statements, we are required to estimate accrued expenses. This process involves identifying services that third parties have performed on our behalf and estimating the level of service performed and the associated cost incurred on these services as of each balance sheet date in our consolidated financial statements. Examples of estimated accrued expenses include contract service fees in conjunction with pre-clinical and clinical trials, professional service fees, such as those arising from the services of attorneys and accountants and accrued payroll expenses. In connection with these service fees, our estimates are most affected by our understanding of the status and timing of services provided relative to the actual services incurred by the service providers. In the event that we do not identify certain costs that have been incurred or we under- or over-estimate the level of services or costs of such services, our reported expenses for a reporting period could be understated or overstated. The date on which certain services commence, the level of services performed on or before a given date, and the cost of services are often subject to our judgment. We make these judgments based upon the facts and circumstances known to us in accordance with accounting principles generally accepted in the U.S.

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

*Warrants.* We have issued common stock warrants in connection with the execution of certain equity and debt financings and consulting agreements. Certain warrants are accounted for as derivative liabilities at fair value in accordance with SFAS 133. Such warrants do not meet the criteria in paragraph 11(a) of SFAS 133 that a contract should not be considered a derivative instrument if it is (1) indexed to its own stock and (2) classified in stockholders’ equity. Changes in fair value of derivative liabilities are recorded in the consolidated statement of operations under the caption “Change in fair value of warrant liabilities.” Warrants that are not considered derivative liabilities as defined in SFAS 133 are accounted for at fair value at the date of issuance in additional paid-in capital. The fair value of warrants is determined using the Black-Scholes option-pricing model using assumptions regarding volatility of our common share price, remaining life of the warrant, and risk-free interest rates at each period end. In the second quarter of 2008, these warrants liabilities were marked to market as a consequence of our charter amendment increasing our authorized shares of common stock, resulting in a change in fair value of warrant liabilities gain in our consolidated statement of operations of approximately \$100,000 and reclassified to stockholders’ equity.

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

*Stock-Based Compensation.* Through December 31, 2005, we accounted for stock-based compensation to employees and non-employee directors under the intrinsic value method in accordance with Accounting Principles Board (“APB”) Opinion No. 25, “*Accounting for Stock Issued to Employees*,” (APB No. 25) and the related interpretations. Under APB No. 25, no compensation expense is recognized for stock options granted to employees at fair market value and with fixed terms. On January 1, 2006, we adopted SFAS 123(R), “*Share Based Payment*,” (SFAS 123(R)) using the modified prospective method, which results in the provisions of SFAS 123(R) being applied to the consolidated financial statements on a going-forward basis. Prior periods have not been restated. SFAS 123(R) requires companies to recognize stock-based compensation awards granted to its employees as compensation expense on a fair value method. Under the fair value recognition provisions of SFAS 123(R), stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the service period, which generally represents the vesting period. The grant date fair value of stock options is calculated using the Black-Scholes option-pricing model. The expense recognized over the service period is required to include an estimate of the awards that will be forfeited. Previously, we recorded the impact of forfeitures as they occurred. We do not anticipate any awards will be forfeited in our calculation of compensation expense due to the limited number of employees that receive stock option grants and our historical employee turnover.

We consider equity compensation to be an important component in attracting and retaining key employees. During the nine months ended September 30, 2008 and during the years ended December 31, 2007, 2006 and 2005, we awarded approximately 1,130,000, 1,048,500, 399,000 and 272,000 stock options, respectively, to employees, consultants and non-employee members of our board of directors for normal services and we recorded approximately \$550,000 and \$616,000 of related stock option expense during the nine months ended September 30, 2008 and the year ended December 31, 2007, respectively. Because the exercise price of the options granted equal the fair market value of a share of our common stock on the date of grant and the options have fixed terms, we recorded no stock compensation expense on these awards in 2005. If we had used the fair value method provided for under SFAS No. 123, “*Accounting for Stock-Based Compensation*,” our net loss in 2005 of approximately \$6.9 million would have increased by approximately \$287,000.

## **Results of Operations**

### *Nine Months Ended September 30, 2008 Compared to Nine Months Ended September 30, 2007*

*Research and Development Expenses.* Research and development expenses were approximately \$1,504,000 during the nine months ended September 30, 2008 or a decrease of approximately \$164,000 as compared to \$1,668,000 incurred during the nine months ended September 30, 2007. We generally categorize research and development expenses as either direct external expense, comprised of amounts paid to third party vendors for services, or all other expenses, comprised of employee payroll and general overhead allocable to research and development. We subdivide external expenses between clinical programs and pre-clinical activities. We consider a clinical program to have begun upon acceptance by the FDA, or similar agency outside of the U.S., 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

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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 nine months ended September 30, 2008, as compared to the nine months ended September 30, 2007 were as follows:

	Nine Months Ended September 30,	
	2008	2007
	(in thousands)	
Direct external expenses		
Clinical programs	\$ 201	\$ 674
Pre-clinical activities	594	282
All other research and development expenses	709	712
	<u>\$ 1,504</u>	<u>\$ 1,668</u>

Clinical trial costs decreased by approximately \$473,000. The decrease is due principally to lower activity in the Phase II colorectal and biliary cancer trials as we focused on filing our DAVANAT® “DMF” with the FDA, as well as filing an IND and preparations for our NDA filing. Pre-clinical expenses in 2008 increased by approximately \$312,000 compared to 2007. Of this amount approximately \$569,000 was due to expense associated with filing our DMF. This increase was offset by approximately \$257,000 in lower activity related to all other research activities. Other research and development costs remained essentially unchanged. Stock based compensation increased by approximately \$112,000. This was offset by a decrease in payroll expense of approximately \$111,000 due principally to salary reductions.

*General and Administrative Expenses.* General and administrative expenses were approximately \$2.7 million during the nine months ended September 30, 2008, or a decrease of approximately \$675,000 as compared to approximately \$3.4 million, incurred during the nine months ended September 30, 2007. General and administrative expenses consist primarily of salaries including stock based compensation, legal and accounting fees, insurance, investor relations, business development and other office related expenses. Accounting and legal expenses decreased by approximately \$621,000, payroll expense decreased by approximately \$35,000 and stock based compensation decreased by approximately \$41,000. All other expenses increased by a net of approximately \$22,000.

*Other Income and Expense.* Other income and expense for the nine months ended September 30, 2008, was income of approximately \$1.9 million as compared to expense of approximately \$3.1 million for the nine months ended September 30, 2007. Of the approximately \$5.0 million increase in other income and expense, approximately \$4.7 million was due to fair value accounting associated with our convertible debenture and our warrant liabilities. Interest expense decreased by approximately \$343,000 due to our convertible debenture which was outstanding in 2007 and no longer outstanding in 2008 and interest income decreased by approximately \$64,000 due to lower cash balances.

### *Fiscal Year Ended December 31, 2007 Compared to Fiscal Year Ended December 31, 2006*

*Research and Development Expenses.* Research and development expenses were approximately \$2.1 million during the year ended December 31, 2007 as compared to approximately \$3.0 million incurred during the year ended December 31, 2006. We generally categorize research and development expenses as either direct external expense, comprised of amounts paid to third party vendors for services, or all other expenses, comprised of employee payroll and general overhead allocable to research and development. We subdivide external expenses between clinical programs and preclinical activities. We consider a clinical program to have

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begun upon acceptance by the FDA, or similar agency outside of the U.S., 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 twelve months ended December 31, 2007 as compared to the twelve months ended December 31, 2006 were as follows:

	Year Ended	
	December 31,	
	2007	2006
	<i>(in thousands)</i>	
Direct external expenses		
Clinical programs	\$ 809	\$ 1,504
Pre-clinical activities	357	589
All other research and development expenses	887	926
	<u>\$ 2,053</u>	<u>\$ 3,019</u>

Clinical trial expenses decreased by approximately \$695,000. The decrease was due to a reduction of approximately \$426,000 in expenses related to the Phase II DAVANAT® Colorectal Cancer trial and the Phase I DAVANAT® Colorectal Cancer trial that, for the most part, were completed in 2006. In addition, a reduction of approximately \$362,000 in 2007 as compared to 2006 is due to lower expenses related to our Phase III European colorectal cancer trial. We initiated the trial in 2006 but did not begin dosing patients due to financial constraints. These reductions were offset by an increase of approximately \$93,000 associated with our two current Phase II trials for first-line treatment of colorectal and biliary cancer trial with DAVANAT®. Pre-clinical expenses in 2007 decreased by approximately \$232,000 compared to 2006 due to lower research activity. Other research and development costs decreased by approximately \$39,000. This is the result of lower payroll expense of approximately \$154,000 due principally to salary reductions to conserve cash, offset by higher non-cash stock compensation expense and higher space lease expense.

We expect our research and development expenses in 2008 will remain at approximately the same level as 2007 and will shift from the two current Phase II clinical trials to an NDA for DAVANAT® and development of our new fibrosis compounds.

Both the time required and costs we may incur in order to commercialize a drug candidate that would result in material net cash inflow are subject to numerous variables, and hence we are unable at this stage of our development to forecast useful estimates. Variables that make estimates difficult include the number of clinical trials we may undertake, the number of patients needed to participate in the clinical trial, patient recruitment uncertainties, trial results as to the safety and efficacy of our product, and uncertainties as to the regulatory agency response to our trial data prior to receipt of marketing approval. Moreover, the FDA or other regulatory agencies may suspend clinical trials if we or an agency 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. Please see “Risks Related to Our Company” and “Risks Related to the Drug Development Industry” for additional risks and other factors that make estimates difficult at this time. Due to these uncertainties, accurate and meaningful estimates of the ultimate cost to bring a product to market, the timing of costs and completion of our program and the period during which material net cash inflows will commence are unavailable at this time.

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*General and Administrative Expenses.* General and administrative expenses were approximately \$4.4 million in 2007, an increase of approximately \$373,000 compared to approximately \$4.0 million in 2006. General and administrative expenses consist primarily of salaries, including stock based compensation, legal and accounting fees, insurance, investor relations, business development and other office related costs. Of the approximately \$373,000 increase in expense in 2007, approximately \$405,000 consisted of an increase in legal expenses. Of this amount, approximately \$250,000 was due to expenses related to the counterclaims asserted against us by Prospect Therapeutics, Inc. described in “Business — Legal Proceedings.” An increase of approximately \$250,000 in additional legal expense was due to our equity finance efforts. The increase in legal expense was offset by reductions in general legal and patent legal expense of approximately \$95,000. Additionally, non-cash stock based compensation increased by approximately \$135,000, which was offset by a reduction in payroll expense of approximately \$191,000 as certain employees voluntarily reduced salaries to conserve cash. All other spending increased by approximately \$24,000, due principally to higher space lease expense.

We expect general and administrative expenses to decrease in 2008 as compared to 2007 due to lower legal and accounting expenses.

*Other Income and Expense.* Other income and expense was expense of approximately \$3.0 million in 2007 as compared to income of approximately \$3.9 million in 2006. Of the \$6.8 million increase, approximately \$9.5 million is related to fair value accounting for warrant liabilities. This was offset by approximately a \$1.4 million decrease in expense related to our convertible debt instrument’s fair value accounting. Interest expense was approximately \$350,000 in 2007, as compared to approximately \$1.9 million in 2006. Interest expense decreased by approximately \$1.5 million due to lower convertible debenture amounts outstanding. Approximately \$350,000 of interest expense includes approximately \$257,000 of debt discount amortization and approximately \$93,000 of interest expense. Interest income was approximately \$102,000 in 2007 or a decrease of approximately \$179,000 as compared to approximately \$281,000 in 2006. Interest income consists primarily of interest income on interest-bearing cash equivalents and the certificate of deposit. The decrease in interest income is due primarily to lower average cash balances.

### *Fiscal Year Ended December 31, 2006 Compared to Fiscal Year Ended December 31, 2005*

*Research and Development Expenses.* Research and development expenses were approximately \$3.0 million during the year ended December 31, 2006 as compared to approximately \$3.0 million incurred during the year ended December 31, 2005.

Our research and development expenses for the twelve months ended December 31, 2006 as compared to the twelve months ended December 31, 2005 were as follows:

	Year Ended December 31,	
	2006	2005
	(in thousands)	
Direct external expenses		
Clinical programs	\$ 1,504	\$ 1,557
Pre-clinical activities	589	959
All other research and development expenses	926	524
	<u>\$ 3,019</u>	<u>\$ 3,040</u>

Clinical trial expense decreased by approximately \$53,000 as the Phase I late-stage cancer patient trial was completed and the Phase II late-stage colorectal cancer patient trial completed dosing resulting in reduced spending that was offset by the initiation of the line I biliary duct cancer, the line I colorectal cancer and line II colorectal cancer trials. Pre-clinical spending decreased due principally to reduced DAVANAT<sup>®</sup> manufacturing

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costs. All other research and development costs increased due to the addition of our Chief Scientist, additional personnel to support our clinical trials and expensing stock based compensation largely related to the fair value method as required by SFAS 123(R). In summary, research and development expense in 2006 shifted from pre-clinical activities to clinical programs. The increase in clinical trial expense was due to the start-up and costs associated with the Phase II trial. We completed dosing patients in a Phase I clinical trial of DAVANAT® in March 2005 and began dosing patients in a Phase II clinical trial of DAVANAT® in May 2005, while the pre-clinical tests and experiments associated with DAVANAT® diminished in 2006 as compared to 2005.

Both the time required and costs we may incur in order to commercialize a drug candidate that would result in material net cash inflow are subject to numerous variables, and hence we are unable at this stage of our development to forecast useful estimates. Variables that make estimates difficult include the number of clinical trials we may undertake, the number of patients needed to participate in the clinical trial, patient recruitment uncertainties, trial results as to the safety and efficacy of our product, and uncertainties as to the regulatory agency response to our trial data prior to receipt of marketing approval. Moreover, the FDA or other regulatory agencies may suspend clinical trials if we or an agency 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. Please see “Risks Related to Our Company” and “Risks Related to the Drug Development Industry” for additional risks and other factors that make estimates difficult at this time. Due to these uncertainties, accurate and meaningful estimates of the ultimate cost to bring a product to market, the timing of costs and completion of our program and the period during which material net cash inflows will commence are unavailable at this time.

*General and Administrative Expenses.* General and administrative expenses were approximately \$4.3 million in 2006 or an increase of 12%, as compared to approximately \$3.6 million in 2005. General and administrative expenses consist primarily of salaries, including stock based compensation, legal and accounting fees, insurance, investor relations, business development and other office related costs. Of the approximately \$414,000 increase in expense in 2006, approximately \$385,000 consisted of an increase in accounting and other costs associated primarily with the convertible debentures. Approximately \$273,000 of the increase was due to expensing stock based compensation related to the fair value method as required by SFAS 123(R). These increases were offset by a reduction in legal expense of approximately \$261,000. Legal expenses decreased due to lower expenses associated with the intellectual property litigation with GlycoGenesys. Payroll expense decreased due to lower incentive compensation payments

*Other Income and Expense.* Other income and expense was income of approximately \$3.86 in 2006 as compared to expense of approximately \$200,000 in 2005. Of the \$4.1 million increase, \$8.1 million is related to fair value accounting for warrant liabilities. This was offset by \$4.2 million of charges related to our convertible debt instrument of which approximately \$2.4 million is related to fair value accounting and approximately \$1.9 million is interest expense approximately \$1.9 million of interest includes approximately \$1.4 million of debt discount amortization and Approximately \$492,000 of interest expense. Additionally, interest income in 2006 was approximately \$281,000 or an increase of approximately \$170,000 as compared to approximately \$111,000 in 2005. Interest income consists primarily of interest income on interest-bearing cash equivalents and the certificate of deposit. The increase in interest income is due primarily to higher average interest rates and to a lesser degree due to higher average cash balances. Average interest rates were approximately 3.2% per annum in 2006 versus approximately 1.4% per annum in 2005.

### **Liquidity and Capital Resources**

As described above and elsewhere in this prospectus, we are a development stage company 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 September 30, 2008, we raised a total of \$41.0 million from these offerings and had approximately \$816,000 of available cash and cash equivalents.

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Net cash used in operations decreased by approximately \$51,000 to approximately \$4.2 million for the nine months ended September 30, 2008, from \$4.2 million for the nine months ended September 30, 2007. Cash operating expenses decreased by approximately \$903,000 for the nine months ended September 30, 2008, and were offset by an increase in working capital needs of approximately \$803,000. Interest income decreased for the nine months ended September 30, 2008, by approximately \$64,000 and cash interest expense decreased by approximately \$15,000.

Net cash provided by investing activities was approximately \$6,000 in the nine months ended September 30, 2008, as compared to approximately \$4.9 million in the same period for 2007. The decrease is due principally to the maturity of a \$5.0 million certificate of deposit in the first nine months of 2007. Approximately \$2,000 was used for purchase of plant and equipment in the nine months ended September 30, 2008, the same amount as used in the nine months ended September 30, 2007. No amount was used for patent costs during the nine months of 2008 as compared to a use of approximately \$74,000 during the same period in 2007. Restricted cash decreased by approximately \$8,000 during the nine months ended September 30, 2008 and was an increase of approximately \$11,000 during the same period in 2007.

Cash provided by financing activities was approximately \$3.7 million in the nine months ended September 30, 2008, as compared to a use of approximately \$334,000 to make scheduled repayments of our convertible debenture in the nine months ended September 30, 2007.

On February 25, 2008, we closed an offering resulting in net proceeds of approximately \$3.4 million from the sale of an aggregate of 7,500,000 shares of common stock at \$0.50 per share, (ii) warrants, with a term of five years, to purchase an aggregate of 7,500,000 shares of common stock at an exercise price of \$0.70 per share, and (iii) warrants, with a term of four months, to purchase an aggregate of 3,000,000 shares of common stock at an exercise price of \$0.67 per share. We also issued 206,250 warrants with an exercise price of \$0.70 and a term of 5 years to a placement agent in this transaction.

On February 4, 2008, we closed a private placement begun in October 2007 of Series A 12% convertible preferred stock and related warrants to accredited investors. In this transaction, we sold, at \$1.00 per unit, 1,742,500 units of securities, each unit comprised of (i) one share of Series A 12% convertible preferred stock, (ii) a warrant to purchase one share of common stock for \$1.50, and (iii) a warrant to purchase one share of common stock for \$2.00. Net proceeds from this transaction were approximately \$1.6 million. Approximately \$53,000 of the proceeds were received in 2008.

During the nine months ended September 30, 2008, we received \$20,000 for warrant subscriptions. On July 2, 2008, we issued 300,000 warrants exercisable at \$1.00 per share with a term of three years in exchange for the \$20,000. In the third quarter, we received \$200,000 for equity consideration to be determined at a later date.

At September 30, 2008, cash and cash equivalents on hand was approximately \$816,000. In July of 2008, in order to conserve cash, we reduced payroll as management took salary reductions of approximately 50% and took another 50% reduction in salary in September and significantly reduced other cash expenses. As a result of these reductions, we believe our cash operating expense in the fourth quarter will be lower than the third quarter of 2008. We have implemented these reductions to provide additional time for us to raise cash through a debt or equity based financings (such as the offering described in this prospectus) or through partnerships with bio-pharmaceutical companies. Based on approximately \$607,000 of available cash and cash equivalents as of November 13, 2008 and strategic reductions in operating expenses, we believe that we have sufficient capital to fund our operations into December 2008. Our cash burn rate is approximately \$200,000 per month. If we fail to raise capital in December 2008, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection.

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### *Payments Due Under Contractual Obligations*

The following table summarizes the payments due under our contractual obligations at December 31, 2007, and the effect such obligations are expected to have on liquidity and cash flow in future periods:

	Payments due by period			
	Less than 1 year	1-3 years	3-5 years	More than 5 years
	<u>Total</u>	<u>year</u>	<u>years</u>	<u>years</u>
		<i>(in thousands)</i>		
<b>Contractual Obligations (1)</b>				
Operating leases	\$999	\$289	\$710	\$—
Total payments due under contractual obligations	<u>\$999</u>	<u>\$289</u>	<u>\$710</u>	<u>\$—</u>

(1) At September 30, 2008, we had total payments due under contractual obligations of approximately \$776,000, approximately \$265,000 of which is due in less than one year and approximately \$511,000 of which was due in one to three years.

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

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

### *Off-Balance Sheet Arrangements*

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

### **Effects of Recently Adopted Accounting Pronouncements**

In September 2006, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 157, “*Fair Value Measurements*” (“SFAS No. 157”). SFAS No. 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements are separately disclosed by level within the fair value hierarchy. In February 2008, the FASB decided that an entity need not apply this standard to non-financial assets and liabilities that are recognized or disclosed at fair value in our consolidated financial statements on a non-recurring basis until the subsequent year. We adopted SFAS No. 157 in the first quarter of fiscal year 2008. There was no impact on our consolidated financial statements. We currently have warrant liabilities which are measured at fair value at each reporting period using assumptions that are fully disclosed.

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In February 2007, the FASB issued SFAS No. 159, “*The Fair Value Option for Financial Assets and Financial Liabilities*” (“SFAS No. 159”). SFAS No. 159 provides entities with an option to report selected financial assets and liabilities at fair value, with the objective to reduce both the complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. We adopted SFAS No. 159 in the first quarter of fiscal year 2008. We currently report warrant liabilities at fair value. We have not elected to report any other assets or liabilities at fair value.

In June 2007, the FASB issued EITF 07-3. EITF 07-3 provides that non-refundable advance payments for goods or services that will be used or renders for future research and development activities should be deferred and capitalized. We adopted EITF 07-3 in the first quarter of 2008.

### **Quantitative and Qualitative Disclosures about Market Risk**

Market risk represents the risk of loss that may impact our financial position, operating results or cash flows due to changes in the U.S. interest rates. The primary objective of our investment activities is to preserve cash until it is required to fund operations. To minimize risk, we maintain our portfolio of cash and cash equivalents in operating bank accounts and money market funds. Since our investments are short-term in duration, we believe that we are not subject to any material market risk exposure. As of December 31, 2007 and September 30, 2008, we had approximately \$2.1 million and \$868,000, respectively, of outstanding warrant liabilities. We account for the warrant liabilities on a fair value basis, and changes in share price and market interest rates will affect our earnings but will not affect our cash flows.

## BUSINESS

### Overview

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

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

In 2002, the FDA granted us an IND for use of DAVANAT<sup>®</sup> 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. We believe that using DAVANAT<sup>®</sup> in combination with 5-FU enables greater absorption of the chemotherapy in cancer cells while reducing its toxic side effects.

We plan on submitting a 505(b)(2) NDA for co-administration of DAVANAT<sup>®</sup> with 5-FU for the indication of colorectal cancer in the second quarter of 2009.

We were incorporated under Nevada law in January 2001 and in May of that year acquired a Massachusetts corporation 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, and a wholly-owned Nevada subsidiary that we formed in October 2008 to undertake a possible joint venture for the development of our technology in cardiovascular treatments.

### Background on Carbohydrates

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

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

### Our Strengths and Strategies

*Focus on novel therapeutic opportunities provided by carbohydrates.* We believe our company is one of the pioneers focused on development of carbohydrate-based therapeutics. As a result of their structural complexity,

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carbohydrates have not received as much scientific attention as nucleic acids and proteins, and are not as well understood. Carbohydrate molecules, which are essential to the transmission and recognition of cellular information, have been shown to play an important role in major diseases including cancer, cardiovascular disease, Alzheimer's disease, inflammatory disease and viral infections. We believe this offers a largely untapped area for treatment of disease including chemotherapeutics, infection treatment, vaccines and antibiotics.

*Leverage extensive scientific expertise.* Our scientists have substantial expertise, developed over decades, in the area of carbohydrates. Our team includes David Platt, our Chief Executive Officer, Anatole Klyosov, our Chief Scientist, and Eliezer Zomer, our Executive Vice President — Manufacturing and Product Development. Dr. Platt, a chemical engineer, has conducted research in therapeutic application of carbohydrate-based therapeutics for approximately 20 years and holds many patents. Dr. Klyosov, who headed the Carbohydrate Research Laboratory at the USSR Academy of Sciences and taught at Harvard Medical School, holds more than 20 patents. Dr. Zomer, a biochemist and holder of more than 20 patents, has more than 20 years experience in the regulatory arena involving pharmaceutical products, development and diagnostics. We believe that this expertise, supplemented by members of our Scientific and Medical Advisory Boards, provides us with a substantial advantage in this relatively new area of drug development.

*Completion of development milestones toward commercialization of DAVANAT<sup>®</sup> and 5-FU combination cancer therapy.* We have completed important milestones in the development of DAVANAT<sup>®</sup> in combination with 5-FU to treat late-stage cancer patients with solid tumors. These include our submission of the DMF to the FDA in May 2008, which we believe demonstrates our ability to produce commercial quantities of pharmaceutical-grade DAVANAT<sup>®</sup> under manufacturing standards known as cGMP; our submission in September 2008 of a clinical and pre-clinical package to the FDA in support of our DAVANAT<sup>®</sup> NDA; and report from the FDA that it has reviewed our package and advised that no additional information is needed for our pre-NDA meeting with the FDA scheduled for December 22, 2008. In addition, our planned 505(b)(2) NDA utilizes a regulatory pathway that is less costly because it allows us to rely on previous FDA findings about safety and efficacy and to refer to data, such as published information, that is not our own. These 505(b)(2) NDAs are often used for drugs involving previously-approved products, such as 5-FU in our case. We have also explored utilizing DAVANAT<sup>®</sup> in combination with other therapeutics and also as a potential stand-alone therapeutics.

We are undertaking this rights offering primarily in order to procure the resources needed to file the DAVANAT<sup>®</sup> NDA, which, if approved by the FDA, enables us to commercialize our lead product candidate.

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

### **Product Development**

We are initially developing a pipeline of compounds that may be combined with chemotherapies, such as 5-FU and irinotecan, and biologics, such as Avastin<sup>®</sup>, so as to improve the clinical benefit to patients. Based on our research, we believe DAVANAT<sup>®</sup>, 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<sup>®</sup>, is a patented chemical entity that is currently in Phase II trials for initial treatment of colorectal cancer in combination with 5-FU.

To date, DAVANAT<sup>®</sup> has been administered to approximately 100 cancer patients in Phase I and II trials. Data from a Phase II trial for end-stage colorectal cancer patients showed DAVANAT<sup>®</sup> extended median survival to 6.7 months with significantly reduced side effects, as compared to 4.6 months for best standard of

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care as determined by the patient's physician. Patients have improved quality of life as result of experiencing fewer adverse side effects of the chemotherapy and requiring less hospitalization.

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

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

According to its published guidance, the FDA initially determines whether an NDA filing is complete for purposes of allowing a review, and, if allowed, then determines whether to approve the NDA, a process that takes six months (typically for a chemotherapy) or ten months (typically for a biologic). Upon approval, an applicant may commence commercial marketing and distribution of the approved products. We have retained Camargo Pharmaceutical Services, LLC for regulatory support of our submission with the FDA. Camargo's expertise in regulatory affairs and submissions includes the preparation and submission of NDAs, Abbreviated NDAs, and 505(b)(2) NDAs. Camargo has assisted with more than 150 FDA approvals.

We are also developing other carbohydrate-based therapeutic compounds for treatment of other serious disease, such as liver and kidney fibrosis. These product candidates are all in the pre-clinical stage of development. We entered into research collaborations with the Mount Sinai School of Medicine to study the anti-fibrotic effects of our carbohydrate compounds on liver fibrosis and with Brigham and Women's Hospital to evaluate the anti-fibrotic effects of these compounds to treat acute and chronic kidney disease. Our carbohydrate compounds significantly reduced collagen expression and reversed fibrosis in animal models. Whereas previously *in vitro* data indicated a reversal of fibrosis markers, in this proof-of-concept animal study, the compounds clearly reduced collagen expression and reversed liver fibrosis.

### **DAVANAT<sup>®</sup>**

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

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

#### *Pre-clinical Studies of DAVANAT<sup>®</sup>*

Our pre-clinical studies demonstrate that DAVANAT<sup>®</sup> when used in combination with chemotherapies, such as 5-FU and irinotecan, and biologics, such as Avastin<sup>®</sup>, 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<sup>®</sup> was used in combination with standard therapies. These studies demonstrated that DAVANAT<sup>®</sup> could be used effectively with different chemotherapies and biologics.

*Clinical Trial Development of DAVANAT®*

Results from our Phase II clinical trial data to date in late-stage cancer patients shows that DAVANAT® extends median survival by 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 gastro-intestinal, hematological and other side effects of chemotherapy treatment. We are currently conducting clinical trials with colorectal cancer patients undergoing initial medical treatment to demonstrate increased efficacy of DAVANAT® and to further support that this occurs with no increase in key toxicity indicators.

- *Phase I Trial for End-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<sup>2</sup>) when administered alone and in combination. The cancer patients when entering the study had advanced metastatic tumors that averaged more than 100 millimeters in size and progressive disease that was resistant to chemotherapeutic agents.

Based on objective tumor assessment using RECIST, as defined below, the disease was stabilized in 14 of 26 of the evaluable patients with measurable disease. Furthermore, 7 of 10 patients were stabilized at the highest dose level of DAVANAT® administered in the study. Efficacy results are analyzed based on Response Evaluation Criteria in Solid Tumors (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 approximately eight times longer in the bloodstream of cancer patients, which we believe increases the efficacy of the treatment.

- *Phase II Trial for End Stage Patients with Metastatic Colorectal Cancer.* In 2004, we initiated a Phase II clinical trial to further evaluate DAVANAT® for end-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 by more than six months. 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, will evaluate the efficacy and safety of DAVANAT® when administered for at least two monthly cycles or until disease progression. The trial has 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 halted the trial due to financial constraints in the second quarter of 2008, and do not expect to resume it.

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- *Phase II Trial for Patients with Colorectal Cancer Undergoing Initial Treatment.* In 2006, we initiated a Phase II trial for initial treatment of colorectal cancer patients. The multi-center, open label, single-dose level study is designed to evaluate up to 50 patients who are unable to sustain the high toxicity of current intensive combination chemotherapy. The study is 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 are a complete or partial response in 33 percent of the patients and a secondary measurement of progression free survival at 6 and 12 months. Several patients remain in this study.

Please see “Risks Related to our Company— Our Drug Candidates Are in Clinical Trials and Results Are Uncertain” for additional discussion of risks related to clinical trials.

### **Patents and Proprietary Rights**

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

As of September 30, 2008, we held five U.S. patents and have patent applications pending from the U.S. Patent and Trademark Office. Many of our patents and patent applications cover methods and composition for reducing toxicity and enhancing chemotherapeutic drugs by co-administering a polysaccharide with a chemotherapeutic agent. We have corresponding patent applications pending in Europe, Canada, Israel, Brazil, Japan, China and Australia. Additionally, we have patent applications in others areas to utilize our carbohydrate-based compounds to treat disease other than cancer.

Please see “Risks Related to our Company — We Are a Counterclaim Defendant in a Lawsuit Instituted by David Platt” and “Risks Related to the Drug Development Industry — Our Competitive Position Depends on Protection of Our Intellectual Property” for additional discussion of risks related to protection of our intellectual property based on inventions.

### **Research**

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

### **Manufacturing and Marketing**

We are a development 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.

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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 Related to our Company — We Will Depend on Third Parties to Manufacture and Market Our Products.”

### **Competition**

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

Please see “Risk Factors Related to the Drug Development Industry — We Face Intense Competition in the Biotechnology and Pharmaceutical Industries” for additional discussion related to our current and potential competition.

### **Government Regulation**

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

#### *Drug Approval Process*

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

1. Pre-clinical laboratory tests, animal studies, and formulation studies,
2. Submission to the FDA of an Investigational New Drug application, or IND, for human clinical testing, which must become effective before human clinical trials may begin,
3. Adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for each indication,
4. Submission to the FDA of a New Drug Application, or NDA,
5. Satisfactory completion of an FDA inspection of the manufacturing facility or facilities, at which the drug is produced to assess compliance with current Good Manufacturing Process (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.

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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 people to evaluate its safety, dosage tolerance, pharmacodynamics, and, if possible, to gain an early indication of its effectiveness. Phase II usually involves trials in a limited patient population to (i) evaluate dosage tolerance and appropriate dosage; (ii) identify possible adverse effects and safety risks; and (iii) evaluate preliminarily the efficacy of the drug for specific indications. Phase III trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. There is no assurance that these trials will be completed within a specified period of time, if at all.

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

Please see “Risks Related to the Drug Development Industry — We Will Need Regulatory Approvals to Commercialize Our Products” for additional discussion of regulatory risks related to our drug development program.

### *FDA Priority Review*

FDA procedures provide for priority review of an NDA submitted for drugs that, compared to currently marketed products, offer a significant improvement in the treatment, diagnosis, or prevention of a disease. NDAs that are granted priority review are acted upon more quickly than NDAs given standard review. If we were to seek priority review, there can be no guarantee that the FDA will grant priority review status our request, 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.

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### *Post-Approval Requirements*

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

### *FDA “Orphan Drug” Designation*

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

### *Regulation Outside the United States*

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

### *Environmental Regulation*

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

### **Employees**

As of September 30, 2008, we had eight full-time employees, three of whom are involved primarily in management of our pre-clinical research and development and clinical trials and five of whom are involved primarily in financial management and administration of our company. We also have two part-time contract employees, one of whom provides financial management services and the other serves as our medical director.

## Legal Proceedings

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

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

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

## MANAGEMENT

Our board of directors, executive officers and key employees are as follows:

<u>Name</u>	<u>Age as of November 1, 2008</u>	<u>Position</u>
David Platt, Ph.D.	54	Chief Executive Officer and Chairman
Mildred S. Christian, Ph.D.	65	Director
Dale H. Conaway, D.V.M.	53	Director
Henry J. Esber, Ph.D.	70	Director
James T. Gourzis, M.D., Ph.D.	79	Director
S. Colin Neill	61	Director
Steven Prelack	50	Director
Jerald K. Rome	73	Director
Theodore D. Zucconi, Ph.D.	61	President and Director
Eliezer Zomer, Ph.D.	62	Executive Vice President of Manufacturing and Product Development
Anatole Klyosov, Ph.D., D.Sc.	61	Chief Scientist
Anthony D. Squeglia	65	Chief Financial Officer
Maureen Foley	68	Chief Operating Officer

**David Platt, Ph.D.**, Chief Executive Officer and Chairman of the Board of Directors, is a co-founder of the Company and co-developer of our core technology. From 1995 to 2000, Dr. Platt was Chief Executive Officer and Chairman of the Board of Directors of SafeScience Inc., a company he founded. From 1992 to 1995, Dr. Platt was the Chief Executive Officer, Chairman of the Board and a founder of International Gene Group, Inc., the predecessor company to SafeScience. Dr. Platt received a Ph.D. in Chemistry in 1988 from Hebrew University in Jerusalem. In 1989, Dr. Platt was a research fellow at the Weizmann Institute of Science, Rehovot, Israel, and from 1989 to 1991, was a research fellow at the Michigan Cancer Foundation (re-named Barbara Ann Karmanos Cancer Institute). From 1991 to 1992, Dr. Platt was a research scientist with the Department of Internal Medicine at the University of Michigan. Dr. Platt has published peer-reviewed articles and holds many patents, primarily in the field of carbohydrate chemistry.

**Mildred S. Christian, Ph.D.**, a Director of the Company since 2002, is President and CEO of Argus International, Inc., a provider of consulting services in regulatory affairs, and Chairman and CEO of Argus Health Products, LLC, a developer and distributor of preventive and maintenance healthcare products. Until 2002, Dr. Christian was Executive Director, Science and Compliance, of Charles River Laboratories and Primedica Corporation. Before founding Argus Research Laboratories in 1979 and Argus International in 1980, Dr. Christian spent 14 years in drug development at McNeil Laboratories, a division of Johnson & Johnson Corporation. She has participated at all levels in the performance, evaluation and submission in more than 1,800 pre-clinical studies, from protocol to final report. Dr. Christian is a member of several professional organizations, including service as Councilor of the European Teratology Society and Secretary/Treasurer of the Academy of Toxicological Sciences. She has authored more than 120 papers and abstracts published in U.S. and international journals. Dr. Christian earned her Ph.D. from Thomas Jefferson University in developmental anatomy and pharmacology.

**Dale H. Conaway, D.V.M.**, a Director of the Company since May 2001, is the Chief Veterinary Medical Officer for the Office of Research Oversight, an office within the Veterans Health Administration under the U.S. Department of Veterans Affairs. From 2001 to 2006, Dr. Conway was the Deputy Regional Director (Southern Region). From 1998 to 2001, Dr. Conway served as Manager of the Equine Drug Testing and Animal Disease Surveillance Laboratories for the Michigan Department of Agriculture. From 1994 to 1998, he was Regulatory Affairs Manager for the Michigan Department of Public Health Vaccine Production Division. Dr. Conway received a D.V.M. degree from Tuskegee Institute and an M.S. degree in pathology from the College of Veterinary Medicine at Michigan State University.

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**Henry J. Esber, Ph.D.**, a Director of the Company since April 2006, has been a Principal in Esber D&D consulting since 2005. From 2003 to 2005, Dr. Esber was a Senior Consultant, Business Development at Charles River Labs, Discovery and Development Services. From 2005 to 2006, Dr. Esber was a consultant and from 2006, he was Senior Vice President and Chief Business Officer for Bio-Quant. Dr. Esber is the co-founder of BioSignature Diagnostics, Inc. and Advanced Drug Delivery, Inc. He serves on the Scientific Advisory Boards of several biotechnology companies and is the author of more than 130 technical publications. Dr. Esber has more than 25 years of experience in the areas of oncology/tumor immunology and immunotherapy as well as strong knowledge in the field of toxicology and regulatory affairs. Dr. Esber received a B.S. degree in biology/pre-med from the College of William and Mary, an M.S. degree in public health and parasitology from the University of North Carolina, and a Ph.D. in immunology/microbiology from West Virginia University Medical Center.

**James T. Gourzis, M.D., Ph.D.**, a Director of the Company since December 2006, has extensive experience in formulating scientific and regulatory strategy and heading clinical development teams for pharmaceutical and biotechnology products, small molecules and biologics. Therapeutic area experience includes: oncology, cardiovascular, virology, immunology, central nervous system, allergy, anti-inflammatory, infectious disease, pain management and gastrointestinal disease. Dr. Gourzis is Principal, MEDRAND Associates from 2002 to present, providing consulting services with respect to scientific, strategic and regulatory considerations associated with the development of drugs and biologics. Dr. Gourzis received an A.B. degree in biology from Harvard University, an A.M. degree in pharmacology from Boston University and an M.D., Ph.D. in pharmacology/medicine from the University of Manitoba.

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

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

**Jerald K. Rome**, a Director of the Company 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

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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.

**Theodore D. Zucconi, Ph.D.**, a Director and President of the Company since October 2007, was formerly, since 2002, President of Implementation Edge, a management consulting firm that specializes in organizational performance improvement. From 1994 until 2002, Dr. Zucconi served in various capacities at Motorola, including Director of Motorola University. Prior to Motorola, Dr. Zucconi held technical, operational, and scientific positions at various high technology companies. Dr. Zucconi received his 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.

**Eliezer Zomer, Ph.D.**, is Executive Vice President of Manufacturing and Product Development. Prior to joining the company in 2002, Dr. Zomer was 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.

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

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

**Maureen Foley** is Chief Operating Officer since October 2001 and formerly Manager of Operations. Ms. Foley's experience with start-up companies includes: From June 2000 to December 2000, she provided business operations services for eHealthDirect, Inc., a developer of medical records processing software. From October 1999 to May 2000, Ms. Foley managed business operations services for ArsDigita, Inc., a developer of business software and programs. From June 1996 to August 1999, Ms. Foley served with Thermo Fibergen, Inc., a subsidiary of Thermo Electron Corporation, a developer of composite materials. Ms. Foley is a graduate of The Wyndham School, Boston, Massachusetts, with a major in Mechanical Engineering.

## **Board of Directors Meetings and Committees of the Board**

Our board of directors has three standing committees: the compensation committee, the audit committee and the nominating and corporate governance committee. Our board of directors has determined that, other than Dr. Platt and Dr. Zucconi, neither of whom serves on a standing committee, all of the directors are “independent” within the meaning of the NYSE Alternext US listing standards. As required by the stock exchange rules, we held at least one meeting of the board attended only by the independent (non-management) directors. During 2007, one director, Dr. Gourzis, attended fewer than 75% of the combined total number of meetings of the board. Each of the compensation committee, audit committee and nominating and corporate governance committee has a charter, a copy of which is available in the “About the Company” section of our website at [www.pro-pharmaceuticals.com](http://www.pro-pharmaceuticals.com).

### *Compensation Committee*

The compensation committee members are Ms. Christian (chair) and Dr. Esber. The compensation committee is responsible for reviewing and recommending compensation policies and programs, management and corporate goals, as well as salary and benefit levels for our executive officers and other significant employees. Its specific responsibilities include supervising and overseeing the administration of our incentive compensation and stock programs and, as such, the committee is responsible for administration of grants and awards to directors, officers, employees, consultants and advisors under our 2001 Stock Incentive Plan and our 2003 Non-employee Director Stock Incentive Plan.

### *Audit Committee*

The audit committee members are Mr. Prelack (chair), Dr. Conaway and Mr. Rome. The audit committee is responsible for oversight of the quality and integrity of our company’s accounting, auditing and reporting practices. More specifically, it assists the board of directors in fulfilling its oversight responsibilities relating to (i) the quality and integrity of our consolidated financial statements, reports and related information provided to stockholders, regulators and others, (ii) our compliance with legal and regulatory requirements, (iii) the qualifications, independence and performance of our independent registered public accounting firm, (iv) the internal control over financial reporting that management and the board have established, and (v) the audit, accounting and financial reporting processes generally. The committee is also responsible for review and approval of related-party transactions. The board has determined that Mr. Prelack is an “audit committee financial expert” within the meaning of SEC rules.

### *Nominating and Corporate Governance Committee*

The nominating and corporate governance committee members are Mr. Rome (chair), Dr. Conaway and Ms. Christian. The nominating and corporate governance committee is responsible for identifying individuals qualified to become members of the board, and to recommend to the board, candidates for election or re-election as directors and for reviewing our governance policies in light of the corporate governance rules of the NYSE Alternext US and the SEC. Under its charter, the nominating and corporate governance committee is required to establish and recommend criteria for service as a director, including matters relating to professional skills and experience, board composition, potential conflicts of interest and manner of consideration of individuals proposed by management or stockholders for nomination. The committee believes candidates for the board should have the ability to exercise objectivity and independence in making informed business decisions; extensive knowledge, experience and judgment; the highest integrity; loyalty to the interests of our company and our stockholders; a willingness to devote the extensive time necessary to fulfill a director’s duties; the ability to contribute to the diversity of perspectives present in board deliberations, and an appreciation of the role of the corporation in society. The committee will consider candidates meeting these criteria who are suggested by directors, management, stockholders and other advisers hired to identify and evaluate qualified candidates.

The nominating and corporate governance committee has adopted a policy for stockholders to submit recommendations for director candidates. A stockholder desiring to make a recommendation may do so in

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writing by letter to the nominating and corporate governance committee stating the reasons for the recommendation and how the candidate may meet the committee's director selection criteria. The letter may be confidential and should be addressed to the chairman of the nominating and corporate governance committee, c/o Anthony D. Squeglia, Chief Financial Officer, Pro-Pharmaceuticals, Inc., 7 Wells Avenue, Newton, Massachusetts 02459. The committee will evaluate stockholder-recommended candidates in the same manner as candidates recommended by other persons.

### *Compensation Committee Interlocks and Insider Participation*

No interlocking relationship exists between our board of directors and the board of directors or compensation committee of any other company, nor has any interlocking relationship existed in the past.

### **Certain Relationships and Related Persons Transactions**

Our audit committee charter requires that members of the audit committee, all of whom are independent directors, conduct an appropriate review of, and be responsible for the oversight of, all related party transactions on an ongoing basis. There have been no related party transactions since January 1, 2007.

### **Director Compensation**

<b>Name (1)</b>	<b>Fees Earned or Paid in Cash (\$)</b>	<b>Stock Awards (\$)</b>	<b>Stock Awards (\$)</b>	<b>Non-Equity Incentive Plan Compensation (\$)</b>	<b>Change in Pension Value and Non-qualified Deferred Compensation Earnings (\$)</b>	<b>All Other compensation (\$)</b>	<b>Total (\$)</b>
Mildred S. Christian, Ph.D.	—	—	\$19,436	—	—	—	\$19,436
Dale H. Conaway, D.V.M.	—	—	\$18,983	—	—	—	\$18,983
Henry J. Esber, Ph.D.	—	—	\$15,008	—	—	—	\$15,008
James T. Gourzis, M.D., Ph.D.	—	—	\$ 3,076	—	—	—	\$ 3,076
S. Colin Neill	—	—	\$ 2,471	—	—	—	\$ 2,471
Steven Prelack	\$ 71,200	—	\$ 3,333	—	—	—	\$74,533
Jerald K. Rome	—	—	\$19,755	—	—	—	\$19,755

(1) Excludes David Platt and Theodore Zucconi who are employees.

(2) Reflects the dollar amount recognized for financial statement reporting purposes for the fiscal year ended December 31, 2007, in accordance with SFAS No. 123(R) for awards granted in 2007. Reference is made to Note 8 "Stock Based Compensation" in our consolidated financial statements for the year ended December 31, 2007 included elsewhere in this prospectus, which identifies the assumptions made in the calculation of these amounts.

As provided for in our 2003 Non-employee Directors Stock Incentive Plan, each non-employee director receives a grant of 500 non-qualified stock options for each meeting of our board, and each meeting of a standing committee of the board, that such director attended during a year of service. We paid Mr. Prelack \$68,000 for service as chair of the audit committee and \$3,200 for service on a special committee of the board providing oversight of our litigation. In March 2007, we made the following supplemental grants of stock options to members of the board for services provided during 2006: Mildred S. Christian, 18,000; Dale H. Conaway, 17,000; Henry J. Esber, 15,000; and Jerald K. Rome, 17,000.

**Compensation of Named Executive Officers**

The following information summarizes the compensation paid to our named executive officers for the fiscal year ended December 31, 2007.

**Summary Compensation Table**

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Bonus (\$)</u>	<u>Option Awards (\$)<sup>(1)</sup></u>	<u>All Other compensation (\$)</u>	<u>Total (\$)</u>
David Platt, Ph.D., Chief Executive Officer	2007	195,000	—	86,250	49,850 <sup>(2)</sup>	331,100
	2006	260,000	—	45,832	50,917 <sup>(3)</sup>	356,749
Eliezer Zomer, Ph.D., Executive Vice President of Manufacturing and Product Development	2007	165,000	—	85,651	26,870 <sup>(4)</sup>	277,521
	2006	220,000	—	59,484	29,194 <sup>(5)</sup>	308,678
Maureen Foley, Chief Operating Officer	2007	138,750	—	85,651	18,620 <sup>(6)</sup>	243,021
	2006	185,000	—	59,484	22,372 <sup>(7)</sup>	266,856

- (1) Reference is made to “Note 8 — Stock Based Compensation” in our consolidated financial statements included elsewhere in this prospectus, which identifies assumptions made in the valuation of option awards in accordance with SFAS No. 123(R). The amounts listed in this column represent the amount of stock based compensation recognized for financial statement reporting purposes for the year ended December 31, 2007, in accordance with SFAS No. 123(R) and thus may include amounts from awards granted in or prior to 2007 in our operating expenses for the named executive officers for the year ended December 31, 2007.
- (2) Includes \$22,220 for health insurance, \$17,795 for automobile expenses, \$7,800 for company 401(k) contributions and \$2,035 for health club expenses.
- (3) Includes \$21,785 for health insurance, \$15,956 for automobile expenses, \$8,800 for company 401(k) contributions and \$4,376 for health club expenses.
- (4) Includes \$19,937 for health insurance expenses, \$6,533 for company 401(k) contributions and \$400 for health club expenses.
- (5) Includes \$19,572 for health insurance expenses, \$8,800 for company 401(k) contributions and \$822 for health club expenses.
- (6) Includes \$13,070 for health insurance expenses and \$5,550 for company 401(k) contributions.
- (7) Includes \$13,572 for health insurance expenses and \$8,800 for company 401(k) contributions.

In order to conserve cash, the named executive officers and certain other key employees voluntarily reduced their cash salaries beginning in July 2007.

*Material Terms of Employment Contracts of Named Executive Officers**David Platt, Chief Executive Officer*

We have an employment contract with Dr. Platt. The agreement, which became effective on January 2, 2004, provides that Dr. Platt shall serve as President and Chief Executive Officer at an initial base salary of \$220,000 per year, subject to annual review, and shall receive our standard employee life, disability and health insurance benefits. Dr. Platt is also entitled to receive bonus compensation as follows:

- (i) upon consummation of a transaction with a pharmaceutical company expected to result in at least \$10,000,000 of equity investment or \$50,000,000 of royalty revenue or other substantial benefit as our board may determine, a cash bonus of \$200,000 and fully vested 10-year stock options exercisable at not less than the market value to purchase at least 200,000 of our shares of common stock;
- (ii) upon approval by the FDA of each new investigational new drug application filed by us for commencement of human trials, a bonus of \$100,000 in cash and 100,000 stock options;
- (iii) upon approval by the FDA of each new drug application filed by us for any drug, a bonus of \$400,000 in cash and 400,000 stock options; and

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- (iv) a cash bonus upon achievement of goals specified by our board as determined in the first quarter of each fiscal year, with 50% based on performance relative to his work as an executive manager and/or scientist and 50% based on reference to objective criteria such as the market price of our stock or meeting budgets approved by the board.

If Dr. Platt's employment is terminated (i) by us other than "for cause," (ii) by Dr. Platt for "good reason or (iii) within twelve months after a "change of control," as all terms are defined in Dr. Platt's employment agreement, he is entitled to receive, among other things, a lump sum payment of his base salary and accrued vacation for the current fiscal year through the termination date plus base salary for an additional two years, a cash payment ranging from \$1,000,000 to \$2,000,000 based on prior bonus payments, continuation of (or comparable) health plan benefits for him and his family for two years, immediate vesting of any unvested stock options, continued use of his automobile for an additional two years, a professional office for his personal exclusive use for two years and the extinguishment of any right of repurchase held by us relating to our securities owned by Dr. Platt.

The agreement also requires Dr. Platt to assign inventions and other intellectual property to us which he conceives or reduces to practice during employment and for such period as the company pays severance and to maintain our confidential information during his employment and for a period of 10 years after termination of his employment. Dr. Platt is subject to a (i) non-competition provision that extends for a period of six months after termination of his employment or for such period as we pay severance and (ii) non-solicitation provision that extends for the longer of 12 months after termination of his employment or for such period as we pay severance.

Dr. Platt's salary has been adjusted to \$260,000 for 2008.

*Eliezer Zomer, Ph.D., Executive Vice President of Manufacturing and Product Development, and Maureen Foley, Chief Operating Officer*

We do not have a written employment agreement with Dr. Zomer or Ms. Foley.

### *Material Terms of Employment Agreements with Other Key Employees and Executives*

#### *Theodore D. Zucconi, 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. Dr. Zucconi's employment agreement expired on October 1, 2008. Dr. Zucconi is an employee at will and his salary and other benefits remain the same as under his recently expired employment agreement. Pursuant to his recently expired employment agreement, Dr. Zucconi is required to assign inventions and other intellectual property to us which he conceives or reduces to practice during employment and for one year after the end of his employment. Dr. Zucconi has also agreed to refrain from soliciting, diverting or accepting business relating to our products, processes or services from any customers that he has come into contact with as a result of his employment with us for a period of 12 months after termination of his employment. In addition, Dr. Zucconi has agreed to refrain from rendering any services as an employee, consultant or otherwise to any competing organization or from owning any interest in any competing organization for a period of six months after termination of his employment. Dr. Zucconi is also subject to a non-solicitation provision for 12 months after termination of his employment.

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

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### *Anthony D. Squeglia, Chief Financial Officer*

In connection with Mr. Squeglia's appointment effective October 1, 2007 as our chief financial officer, we entered into an employment agreement with him dated December 20, 2007. Mr. Squeglia's employment agreement provides for an initial base salary of \$180,000 per year, subject to annual review, and our standard health insurance benefits. In addition, Mr. Squeglia was granted 20,000 stock options on December 12, 2007 with an exercise price of \$0.62 per share of which one-third vested immediately and the remaining two-thirds vest equally on December 12, 2008 and December 12, 2009. In the event Mr. Squeglia's employment is terminated "without cause" he is entitled to severance equal to two months' base salary plus one month for each year of employment (not to exceed six months) and continuation of benefits for two months. The agreement requires Mr. Squeglia to assign inventions and other intellectual property to us which he conceives or reduces to practice during employment and for one year after termination of his employment and to maintain our confidential information during his employment. Mr. Squeglia is subject to a (i) non-competition provision that extends for a period of six months after termination of his employment and (ii) non-solicitation provision that extends for 12 months after termination of his employment.

### *Anatole Klyosov, Chief Scientist*

Dr. Klyosov's employment agreement effective January 3, 2006 provides for an initial base salary of \$220,000 per year, subject to annual review, and our standard health insurance benefits. In the event his employment is terminated "without cause" he is entitled to severance equal to two months' base salary plus one month for each year of employment (not to exceed six months) and continuation of benefits for two months. The agreement requires Dr. Klyosov to assign inventions and other intellectual property to us which he conceives or reduces to practice during employment and for one year after termination of his employment and to maintain our confidential information during his employment. Dr. Klyosov is subject to a (i) non-competition provision that extends for a period of six months after termination of his employment and (ii) non-solicitation provision that extends for 12 months after termination of his employment.

## **Outstanding Equity Awards At Year End**

The following information summarizes outstanding equity awards held by the named executive officers as of December 31, 2007.

<b>Name</b>	<b>Option Grant Date</b>	<b>Number of Securities Underlying Unexercised Options</b>		<b>Option Exercise Price Per Share</b>	<b>Option Expiration Date</b>
		<b>Exercisable</b>	<b>Un-exercisable</b>		
David Platt, Ph.D.	03/09/2006	25,000	50,000	\$ 3.75	03/09/2011
	03/08/2007	—	150,000	1.01	03/08/2012
Eliezer Zomer, Ph.D.,	12/04/2002	120,000	—	3.50	11/14/2012
	09/18/2003	425,000	—	4.05	09/02/2013
	12/21/2004	75,000	—	1.90	12/21/2014
	03/09/2006	16,667	33,333	3.75	03/09/2011
	03/08/2007	—	100,000	1.01	03/08/2012
Maureen Foley,	12/04/2002	20,000	—	3.50	12/14/2011
	12/04/2002	100,000	—	3.50	11/14/2012
	09/18/2003	650,000	—	4.05	09/02/2013
	12/21/2004	75,000	—	1.90	12/21/2014
	03/09/2006	16,667	33,333	3.75	03/09/2011
	03/08/2007	—	100,000	1.01	03/08/2012

Options vest annually, in equal increments, over three years beginning the first anniversary of the grant date, provided the grantee is then an employee. The exercise price of the options is set at the closing price of our stock on the date of grant. Grants of options are recommended by the compensation committee and adopted by the board of directors. No options were exercised in 2007.

## THE RIGHTS OFFERING

### Terms of the Offer

We are distributing at no charge to the holders of our common stock on November , 2008, subscription rights to purchase up to an aggregate of shares of our common stock and common stock purchase warrants to purchase an additional shares of our common stock. We expect the total purchase price for the securities offered in this rights offering to be \$ , assuming full participation in the rights offering but excluding any issuance of shares of common stock to holders of (i) Series C warrants upon exercise of those warrants and (ii) 2006 investor warrants exercising their exchange rights and participating in the rights offering. See below for additional information regarding subscription by DTC participants.

Each record date stockholder is being issued one right for every share of our common stock owned on the record date. Each right carries with it a basic subscription right and an over-subscription right.

Each right entitles the holder to purchase: (i) one share of common stock at the subscription price of \$ per share and (ii) a Series C warrant that will entitle the holder to purchase one share of our common stock, which we refer to as the basic subscription right. Each warrant will be immediately exercisable for twelve months following issuance to purchase one share of our common stock at 125% of the price of the basic subscription right, or initially \$ per share, which may be reduced at any time in our discretion. If, during the term of the warrant, the closing price of our common stock is equal to or greater than 400% of the initial warrant exercise price, or \$ , for at least ten consecutive trading days, we may call, or cancel, any outstanding warrants that are not exercised during the 15 trading day period following the date we give notice to the holders of those warrants.

Holders who fully exercise their basic subscription rights will be entitled to subscribe for additional shares and warrants that remain unsubscribed as a result of any unexercised basic subscription rights, which we refer to as the over-subscription right. The over-subscription right allows a holder to subscribe for an additional amount equal to up to 400% of the shares and warrants for which such holder was otherwise entitled to subscribe. Over-subscription rights will be allocated *pro rata* among rights holders who over-subscribed, based on the number of over-subscription shares and warrants to which they subscribed. Rights may only be exercised for whole numbers of shares; no fractional shares of common stock will be issued in this offering. The percentage of remaining shares each over-subscribing rights holder may acquire will be rounded down to result in delivery of whole shares. You must exercise your rights with respect to the basic subscription right and the over-subscription right at the same time.

Rights may be exercised at any time during the subscription period, which commences on November , 2008 and ends at 5:00 p.m., New York City time, on December , 2008, the expiration date, unless extended by us for up to an additional 45 trading days, in our sole discretion.

We expect that the shares of our common stock issued upon the exercise of rights will be listed on either the NYSE Alternext US or OTC Bulletin Board under the symbol "PRW". The rights will be evidenced by subscription rights certificates which will be mailed to stockholders, except as discussed below under "Foreign Stockholders." Neither the subscription rights, nor the warrants underlying the subscription rights, will be listed for trading on any stock exchange or market or on the OTC Bulletin Board but may be sold, assigned or transferred in accordance with applicable law. We expect the rights, and warrants underlying the rights, will be exercisable for shares of our common stock that will be listed on either the NYSE Alternext US or the OTC Bulletin Board.

For purposes of determining the number of shares a rights holder may acquire in this offering, brokers, dealers, custodian banks, trust companies or others whose shares are held of record by Cede & Co. or by any other depository or nominee will be deemed to be the holders of the rights that are issued to Cede or the other depository or nominee on their behalf.

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We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 from the exercise of basic and over-subscription rights by the expiration date. In no event, will we raise more than \$20,000,000 in this offering.

### **Allocation and Exercise of Over-Subscription Rights**

In order to properly exercise an over-subscription right, a rights holder must (i) indicate on its subscription rights certificate that it submits with respect to the exercise of the rights issued to it how many additional shares and warrants it is willing to acquire pursuant to its over-subscription right and (ii) *concurrently* deliver the subscription payment related to your over-subscription right at the time you make payment for your basic subscription right.

If there are sufficient remaining shares and warrants, all over-subscription requests will be honored in full. If requests for shares and warrant pursuant to the over-subscription right exceed the remaining shares and warrants available, the available remaining shares will be allocated *pro rata* among rights holders who over-subscribe based on the number of over-subscription shares and warrants to which they subscribe. The percentage of remaining shares each over-subscribing rights holder may acquire will be rounded down to result in delivery of whole shares. The allocation process will assure that the total number of remaining shares and warrants available for over-subscriptions is distributed on a *pro rata* basis. The formula to be used in allocating the available excess shares is as follows:

$$\frac{\text{Number of Over-Subscription Shares and Warrants  
Subscribed to by Exercising Rights Holder}}{\text{Total Number of Over-Subscription Shares and Warrants  
Available for Rights Holders Exercising Their Over-  
Subscription Right}} \times \text{Shares and Warrants Available  
for  
Rights Holders Exercising  
Their Over-Subscription  
Right}$$

Rights payments for basic subscriptions and over-subscriptions will be deposited upon receipt by the subscription agent and held in a segregated account with the subscription agent pending a final determination of the number of shares and warrants to be issued pursuant to the over-subscription right. If the pro rated amount of shares and warrants allocated to you in connection with your over-subscription right is less than your over-subscription request, then the excess funds held by the subscription agent on your behalf will be returned to you promptly without interest or deduction. We will deliver certificates representing your shares of our common stock and Series C warrants, or credit your account at your nominee holder with shares of our common stock, that you purchased pursuant to your over-subscription right as soon as practicable after the rights offering has expired and all proration calculations and reductions contemplated by the terms of the rights offering have been effected.

Brokers, dealers, custodian banks, trust companies and other nominee holders of rights will be required to certify to the subscription agent, before any over-subscription right may be exercised with respect to any particular beneficial owner, as to the aggregate number of rights exercised pursuant to the basic subscription right and the number of shares subscribed for pursuant to the over-subscription right by such beneficial owner.

We will not offer or sell in connection with this offering any shares or warrants that are not subscribed for pursuant to the basic subscription right or the over-subscription right.

### **Pro Rata Allocation if Insufficient Shares are Available for Issuance**

If, on or before the record date, we issue more than \_\_\_\_\_ shares of common stock as a result of exercises of outstanding warrants and options and conversion of our existing series A preferred stock into common stock, we would be obligated to distribute basic subscription rights for shares and Series C warrants that exceed the number of our authorized shares of common stock available for issuance. We consider this an unlikely prospect given the exercise prices of our outstanding options and warrants and the preference for dividends on our Series A preferred stock. Similarly, if we receive a sufficient number of subscriptions, the aggregate dollar amount of

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the exercises could exceed the maximum dollar amount of this offering. In each case, we would reduce on a *pro rata* basis, the number of subscriptions we accept so that: (i) we will not become obligated to issue, upon exercise of the subscriptions and the Series C warrants, a greater number of shares of common stock than we have authorized and available for issuance and (ii) the gross proceeds of this offering will not exceed the maximum dollar amount of this offering. In the event of any *pro rata* reduction, we would first reduce over-subscriptions prior to reducing basic subscriptions.

### **Expiration of the Rights Offering and Extensions, Amendments, and Termination**

*Expiration and Extensions.* You may exercise your subscription rights at any time before 5:00 p.m., New York City time, on December 31, 2008, the expiration date of the rights offering, unless extended. Our board of directors may extend the expiration date for exercising your subscription rights for up to an additional 45 trading days in their sole discretion. If we extend the expiration date, you will have at least ten trading days during which to exercise your rights. Any extension of this offering will be followed as promptly as practicable by an announcement, and in no event later than 9:00 a.m., New York City time, on the next business day following the previously scheduled expiration date.

We may choose to extend the expiration date of the rights in order to give investors more time to exercise their subscription rights in the rights offering. We may extend the expiration date of the rights offering by giving oral or written notice to the subscription agent and information agent on or before the scheduled expiration date. If we elect to extend the expiration date, we will issue a press release announcing such extension no later than 9:00 a.m., New York City time, on the next business day after the most recently announced expiration date.

Any rights not exercised at or before that time will have no value and expire without any payment to the holders of those unexercised rights. We will not be obligated to honor your exercise of subscription rights if the subscription agent receives the documents relating to your exercise after the rights offering expires, regardless of when you transmitted the documents.

*Termination; Cancellation.* We may cancel or terminate the rights offering at any time prior to the expiration date. Any cancellation or termination of this offering will be followed as promptly as practicable by an announcement or termination.

### **Reasons for the Rights Offering; Determination of the Offering Price**

We are making the rights offering to raise funds for concluding the clinical work required for, and the submission to the FDA of, our NDA for DAVANAT<sup>®</sup>, as well as for general working capital purposes. Prior to approving the rights offering, our board of directors carefully considered current market conditions and financing opportunities, as well as the potential dilution of the ownership percentage of the existing holders of our common stock that may be caused by the rights offering.

After weighing the factors discussed above and the effect of the \$ 10 million in additional capital, before expenses, that may be generated by the sale of shares and warrants pursuant to the rights offering, our board of directors believes that the rights offering is in the best interests of our company. As described in the section of this prospectus entitled "Use of Proceeds," the proceeds from the rights offering, less fees and expenses incurred in connection with this offering, will be used for concluding the clinical work required for, and the submission to the FDA of, our NDA for DAVANAT<sup>®</sup>, as well as for general working capital purposes. Although we believe that the rights offering will strengthen our financial condition, our board of directors is not making any recommendation as to whether you should exercise your subscription rights.

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The subscription price per share for the rights offering was set by our board of directors based on a range between [90% of the five day volume weighted average price per share of our common stock, or VWAP, prior to the date of this prospectus and 115% of the 20 day VWAP prior to the date of this prospectus, but in no event less than \$0.20 unless waived by our board of directors]. In determining the subscription price, the board of directors considered, among other things, the following factors:

- the milestones achieved in our drug development program;
- the historical and current market price of our common stock,
- the fact that holders of rights will have an over-subscription right;
- the terms and expenses of this offering relative to other alternatives for raising capital, including fees payable to the dealer-manager and our advisors;
- the size of this offering; and
- the general condition of the securities market.

### **Information Agent**

MacKenzie Partners will act as the information agent in connection with this offering. The information agent will receive for its services a fee estimated to be approximately \$7,500 plus reimbursement of all reasonable out-of-pocket expenses related to this offering. The information agent can be contacted at the address below:

MacKenzie Partners, Inc.  
105 Madison Avenue  
New York, NY 10016  
Collect: (212) 929-5500  
Toll-free: (800) 322-2885  
Email: [rightsoffering@mackenziepartners.com](mailto:rightsoffering@mackenziepartners.com)

### **Subscription Agent**

Continental Stock Transfer & Trust Company will act as the subscription agent in connection with this offering. The subscription agent will receive for its administrative, processing, invoicing and other services a fee estimated to be approximately \$10,000 plus reimbursement for all reasonable out-of-pocket expenses related to this offering.

Completed subscription rights certificates must be sent together with full payment of the subscription price for all shares and warrants subscribed for through the exercise of the subscription right and the over-subscription right to the subscription agent by one of the methods described below.

We will accept only properly completed and duly executed subscription rights certificates actually received at any of the addresses listed below, at or prior to 5:00 p.m., New York City time, on the expiration date of this offering. See "Payment for Shares" below. In this prospectus, close of business means 5:00 p.m., New York City time, on the relevant date.

#### **Subscription Rights Certificate Delivery Method**

By Mail/Commercial Courier/Hand Delivery:

#### **Address/Number**

Continental Stock Transfer & Trust Company  
Attn: Reorganization Department  
17 Battery Place, 8<sup>th</sup> Floor  
New York, NY 10004

Delivery to an address other than the address listed above will not constitute valid delivery and, accordingly, may be rejected by us.

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Any questions or requests for assistance concerning the method of subscribing for shares or for additional copies of this prospectus or subscription rights certificates may be directed to the subscription agent at its telephone number and address listed below:

Continental Stock Transfer & Trust Company  
Attn: Reorganization Department  
17 Battery Place, 8<sup>th</sup> Floor  
New York, NY 10004  
(212) 509-4000, x 536

Stockholders may also contact their broker, dealer, custodian bank, trustee or other nominee for information with respect to this offering.

### **Methods for Exercising Rights**

Rights are evidenced by subscription rights certificates that, except as described below under “Foreign Stockholders,” will be mailed to record date stockholders or, if a record date stockholder’s shares are held by a depository or nominee on his, her or its behalf, to such depository or nominee. Rights may be exercised by completing and signing the subscription rights certificate that accompanies this prospectus and mailing it in the envelope provided, or otherwise delivering the completed and duly executed subscription rights certificate to the subscription agent, together with payment in full for the shares at the subscription price by the expiration date of this offering. Completed subscription rights certificates and related payments must be received by the subscription agent prior to 5:00 p.m., New York City time, on or before the expiration date, at the offices of the subscription agent at the address set forth above.

#### *Exercise of the Over-Subscription Right*

Rights holders who fully exercise all basic subscription rights issued to them may participate in the over-subscription right by indicating on their subscription rights certificate the number of shares they are willing to acquire. If sufficient remaining shares are available after the basic subscription, all over-subscriptions will be honored in full; otherwise, remaining shares will be allocated on a *pro rata* basis as described under “Allocation of Over-Subscription Right” above.

#### *Record Date Stockholders Whose Shares are Held by a Nominee*

Record date stockholders whose shares are held by a nominee, such as a broker, dealer, custodian bank, trustee or other nominee, must contact that nominee to exercise their rights. In that case, the nominee will complete the subscription rights certificate on behalf of the record date stockholder and arrange for proper payment by one of the methods set forth under “Payment for Shares” below.

#### *Nominees*

Nominees, such as brokers, dealers, custodian banks, trustees or depositories for securities, who hold shares for the account of others, should notify the respective beneficial owners of the shares as soon as possible to ascertain the beneficial owners’ intentions and to obtain instructions with respect to the rights. If the beneficial owner so instructs, the nominee should complete the subscription rights certificate and submit it to the subscription agent with the proper payment as described under “Payment for Shares” below.

#### *General*

All questions as to the validity, form, eligibility (including times of receipt and matters pertaining to beneficial ownership) and the acceptance of subscription forms and the subscription price will be determined by us, which determinations will be final and binding. No alternative, conditional or contingent subscriptions will be accepted. We reserve the right to reject any or all subscriptions not properly submitted or the acceptance of which would, in the opinion of our counsel, be unlawful.

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We reserve the right to reject any exercise if such exercise is not in accordance with the terms of this rights offering or not in proper form or if the acceptance thereof or the issuance of shares of our common stock thereto could be deemed unlawful. We reserve the right to waive any deficiency or irregularity with respect to any subscription rights certificate. Subscriptions will not be deemed to have been received or accepted until all irregularities have been waived or cured within such time as we determine in our sole discretion. We will not be under any duty to give notification of any defect or irregularity in connection with the submission of subscription rights certificates or incur any liability for failure to give such notification.

### **The Rights are Not Tradable or Transferable**

The rights will not be listed for trading on any stock exchange or market or on the OTC Bulletin Board and may not be sold, transferred or assigned.

### **Foreign Stockholders**

Subscription rights certificates will not be mailed to foreign stockholders. A foreign stockholder is any record holder of common stock on the record date whose address of record is outside the United States and Canada, or is an Army Post Office (APO) address or Fleet Post Office (FPO) address. Foreign stockholders will be sent written notice of this offering. The subscription agent will hold the rights to which those subscription rights certificates relate for these stockholders' accounts, subject to that stockholder making satisfactory arrangements with the subscription agent for the exercise of the rights, and follow the instructions of such stockholder for the exercise of the rights if such instructions are received by the subscription agent at or before 11:00 a.m., New York City time, on December 3, 2008, three business days prior to the expiration date (or, if this offering is extended, on or before three business days prior to the extended expiration date). If no instructions are received by the subscription agent by that time, the rights will expire worthless without any payment to the holders of those unexercised rights.

### **Payment for Shares**

A participating rights holder may send the subscription rights certificate together with payment for the shares acquired in the subscription right and any additional shares subscribed for pursuant to the over-subscription right to the subscription agent based on the subscription price of \$ \_\_\_\_\_ per share. To be accepted, the payment, together with a properly completed and executed subscription rights certificate, must be received by the subscription agent at one of the subscription agent's offices set forth above (see "—Subscription Agent"), at or prior to 5:00 p.m., New York City time, on the expiration date.

All payments by a participating rights holder must be in U.S. dollars by money order or check or bank draft drawn on a bank or branch located in the U.S. and payable to Continental Stock Transfer & Trust Company. Payment also may be made by wire transfer to \_\_\_\_\_, ABA No. \_\_\_\_\_, Account No. \_\_\_\_\_, Continental Stock Transfer for benefit of (FBO) Pro-Pharmaceuticals, Inc., with reference to the rights holder's name. The subscription agent will deposit all funds received by it prior to the final payment date into a segregated account pending pro-ration and distribution of the shares.

**The method of delivery of subscription rights certificates and payment of the subscription price to us will be at the election and risk of the participating rights holders, but if sent by mail it is recommended that such certificates and payments be sent by registered mail, properly insured, with return receipt requested, and that a sufficient number of days be allowed to ensure delivery to the subscription agent and clearance of payment prior to 5:00 p.m., New York City time, on the expiration date. Because uncertified personal checks may take at least five business days to clear, you are strongly urged to pay, or arrange for payment, by means of certified or cashier's check or money order.**

**Whichever of the methods described above is used, issuance of the shares purchased is subject to collection of checks and actual payment.**

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If a participating rights holder who subscribes for shares as part of the subscription right or over-subscription right does not make payment of any amounts due by the expiration date, the subscription agent reserves the right to take any or all of the following actions: (i) reallocate the shares to other participating rights holders in accordance with the over-subscription right; (ii) apply any payment actually received by it from the participating rights holder toward the purchase of the greatest whole number of shares and warrants which could be acquired by such participating rights holder upon exercise of the basic subscription any over-subscription right; and/or (iii) exercise any and all other rights or remedies to which it may be entitled, including the right to set off against payments actually received by it with respect to such subscribed for shares.

All questions concerning the timeliness, validity, form and eligibility of any exercise of rights will be determined by us, whose determinations will be final and binding. We, in our sole discretion, may waive any defect or irregularity, or permit a defect or irregularity to be corrected within such time as we may determine, or reject the purported exercise of any right. Subscriptions will not be deemed to have been received or accepted until all irregularities have been waived or cured within such time as we determine in our sole discretion. The subscription agent will not be under any duty to give notification of any defect or irregularity in connection with the submission of subscription rights certificates or incur any liability for failure to give such notification.

Participating rights holders will have no right to rescind their subscription after receipt of their payment for shares and warrants.

### **Delivery of Stock Certificates**

Stockholders whose shares are held of record by Cede & Co. or by any other depository or nominee on their behalf or on behalf of their broker, dealer, custodian bank, trustee or other nominee will have any shares that they acquire credited to the account of Cede & Co. or the other depository or nominee. With respect to all other stockholders, stock certificates for all shares acquired will be mailed promptly after payment for all the shares subscribed for has cleared.

### **ERISA Considerations**

Retirement plans and other tax exempt entities, including governmental plans, should also be aware that if they borrow in order to finance their exercise of rights, they may become subject to the tax on unrelated business taxable income under Section 511 of the Code. If any portion of an individual retirement account is used as security for a loan, the portion so used is also treated as distributed to the IRA depositor. The Employee Retirement Income Security Act of 1974, as amended (“ERISA”), contains fiduciary responsibility requirements, and ERISA and the Code contain prohibited transaction rules that may impact the exercise of rights. Due to the complexity of these rules and the penalties for noncompliance, retirement plans should consult with their counsel and other advisers regarding the consequences of their exercise of rights under ERISA and the Code.

### **Distribution Arrangements**

Maxim Group LLC, which is a broker-dealer and member of the Financial Industry Regulatory Authority, will act as dealer-manager for this offering. The principal business address of the dealer-manager is 405 Lexington Avenue, New York, NY 10174.

Under the terms and subject to the conditions contained in a dealer-manager agreement which we will enter into, the dealer-manager will provide marketing services in connection with this offering and will solicit the exercise of rights and participation in the over-subscription right. This offering is not contingent upon any number of rights being exercised. Maxim Group is not underwriting or placing any of the rights or the shares of our common stock being sold in this offering and does not make any recommendation with respect to such rights or shares (including with respect to the exercise of such rights).

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Pursuant to the dealer-manager agreement, we are obligated to pay to Maxim Group as compensation 9.0% of the gross proceeds of this offering in cash and 8.0% of the shares of common stock sold in this offering in warrants priced at 125% of the subscription price and to reimburse the dealer-manager for its reasonable expenses incurred in connection with this offering and to indemnify the dealer-manager for, or contribute to losses arising out of, certain liabilities, including liabilities under the Securities Act of 1933. The dealer-manager agreement also provides that the dealer-manager will not be subject to any liability to us in rendering the services contemplated by the dealer-manager agreement except for any act of bad faith or gross negligence of the dealer-manager.

Maxim Group LLC and its affiliates have provided in the past and may provide to us from time to time in the future in the ordinary course of their business certain financial advisory, investment banking and other services for which they will be entitled to receive fees.

### **Stockholder Lock-Ups**

Each of Dr. Platt, our chief executive officer and chairman of the Board, and Dr. Klyosov, our chief scientist, who collectively own an aggregate of 10.6% of the outstanding shares of our common stock on the date of this prospectus, have entered into a lock-up agreement with us which prevents each of them from selling any shares of our common stock and Series C warrants until the expiration of one year from the date of this prospectus.

**PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY****Price Range of Common Stock**

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

	High	Low
<b>Fiscal Year Ended December 31, 2006</b>		
First Quarter	\$3.78	\$2.85
Second Quarter	3.98	3.13
Third Quarter	3.00	0.59
Fourth Quarter	0.97	0.35
<b>Fiscal Year Ended December 31, 2007</b>		
First Quarter	\$1.39	\$0.25
Second Quarter	0.93	0.35
Third Quarter	0.72	0.31
Fourth Quarter	0.89	0.60
<b>Fiscal Year Ended December 31, 2008</b>		
First Quarter	\$0.67	\$0.36
Second Quarter	0.46	0.27
Third Quarter	0.38	0.17
Fourth Quarter (through November 17, 2008)	0.20	0.06

**Dividends**

We have not declared cash dividends on our common stock since our company was formed. Dividends are declared at the sole discretion of our board of directors. We do not intend to declare cash dividends and intend to retain all cash for our operations.

**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table sets forth, as of November 17, 2008, certain information concerning the beneficial ownership of each class of our voting securities by: (i) each person known by us to own beneficially five per cent (5%) or more of the outstanding shares of our common stock or our Series A preferred stock, (ii) each of our directors and named executive officers, and (iii) all executive officers and directors as a group.

The number of shares beneficially owned by each 5% stockholder, director or named executive officer is determined under rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Under those rules, beneficial ownership includes any shares to which the individual has sole or shared voting power or investment power and also any shares that the individual has the right to acquire within 60 days after November 17, 2008 through the exercise of any stock option, warrant or other right, or conversion of any security. Unless otherwise indicated, each person has sole investment and voting 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 <sup>(1)</sup>	Amount and Nature of Beneficial Ownership <sup>(3)</sup>	Percentage of Class <sup>(2)</sup>
<b>5% Stockholders</b>		
David Platt, Ph.D.	3,536,347(4)	7.4%
James C. Czirr	4,686,468(5)	9.8%
<b>Directors and Named Executive Officers</b>		
David Platt, Ph.D.	3,536,347(4)	7.4%
Mildred S. Christian, Ph.D.	192,208(6)	*
Dale H. Conaway, D.V.M.	98,306(7)	*
Henry J. Esber, Ph.D.	35,500	*
James T. Gourzis, M.D., Ph.D.	8,500	*
S. Colin Neill	5,500	*
Steven Prelack	33,000	*
Jerald K. Rome	215,844	*
Theodore D. Zucconi, Ph.D.	307,343	*
Maureen Foley	916,668	1.9%
Eliezer Zomer, Ph.D.	686,668	1.4%
<b>All executive officers and directors as a group (12 persons)</b>	<b>6,684,241</b>	<b>13.8%</b>

\* Less than 1%.

- (1) The address of each of the persons listed is c/o Pro-Pharmaceuticals, Inc., 7 Wells Avenue, Newton, MA 02459, except Mr. Czirr whose address is 425 Janish Drive, Sandpoint, ID 83864.
- (2) For each person and group included in this table, percentage ownership is calculated by dividing the number of shares beneficially owned by such person or group by the sum of 48,052,159 shares of common stock outstanding as of November 17, 2008, plus the number of shares of common stock that such person has the right to acquire within 60 days after November 17, 2008.

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- (3) Includes the following number of shares of our common stock issuable upon exercise of outstanding stock options that were exercisable within 60 days after November 17, 2008:

<u>Directors and Named Executive Officers</u>	<u>Options Exercisable Within 60 Days</u>
Dr. Platt	100,000
Dr. Christian	114,354
Dr. Conaway	65,500
Dr. Esber	35,500
Dr. Gourzis	6,500
Mr. Neill	5,500
Mr. Prelack	33,000
Mr. Rome	56,500
Dr. Zucconi	200,000
Ms. Foley	911,667
Dr. Zomer	686,668
All executive officers and directors as a group	6,684,241

- (4) Includes: (i) 7,379 shares of common stock owned by Dr. Platt's wife, as to which he disclaims beneficial ownership, and (ii) 100,000 shares of Series A preferred stock convertible into 100,000 shares of common stock. Such number of shares of Series A preferred stock represents 5% or more of the outstanding shares of this class of securities.
- (5) Includes: (i) 28,200 shares owned by a child of Mr. Czirr as to which Mr. Czirr disclaims beneficial ownership, and (ii) 100,000 shares of Series A preferred stock convertible into 100,000 shares of common stock. Such number of shares of Series A preferred stock represents 5% or more of the outstanding shares of this class of securities.
- (6) Includes 25,000 shares of Series A preferred stock convertible into 25,000 shares of common stock.
- (7) Includes 10,000 shares of Series A preferred stock convertible into 10,000 shares of common stock.

## DESCRIPTION OF SECURITIES

Our authorized capital stock currently consists of 200,000,000 shares of common stock, par value \$0.001 per share, 5,000,000 shares of undesignated preferred stock, par value \$0.01 per share, and 5,000,000 shares designated Series A 12% convertible preferred stock (of which, 1,742,500 shares were issued and outstanding at September 30, 2008).

The following summary of certain provisions of our common stock and Series C warrants does not purport to be complete. You should refer to our amended and restated certificate of incorporation, as amended, our amended and restated by-laws, and the form of common stock purchase warrants, each of which is filed or incorporated by reference as an exhibit to the registration statement of which this prospectus is a part. The summary below is also qualified by provisions of applicable law.

### Common Stock

Holders of common stock are entitled to one vote per share on matters on which our stockholders vote. There are no cumulative voting rights. Holders of common stock are entitled to receive dividends, if declared by our board of directors, out of funds that we may legally use to pay dividends. If we liquidate or dissolve, holders of common stock are entitled to share ratably in our assets once our debts and any liquidation preference owed to any then-outstanding preferred stockholders are paid. All shares of common stock that are outstanding as of the date of this prospectus are fully-paid and non-assessable.

### Series C Warrants

*General.* Each common stock purchase warrant included in each subscription right will entitle the holder to purchase one share of our common stock.

*Exercisability; Company Ability to Cancel.* Each warrant will be immediately exercisable for twelve months following issuance to purchase one share of our common stock at 125% of the price of the basic subscription right, or initially \$            per share, which may be reduced at any time in our discretion. If, during the term of the warrant, the closing price of our common stock is equal to or greater than 400% of the initial warrant exercise price, or \$            , for at least ten consecutive trading days, we may call, or cancel, any outstanding warrants that are not exercised during the 15 trading day period following the date we give notice to the holders of those warrants. Warrants may be exercised at any time up to the close of business on the earlier of the warrant redemption date or warrant expiration date. After the close of business on the earlier of the warrant cancellation or warrant expiration date, unexercised warrants will become void.

*Adjustments.* The exercise price and the number of shares underlying the warrants are subject to appropriate adjustment in the event of stock splits, stock dividends on our common stock, stock combinations or similar events affecting our common stock. In addition, in the event we consummate any merger, consolidation, sale or other reorganization event in which our common stock is converted into or exchanged for securities, cash or other property, then following such event, the holders of the warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities, cash or other property which the holders would have received had they exercised the warrants immediately prior to such reorganization event.

*Fractional Shares.* No fractional shares of common stock will be issued in connection with the exercise of a warrant. In lieu of fractional shares, we will round up to the nearest whole share.

*Transferability.* A warrant may be transferred by a holder without our consent, upon surrender of the warrant to us, properly endorsed (by the holder executing an assignment in the form attached to the warrant) and upon payment of any necessary tax or other governmental charge imposed upon such transfer.

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*Listing.* The warrants will be transferable in accordance with applicable law but will not be listed for trading on any stock exchange or market or on the OTC Bulletin Board. However, we expect that the warrants will be exercisable for shares of our common stock that will be listed on either the NYSE Alternext US or the OTC Bulletin Board.

**Transfer Agent and Registrar**

The transfer agent and registrar for our common stock, rights and warrants is Continental Stock Transfer & Trust Company, 17 Battery Place, 8th Floor, New York, NY 10004.

## INDEMNIFICATION OF DIRECTORS AND OFFICERS

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

The NRS permits a present or former director or officer of a corporation to be indemnified against certain expenses if the person has been successful, on the merit or otherwise, in defense of any proceeding brought against such person by virtue of the fact that the person is or was an officer or director of the corporation. In addition, the NRS permits the advancement of expenses relating to the defense of any proceeding to directors and officers contingent upon the person’s commitment to repay advances for expenses in the case he or she is ultimately found not to be entitled to be indemnified.

Our amended and restated bylaws, as amended, provide that, to the fullest extent permitted by the NRS, we will pay the expenses of our directors and officers incurred in defending a civil or criminal action, suit or proceeding, as such expenses are incurred and in advance of the final disposition of such matter, upon receipt of an undertaking in form and substance acceptable to our board of directors for the repayment of such advances if it is ultimately determined by a court of competent jurisdiction that the officer or director is not entitled to be indemnified.

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

## MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following discussion sets forth the material U.S. Federal income tax consequences of the receipt of rights described in this offering (“Rights”) and of the exercise or expiration of those Rights to U.S. Holders (as defined below) of our common stock that hold such stock as a capital asset for Federal income tax purposes and to U.S. Holders of Company warrants dated February 14, 2006 (“2006 Investor Warrants”) who elect to receive Rights as opposed to an adjustment of the exercise price of such warrants, other than U.S. Holders who received 2006 Investor Warrants as compensation. This discussion is based upon the Code, Treasury Regulations promulgated thereunder, judicial decisions, and the U.S. Internal Revenue Service’s (“IRS”) current administrative rules, practices and interpretations of law, all as in effect on the date of this document, and all of which are subject to change, possible with retroactive effect. This discussion applies only to U.S. Holders and does not address all aspects of Federal income taxation that may be important to particular holders in light of their individual investment circumstances or to holders who may be subject to special tax rules, including, without limitation, holders of preferred stock, partnerships (including any entity or arrangement treated as a partnership for Federal income tax purposes), holders who are dealers in securities or foreign currency, foreign persons, insurance companies, tax-exempt organizations, non-U.S. Holders, banks, financial institutions, broker-dealers, holders who hold common stock as part of a hedge, straddle, conversion, constructive sale or other integrated security transaction, or who acquired common stock pursuant to the exercise of compensatory stock options or otherwise as compensation, all of whom may be subject to tax rules that differ significantly from those summarized below.

We have not sought, and will not seek, a ruling from the IRS regarding the Federal income tax consequences of this offering or the related share issuance. The following discussion does not address the tax consequences of this offering or the related share issuance under foreign, state, or local tax laws. Accordingly, each holder of common stock is urged to consult its tax advisor with respect to the particular tax consequences of this offering or the related share issuance to such holder.

For purposes of this description, a “U.S. Holder” is a holder that is for U.S. federal income tax purposes:

- a citizen or resident of the U.S.;
- a corporation or other entity taxable as a corporation that is organized in or under the laws of the U.S., any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation, regardless of its source; or
- a trust, if a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust (or the trust was in existence on August 20, 1996, and validly elected to continue to be treated as a U.S. trust).

**THIS SUMMARY IS ONLY A GENERAL DISCUSSION AND IS NOT INTENDED TO BE, AND SHOULD NOT BE CONSTRUED TO BE, LEGAL, OR TAX ADVICE. THE U.S. FEDERAL INCOME TAX TREATMENT OF THE RIGHTS IS COMPLEX AND POTENTIALLY UNFAVORABLE TO U.S. HOLDERS. ACCORDINGLY, EACH U.S. HOLDER WHO ACQUIRES RIGHTS IS STRONGLY URGED TO CONSULT HIS, HER OR ITS OWN TAX ADVISER WITH RESPECT TO THE U.S. FEDERAL, STATE, LOCAL AND FOREIGN INCOME, ESTATE AND OTHER TAX CONSEQUENCES OF THE ACQUISITION OF THE RIGHTS, WITH SPECIFIC REFERENCE TO SUCH PERSON’S PARTICULAR FACTS AND CIRCUMSTANCES.**

**THE FEDERAL TAX DISCUSSION CONTAINED IN THIS PROSPECTUS IS NOT INTENDED OR WRITTEN TO BE USED, AND CANNOT BE USED, BY ANY PERSON FOR THE PURPOSE OF AVOIDING ANY PENALTIES THAT MAY BE IMPOSED BY THE CODE. THE FEDERAL TAX DISCUSSION CONTAINED IN THIS PROSPECTUS WAS WRITTEN TO SUPPORT THE PROMOTION OR MARKETING OF THE TRANSACTION DESCRIBED IN THIS PROSPECTUS. PROSPECTIVE INVESTORS SHOULD SEEK ADVICE FROM THEIR OWN INDEPENDENT TAX ADVISORS CONCERNING THE FEDERAL, STATE AND LOCAL TAX CONSEQUENCES OF AN INVESTMENT IN THE COMPANY BASED ON THEIR PARTICULAR CIRCUMSTANCES.**

## **Receipt of the Rights**

The distribution of the Rights should be a non-taxable distribution under Section 305(a) of the Code. This position is not binding on the IRS, or the courts, however. If this position is finally determined by the IRS or a court to be incorrect, the fair market value of the Rights would be taxable to holders of our common stock as a dividend to the extent of the holder's *pro rata* share of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent thereof and then as capital gain.

The distribution of the Rights would be taxable under Section 305(b) of the Code if it were a distribution or part of a series of distributions, including deemed distributions, that have the effect of the receipt of cash or other property by some of our stockholders and an increase in the proportionate interest of other stockholders in our assets or earnings and profits, if any. Distributions having this effect are referred to as "disproportionate distributions." The exercise price of our 2006 Investor Warrants, by its terms, will adjust as a result of the rights offering unless a warrant holder elects to receive the Rights. We will also adjust the terms of our outstanding stock options (e.g., exercise price, share subject to the option) to prevent the rights offering from being part of a "disproportionate distribution." Neither the adjustment to the warrant price nor the adjustment to the option price should prevent the distribution of the Rights from being considered part of a "disproportionate distribution."

In addition, the terms of our stock options provide for the crediting of shares underlying such options against the holder's income tax obligations when those options are exercised. While the holders of our stock options could be treated as receiving cash with respect to their shares in these transactions, the transactions are unlikely to cause the distribution of the Rights to be considered part of a "disproportionate distribution" because of their infrequency, their resemblance to redemptions for U.S. federal income tax purposes, and their relatively small size.

The remaining description assumes that holders of our common stock or our 2006 Investor Warrants who elect to receive the Rights will not be subject to U.S. federal income tax on the receipt of a Right.

## **Tax Basis and Holding Period of the Rights**

If the aggregate fair market value of the Rights at the time they are distributed to U.S. Holders of our common stock is less than 15% of the aggregate fair market value of our common stock at such time, the tax basis of the Rights issued to you will be zero unless you elect to allocate a portion of your tax basis of previously owned common stock to the Rights issued to you in this offering. However, if the aggregate fair market value of the Rights at the time they are distributed to U.S. Holders of our common stock is 15% or more of the aggregate fair market value of our common stock at such time, or if you elect to allocate a portion of your tax basis of previously owned common stock to the Rights issued to you in this offering, then your tax basis in previously owned common stock will be allocated between such common stock and the Rights based upon the relative fair market value of such common stock and the Rights as of the date of the distribution of the Rights. Thus, if such an allocation is made and the Rights are later exercised, the tax basis in the common stock you originally owned will be reduced by an amount equal to the tax basis allocated to the Rights and the stock basis in the new common stock will be increased by the tax basis allocated to these common shares. This election is irrevocable if made and would apply to all of the Rights received pursuant to the rights offering. The election must be made in a statement attached to your Federal income tax return for the taxable year in which the Rights are distributed.

The tax basis in the 2006 Investor Warrants shall be allocated between the 2006 Investor Warrants and the Rights received in proportion to the fair market values of each on the date of distribution in the case of U.S. Holders of 2006 Investor Warrants who elect to receive Rights as opposed to an adjustment of the exercise price of such warrants.

The holding period for the Rights received in the rights offering by a U.S. Holder of our common stock and a U.S. Holder of 2006 Investor Warrants, who elect to receive Rights as opposed to an adjustment of the exercise price of such warrants, will include the holding period for the common stock or the 2006 Investor Warrants with respect to which the Rights were received.

### **Expiration of the Rights**

If the Rights expire without exercise while you continue to hold the shares of our common stock with respect to which the Rights are received, you will recognize no loss and your tax basis in the common stock with respect to which the Rights were received will equal its tax basis before receipt of the Rights. If the Rights expire without exercise after you have disposed of the shares of our common stock with respect to which the Rights are received, you should consult your own tax advisor regarding your ability to recognize a loss (if any) on the expiration date.

### **Exercise of the Rights; Tax Basis and Holding Period of the Shares**

The exercise of the Rights received in this offering will not result in any gain or loss to you. The exercise of the Rights should be treated for United States federal income tax purposes as an investment unit consisting of one share of our common stock and a Series C common stock purchase warrant ("Warrant"). Each holder of a investment unit must allocate the purchase price paid by such holder for such unit between the share of common stock and the Warrant based on their respective relative fair market values. A holder's initial tax basis in the common stock and the Warrant included in each unit should equal the portion of the purchase price of the unit allocated thereto.

Generally, the tax basis of the common stock and the Warrant acquired through exercise of the Rights will be equal to the sum of the subscription price per share and the basis, if any, in the Rights that you exercised, as described in "—Tax Basis of the Rights" above. This amount must be allocated between the share of common stock and the Warrant based on their respective relative fair market values.

The holding period for a share of common stock acquired upon exercise of a Right begins with the date of exercise.

If you exercise the Rights received in this offering after disposing of the shares of our common stock with respect to which the Rights are received, you should consult your own tax advisor regarding the potential application of the "wash sale" rules under Section 1091 of the Code.

### **Sale or Other Disposition of the Shares of Common Stock Underlying the Rights**

If a U.S. Holder sells or otherwise disposes of the shares received as a result of exercising a Right, such U.S. Holder's gain or loss recognized upon that sale or other disposition will be a capital gain or loss assuming the share is held as a capital asset at the time of sale. This gain or loss will be long-term if the share has been held at the time of sale for more than one year.

### **Exercise of a Warrant**

Upon the exercise of a Warrant, a holder will not be required to recognize taxable gain or loss with respect to the Warrant. The holder's tax basis in the share of our common stock received by such holder will be an amount equal to the sum of the holder's initial investment in the warrant (i.e., the portion of the holder's purchase price for a unit that is allocated to the warrant, as described above under "—Exercise of the Rights; Tax Basis and Holding Period of the Shares") and the exercise price. The holder's holding period for the share of our common stock received upon exercise of the Warrant should begin on the date following the date of exercise (or possibly on the date of exercise) of the Warrant and will not include the period during which the holder held the Warrant.

### **Sale, Exchange, Redemption, or Expiration of a Warrant**

Upon a sale, exchange (other than by exercise), or redemption of a Warrant, a U.S. Holder will be required to recognize taxable gain or loss in an amount equal to the difference between (1) the amount realized upon such disposition (or, if the warrant is held as part of a unit at the time of the disposition of the unit, the portion of the amount realized on such disposition that is allocated to the Warrant based on the then fair market value of the Warrant) and (2) the U.S. Holder's tax basis in the Warrant (that is, the portion of the U.S. holder's purchase price for a unit that is allocated to the warrant, as described above under "—Exercise of the Rights; Tax Basis and Holding Period of the Shares"). Upon the expiration of a Warrant (whether or not held as part of a unit at the time of such expiration), a U.S. Holder will be required to recognize a taxable loss in an amount equal to the U.S. Holder's tax basis in the Warrant. Such gain or loss will generally be treated as capital gain or loss and will be treated as long-term capital gain or loss if the Warrant was held by the U.S. holder for more than one year at the time of such disposition or expiration.

If you exercise the Warrant after disposing of the shares of our common stock, you should consult your own tax advisor regarding the potential application of the "wash sale" rules under Section 1091 of the Code.

### **Information Reporting and Backup Withholding**

Payments made to you of proceeds from the sale of shares of common stock underlying the Rights may be subject to information reporting to the IRS and possible U.S. federal backup withholding. Backup withholding will not apply if you furnish a correct taxpayer identification number (certified on the IRS Form W-9) or otherwise establish that you are exempt from backup withholding. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against your U.S. federal income tax liability. You may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS and furnishing any required information.

## PLAN OF DISTRIBUTION

On or about November 1, 2008, we will distribute the rights, subscription rights certificates and copies of this prospectus to the holders of our common stock on the record date. Rights holders who wish to exercise their rights and purchase shares of our common stock must complete the rights certificate and return it with payment for the shares to the subscription agent, Continental Stock Transfer & Trust Company, at the following address:

Continental Stock Transfer & Trust Company  
Attn: Reorganization Department  
17 Battery Place, 8<sup>th</sup> Floor  
New York, NY 10004

See “The Rights Offering — Method of Exercising Rights.” If you have any questions, you should contact Continental Stock Transfer & Trust Company.

Other than as described in this prospectus, we do not know of any existing agreements between any stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the underlying common stock.

To the extent required, we will file, during any period in which offers or sales are being made, a supplement to this prospectus which sets forth, with respect to a particular offering, the specific number of shares of common stock to be sold, the name of the holder, the sales price, the name of any participating broker, dealer, underwriter or agent, any applicable commission or discount and any other material information with respect to the plan of distribution not previously disclosed.

In order to comply with certain states’ securities laws, if applicable, the shares of common stock and Series C warrants will be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states, rights may not be distributed, shares of common stock and Series C warrants may not be sold, and Series C warrants may not be exercised, unless the rights, shares and Series C warrants (including the shares underlying the Series C warrants) have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is satisfied.

Maxim Group LLC is the dealer-manager of this rights offering. In such capacity, Maxim Group will provide marketing assistance and advice to our company in connection with this offering. We have agreed to pay Maxim Group 9.0% of the gross proceeds of this offering in cash and 8.0% of the shares of common stock sold in this offering in warrants priced at 125% of the subscription price. In addition, we have agreed to reimburse Maxim Group for certain expenses, including reasonable legal expenses, incurred in connection therewith. We have also agreed to indemnify Maxim Group LLC and their respective affiliates against certain liabilities arising under the Securities Act of 1933. Maxim Group LLC is not underwriting or placing any of the rights or the shares of our common stock being sold in this offering and does not make any recommendation with respect to such rights or shares (including with respect to the exercise of such rights). Maxim Group’s participation in this offering is subject to customary conditions contained in the dealer-manager agreement, including the receipt by Maxim Group of opinions of our counsel. Maxim Group LLC and its affiliates have provided in the past and may provide to us from time to time in the future in the ordinary course of their business certain financial advisory, investment banking and other services for which they will be entitled to receive fees.

## LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus has been passed upon for Pro-Pharmaceuticals, Inc. by Greenberg Traurig, LLP, Boston, Massachusetts. Ellenoff Grossman & Schole LLP, New York, New York, has acted as counsel to the dealer-manager.

## EXPERTS

The consolidated financial statements included in this prospectus for the years ended December 31, 2007 and 2006, and for each of the three years in the period ended December 31, 2007, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein (which report expresses an unqualified opinion on the financial statements and includes explanatory paragraphs relating to Pro-Pharmaceuticals' adoption of Statement of Financial Accounting Standards ("SFAS") No. 123(R), "Share-Based Payment" effective January 1, 2006, and the adoption of Financial Accounting Standards Board ("FASB") Interpretation ("FIN") No. 48, "Accounting For Uncertainty in Income Taxes" on January 1, 2007, and to the substantial doubt about our ability to continue as a going concern). Such consolidated financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

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

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

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

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

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

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

We have audited the accompanying consolidated balance sheets of Pro-Pharmaceuticals, Inc. and subsidiary (a development stage company) (the “Company”) as of December 31, 2007 and 2006, and the related consolidated statements of operations, stockholders’ (deficit) equity, and cash flows for each of the three years in the period ended December 31, 2007, and for the period from inception (July 10, 2000) to December 31, 2007. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2007 and 2006, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2007, and for the period from inception (July 10, 2000) to December 31, 2007 in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the consolidated financial statements, the Company adopted Statement of Financial Accounting Standards (“SFAS”) No. 123(R), “Share-Based Payment” on January 1, 2006 based on the modified prospective application transition method and the Company adopted Financial Accounting Standards Board (“FASB”) Interpretation (“FIN”) No. 48 “Accounting For Uncertainty in Income Taxes” on January 1, 2007.

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

/s/ Deloitte & Touche LLP  
Boston, Massachusetts  
March 28, 2008

**PRO-PHARMACEUTICALS, INC.**  
**(A Development-Stage Company)**  
**CONSOLIDATED BALANCE SHEETS**  
**DECEMBER 31, 2007 AND 2006**  
**(dollars in thousands except share and per share data)**

	<u>2007</u>	<u>2006</u>
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 1,319	\$ 773
Prepaid expenses and other current assets	70	163
Certificate of deposit	—	5,000
Total current assets	<u>1,389</u>	<u>5,936</u>
<b>PROPERTY AND EQUIPMENT—NET</b>	73	112
<b>RESTRICTED CASH</b>	70	59
<b>INTANGIBLE ASSETS—NET</b>	250	256
<b>TOTAL ASSETS</b>	<u>\$ 1,782</u>	<u>\$ 6,363</u>
<b>LIABILITIES AND STOCKHOLDERS' DEFICIT</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 601	\$ 340
Accrued expenses	362	512
Convertible debt instrument	—	5,137
Advances received from subscribers for Series A 12% Convertible Preferred Stock and related warrants	1,637	
Total current liabilities	<u>2,600</u>	<u>5,989</u>
<b>WARRANT LIABILITIES</b>	2,069	371
<b>OTHER LONG TERM LIABILITIES</b>	37	25
Total liabilities	<u>\$ 4,706</u>	<u>\$ 6,385</u>
<b>COMMITMENTS AND CONTINGENCIES (Note 10)</b>		
<b>STOCKHOLDERS' DEFICIT:</b>		
Undesignated shares, \$0.01 par value; 10,000,000 shares authorized; 5,000,000 shares designated Series A 12% Convertible Preferred Stock and 10,000,000 shares undesignated at December 31, 2007 and 2006 respectively; 1,667,500 shares of Series A 12% Convertible Preferred Stock subscribed, none issued and outstanding at December 31, 2007 and 2006		
Common stock, \$0.001 par value; 100,000,000 shares authorized; 40,364,792 and 32,518,643 shares of common stock issued and outstanding at December 31, 2007 and 2006, respectively; Undesignated shares, \$.01 par value; 10,000,000 shares authorized; 5,000,000 and 10,000,000 undesignated at December 31, 2007 and 2006, respectively	40	32
Additional paid-in capital	32,196	25,673
Deficit accumulated during the development stage	<u>(35,160)</u>	<u>(25,727)</u>
Total stockholders' deficit	<u>(2,924)</u>	<u>(22)</u>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT</b>	<u>\$ 1,782</u>	<u>\$ 6,363</u>

*See notes to consolidated financial statements.*

**PRO-PHARMACEUTICALS, INC.**  
**(A Development-Stage Company)**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**YEARS ENDED DECEMBER 31, 2007, 2006 AND 2005, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2007**  
**(dollars in thousands except per share data)**

	Years Ended December 31,			Cumulative Period from Inception (July 10, 2000) to December 31, 2007
	2007	2006	2005	
<b>OPERATING EXPENSES:</b>				
Research and development	\$ 2,053	\$ 3,019	\$ 3,040	\$ 15,581
General and administrative	4,402	4,029	3,615	22,455
Operating loss	(6,455)	(7,048)	(6,655)	(38,036)
<b>OTHER INCOME AND (EXPENSE):</b>				
Interest income	102	281	111	737
Interest expense	(350)	(1,850)	—	(4,451)
Change in fair value of convertible debt instrument	(1,032)	(2,394)	—	(3,426)
Change in fair value of warrant liabilities	(1,698)	7,818	(311)	10,016
Total other income (expense)	\$ (2,978)	\$ 3,855	\$ (200)	\$ 2,876
<b>NET LOSS</b>	<b>\$ (9,433)</b>	<b>\$ (3,193)</b>	<b>\$ (6,855)</b>	<b>\$ (35,160)</b>
<b>NET LOSS PER SHARE—BASIC AND DILUTED</b>	<b>\$ (0.24)</b>	<b>\$ (0.11)</b>	<b>\$ (0.25)</b>	
<b>WEIGHTED AVERAGE COMMON SHARES OUTSTANDING—BASIC AND DILUTED</b>	<b>38,980,548</b>	<b>28,472,898</b>	<b>27,315,411</b>	

*See notes to consolidated financial statements.*

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

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY**  
**YEARS ENDED DECEMBER 31, 2007, 2006 AND 2005, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2007**  
**(dollars in thousands)**

	Common Stock		Additional Paid-in Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' (Deficit) Equity
	Number of Shares	\$0.001 Par Value				
Issuance of founders shares in 2000	12,354,670	\$ 12	\$ (3)	\$ —	\$ —	\$ 9
Beneficial conversion feature and rights to common stock embedded in convertible note in 2000	—	—	222	—	—	222
Issuance of common stock and beneficial conversion feature related to convertible note in 2001	660,321	1	1,035	—	—	1,036
Issuance of common stock in connection with reverse merger of Pro-Pharmaceuticals-NV in 2001	1,221,890	1	106	—	—	107
Conversion of notes payable and accrued interest to common stock in 2001	598,229	1	1,125	—	—	1,126
Issuance of warrants to induce conversion of notes payable in 2001	—	—	503	—	—	503
Issuance of common stock and warrants (net of issuance costs of \$17) in 2001	689,300	1	2,220	—	—	2,221
Issuance of common stock (net of issuance costs of \$49) in 2002	185,999	—	602	—	—	602
Issuance of common stock related to 2002 private placement (net of issuance costs of \$212)	3,223,360	3	2,858	—	—	2,861
Conversion of notes payable and accrued interest to common stock	105,877	—	290	—	—	290
Issuance of warrants to purchase common stock in consideration for placement of convertible notes payable in 2002	—	—	236	—	—	236
Issuance of common stock to investors in 2002 private placement (net of issuance costs of \$18)	1,088,000	1	1,069	—	—	1,070
Issuance of common stock to consultants for services related to 2002 private placement	12,250	—	12	—	—	12
Receipt of subscription receivable	—	—	150	—	—	150
Conversion of accrued expenses to common stock and options	201,704	—	302	—	—	302
Issuance of common stock to investors in May, 2003 private placement (net of issuance costs of \$128)	2,399,500	3	4,407	—	—	4,410
Fair value of common stock warrants issued to placement agents in May, 2003 private placement	—	—	261	—	—	261
Issuance of common stock to investors in October, 2003 private placement (net of issuance costs of \$559)	1,314,571	1	1,318	—	—	1,319
Cashless exercise of employee stock options	16,629	—	74	—	—	74
Issuance of common stock to investors in April, 2004 private placement (net of issuance costs of \$466)	1,236,111	1	1,897	—	—	1,898
Issuance of common stock to investors in August, 2004 private placement (net of issuance costs of \$485)	2,000,000	2	488	—	—	490
Common stock issued in 2006 related to convertible debenture conversions	476,202	1	1,744	—	—	1,745
Common stock issued in 2006 and 2007 related to convertible debenture redemptions	7,367,831	7	3,941	—	—	3,948
Common stock issued in 2007 related to convertible debenture waiver and exchange agreement	5,205,348	5	5,325	—	—	5,330
Deferred compensation relating to issuance of stock options	—	—	455	(455)	—	—
Amortization of deferred compensation	—	—	—	612	—	612
Stock compensation expense related to fair market revaluation	—	—	157	(157)	—	—
Stock based compensation expense	—	—	1,375	—	—	1,375
Stock compensation related to the issuance of common shares	7,000	—	27	—	—	27
Net loss since inception	—	—	—	—	(35,160)	(35,160)
<b>BALANCE, DECEMBER 31, 2007</b>	<b>40,364,792</b>	<b>\$ 40</b>	<b>\$ 32,196</b>	<b>\$ —</b>	<b>\$ (35,160)</b>	<b>\$ (2,924)</b>

*See notes to consolidated financial statements.*

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

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY**  
**YEARS ENDED DECEMBER 31, 2007, 2006 AND 2005, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2007**  
(dollars in thousands)

	Common Stock		Additional Paid-in Capital	Deferred Compensation	Deficit Accumulated During the Development Stage	Total Stockholders' (Deficit) Equity
	Number of Shares	\$0.001 Par Value				
BALANCE, JANUARY 1, 2005	27,315,411	\$ 27	\$ 20,133	\$ (1)	\$ (15,679)	\$ 4,480
Issuance of common stock options in consideration for investor relations and other services	—	—	21	—	—	21
Amortization of deferred compensation	—	—	—	1	—	1
Net loss	—	—	—	—	(6,855)	(6,855)
BALANCE, DECEMBER 31, 2005	27,315,411	\$ 27	\$ 20,154	\$ —	\$ (22,534)	\$ (2,353)
Common stock issued related to convertible debenture conversions	476,202	1	1,744	—	—	1,745
Common stock issued related to convertible debenture redemptions	4,727,030	4	3,359	—	—	3,363
Stock based compensation expense	—	—	416	—	—	416
Net loss	—	—	—	—	(3,193)	(3,193)
BALANCE DECEMBER 31, 2006	32,518,643	\$ 32	\$ 25,673	—	\$ (25,727)	\$ (22)
Common stock issued related to convertible debenture redemptions	2,640,801	3	582	—	—	585
Common Stock issued related to waiver and exchange agreement	5,205,348	5	5,325	—	—	5,330
Stock based compensation expense	—	—	616	—	—	616
Net loss	—	—	—	—	(9,433)	(9,433)
BALANCE DECEMBER 31, 2007	40,364,792	\$ 40	32,196	—	\$ (35,160)	\$ (2,924)

(Concluded)

*See notes to consolidated financial statements.*

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

**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**YEARS ENDED DECEMBER 31, 2007, 2006 AND 2005, AND CUMULATIVE PERIOD**  
**FROM INCEPTION (JULY 10, 2000) TO DECEMBER 31, 2007**  
**(dollars in thousands)**

	Years Ended December 31,			Cumulative Period from Inception (July 10, 2000) to December 31, 2007
	2007	2006	2005	
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>				
Net loss	\$(9,433)	\$(3,193)	\$ (6,855)	\$ (35,160)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	64	67	82	439
Stock-based compensation expense	616	416	22	2,088
Non-cash interest expense	333	1,772	—	4,279
Change in fair value of convertible debt instrument	1,032	2,394	—	3,426
Change in fair value of warrant liabilities	1,698	(7,818)	311	(10,016)
Write-off of intangible assets	23	11	20	170
Changes in other assets and liabilities:				
Prepaid expenses and other current assets	61	97	(81)	(67)
Accounts payable and accrued expenses	111	(528)	374	1,081
Changes in long term liabilities	12	25	—	37
Net cash used in operating activities	<u>(5,483)</u>	<u>(6,757)</u>	<u>(6,127)</u>	<u>(33,723)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>				
Maturity/(Purchase) of certificate of deposit	5,000	(5,000)	—	—
Purchases of property and equipment	(5)	(98)	(21)	(419)
Increase in restricted cash	(11)	(59)	—	(70)
Increase in patents costs and other assets	(37)	(79)	(90)	(404)
Net cash provided by/ (used in) investing activities	<u>4,947</u>	<u>(5,236)</u>	<u>(111)</u>	<u>(893)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>				
Net proceeds from issuance of common stock and warrants	—	—	—	25,309
Net proceeds from issuance of convertible debt instrument	—	9,300	—	10,621
Repayment of convertible debt instrument	(555)	(1,000)	—	(1,641)
Advances received from stock subscriptions for series "A" convertible Preferred Stock and Warrants	1,637	—	—	1,637
Proceeds from shareholder advances	—	—	—	9
Net cash provided by financing activities	<u>1,082</u>	<u>8,300</u>	<u>—</u>	<u>35,935</u>
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	546	(3,693)	(6,238)	1,319
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	773	4,466	10,704	—
CASH AND CASH EQUIVALENTS, END OF PERIOD	<u>\$ 1,319</u>	<u>\$ 773</u>	<u>\$ 4,466</u>	<u>\$ 1,319</u>
SUPPLEMENTAL DISCLOSURE – Cash paid for interest	<u>\$ 17</u>	<u>\$ 78</u>	<u>\$ —</u>	<u>\$ 114</u>
<b>NONCASH FINANCING ACTIVITIES</b>				
Issuance of equity warrants in connection with equity offerings	—	—	—	1,172
Conversion of accrued expenses into common stock	—	—	—	303
Cashless exercise of employee stock options	—	—	—	74
Conversion and redemptions of convertible notes and accrued interest into common stock	5,915	5,108	—	12,243
Conversion of extension costs related to convertible notes into common stock	—	—	—	171
Conversion of Prepaid Interest into common stock	(32)	(49)	—	—
Issuance of warrants to induce conversion of notes payable	—	—	—	503
Issuance of stock to acquire Pro-Pharmaceuticals-NV	—	—	—	107

*See notes to consolidated financial statements.*

**PRO-PHARMACEUTICALS, INC.**  
**(A DEVELOPMENT-STAGE COMPANY)**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**(dollar amounts in thousands)**

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

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

The Company is devoting substantially all of its efforts toward product research and development, and raising capital. Its first product candidate began a Phase I clinical trial in end stage patients in February 2003. Patient dosing in this trial was completed in March 2005. This same product candidate began a concurrent Phase II clinical trial in end stage patients in January 2004. Patient dosing in this trial commenced in May of 2005 and was completed in May 2006. The Company has initiated two additional Phase II trials in early stage patients to test the safety and efficacy of the product.

The Company incurred net losses of \$35,160 for the cumulative period from inception (July 10, 2000) through December 31, 2007. The Company expects to incur additional losses and use additional cash in its operations in the near future. Through December 31, 2007, the Company had raised \$37,567 in capital through the issue and sale in private placements of convertible notes, advance preferred stock subscriptions, common stock and warrants. From inception (July 10, 2000) through December 31, 2007, the Company used cash of \$33,723 in its operations.

In July 2007, in order to conserve cash, employees took an approximate 50% pay reduction and reduced other expenses thereby extending the Company's cash runway. In October 2007, the Company commenced a private placement of units Company's Series A 12% Convertible Preferred Stock and warrants which was offered to accredited investors. As of December 31, 2007, the Company held net proceeds, which represent advances for stock subscriptions, from the transaction of approximately \$1,637. In 2008, the Company raised an additional \$75 through this private placement. The stock subscriptions were accepted and the Private Placement was closed on February 4, 2008. This transaction is further discussed in Note 7. At December 31, 2007, the Company had \$1,319 of cash and cash equivalents available to fund future operations, which when combined with the net proceeds of approximately \$3,400 from its February 25, 2008 registered direct share issuance as further discussed in Note 12, management believes is sufficient cash to fund its operations into October 2008. The Company is actively pursuing additional sources of financing and other strategic alternatives.

In June 2007, the Company received a notice from the American Stock Exchange that it is reviewing the Company's eligibility for continued listing of its common stock. In particular, the exchange noted that the Company is not in compliance with its minimum stockholders' equity requirement in two of the last three years. In response to the Company's plan to achieve and sustain compliance with the listing requirements, the exchange granted the Company an extension until October 13, 2008 to regain compliance with the standards. Failure to make progress consistent with the plan or to regain compliance with the continued listing standards by such date could result in the Company's stock being de-listed from the exchange.

The Company is subject to a number of risks similar to those of other development-stage companies, including dependence on key individuals, uncertainty of product development and generation of revenues, dependence on outside sources of capital, risks associated with clinical trials of products, dependence on third-party collaborators for research operations, need for regulatory approval of products, risks associated with protection of intellectual property, and competition with larger, better-capitalized companies. Successful

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completion of the Company's development program and, ultimately, the attainment of profitable operations is dependent upon future events, including obtaining adequate financing to fulfill its development activities and achieving a level of revenues adequate to support the Company's cost structure. There are no assurances that the Company will be able to obtain additional financing on favorable terms, or at all, or successfully market its products.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

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

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

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

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

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

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

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

*Intangible Assets* – Intangible assets include patent costs, consisting primarily of related legal fees, which are capitalized as incurred and amortized over an estimated useful life of five years from issuance. Amortization expense in 2007, 2006 and 2005 was, \$20, \$21 and \$17 respectively and accumulated amortization at December 31, 2007 and 2006 totaled \$90 and \$70, respectively.

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

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The Company wrote off capitalized patent costs of \$23, \$11, and \$20 in 2007, 2006, and 2005, respectively, when it was determined that the underlying intellectual property would have no future benefit to the Company.

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

*Warrants* – The Company has issued common stock warrants in connection with the execution of certain equity and debt financings. Certain warrants are accounted for as derivative liabilities at fair value in accordance with SFAS 133. Such warrants do not meet the criteria in paragraph 11(a) of SFAS 133 that a contract should not be considered a derivative instrument if it is (1) indexed to its own stock and (2) classified in stockholders’ equity. Changes in fair value of derivative liabilities are recorded in the consolidated statement of operations under the caption “Change in fair value of warrant liabilities.” Warrants that are not considered derivative liabilities as defined in SFAS 133 are accounted for at fair value at the date of issuance in additional paid-in capital. The fair value of warrants is determined using the Black-Scholes option-pricing model.

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

*Income Taxes* – The Company accounts for income taxes in accordance with SFAS No. 109, “Accounting for Income Taxes” (“SFAS No. 109”). This statement requires an asset and liability approach to accounting for income taxes based upon the future expected values of the related assets and liabilities. Deferred income tax assets and liabilities are determined based on the differences between the financial reporting and tax bases of assets and liabilities and for tax loss and credit carry forwards, and are measured using the expected tax rates estimated to be in effect when such basis differences reverse. Valuation allowances are established, if necessary, to reduce the deferred tax asset to the amount that will, more likely than not, be realized. In June 2006, the Financial Accounting Standards Board issued FASB Interpretation No. 48, “Accounting for Uncertainty in Income Taxes” (“FIN 48” or the “Interpretation”). This Interpretation clarifies the accounting for uncertainty in income taxes recognized in accordance with SFAS No. 109, “Accounting for Income Taxes.” This Interpretation prescribes a more-likely-than not recognition threshold that a tax position will be sustained upon examination and a measurement attribute for the financial statement recognition of a tax position taken or expected to be taken in a tax return. This Interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company adopted the provisions of FIN 48 on January 1, 2007. As of the date of adoption, the total amount of unrecognized tax benefits was \$1,031 of which \$880, if recognized, would affect the effective tax. As a result of the implementation of FIN 48, the Company did not recognize an adjustment to the deficit accumulated during the development stage for the unrecognized tax benefits because the Company has recorded a full valuation allowance against net operating loss carry forwards. There have been no changes in unrecognized tax benefits as a result of the tax positions taken during the current period (See Note 11 for further detail).

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

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*Fair Value of Financial Instruments* – SFAS No. 107, “Disclosures About Fair Value of Financial Instruments,” requires disclosure of the fair value of certain financial instruments. The Company’s financial instruments consist of cash equivalents, accounts payable and accrued expenses. The estimated fair value of these financial instruments approximates their carrying value due to their short-term nature. Additionally, certain common stock warrants and the Convertible Debentures are recorded as liabilities at fair value as discussed in Note 6.

*Concentration of Credit Risk* – Financial instruments that subject the Company to credit risk consist of cash and cash equivalents and certificates of deposit. The Company maintains cash and cash equivalents and certificates of deposit with well-capitalized financial institutions. The Company has no significant concentrations of credit risk.

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

*Stock-Based Compensation* – Through December 31, 2005, the Company accounted for stock-based compensation to employees and non-employee directors under the intrinsic value method in accordance with Accounting Principles Board (“APB”) Opinion No. 25, “Accounting for Stock Issued to Employees,” (“APB No. 25”) and the related interpretations. Under APB No. 25, no compensation expense is recognized for stock options granted at fair market value and with fixed terms. On January 1, 2006, the Company adopted SFAS 123(R), “Share-Based Payment,” (“SFAS 123(R)”) using the modified prospective method, which results in the provisions of SFAS 123(R) being applied to the consolidated financial statements on a going-forward basis. Prior periods have not been restated. SFAS 123(R) requires companies to recognize stock-based compensation awards as compensation expense on a fair value method. Under the fair value recognition provisions of SFAS 123(R), stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the service period, which generally represents the vesting period. The Company uses the Black-Scholes option-pricing model to calculate the grant date fair value of stock options. The expense recognized over the service period is required to include an estimate of the awards that will be forfeited. Previously, the Company recorded the impact of forfeitures as they occurred. FASB Staff Position (“FSP”) No. 123(R)-3, “Transition Election Related to Accounting for the Tax Effects of Share-Based Payment Awards” required an entity to follow either the transition guidance for the additional-paid-in-capital pool as prescribed in SFAS No. 123(R) or the alternative transition method described in FSP No. 123(R)-3. An entity that adopted SFAS No. 123(R) using the modified prospective application method may make a one-time election to adopt the transition method described in the FSP No. 123(R)-3, and may take up to one year from the latter of its initial adoption of SFAS No. 123(R) or the effective date of the FSP No. 123(R)-3 to evaluate the available transition alternatives and make its one-time election. The Company adopted the alternative transition method provided in the FSP No. 123(R)-3 for calculating the tax effects of stock-based compensation under SFAS No. 123(R). Stock-based compensation is more fully described in Note 8.

*Impact of New Accounting Standards* – In September 2006, the FASB issued SFAS No. 157, “Fair Value Measurements” (“SFAS No. 157”). SFAS 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements would be separately disclosed by level within the fair value hierarchy. In February 2008 the FASB decided that an entity need not apply this standard to nonfinancial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a nonrecurring basis until the subsequent year. The Company will be required to adopt SFAS No. 157 in the first quarter of fiscal year 2008. The Company is currently evaluating the requirements of SFAS No. 157 and has not yet determined the impact, if any, on the Company’s consolidated financial statements.

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In February 2007, the FASB issued SFAS No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities” (“SFAS No. 159”). SFAS No. 159 provides entities with an option to report selected financial assets and liabilities at fair value, with the objective to reduce both the complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. The Company will be required to adopt SFAS No. 159 in the first quarter of fiscal year 2008. The Company is currently evaluating the requirements of SFAS No. 159 and has not yet determined the impact, if any, of its adoption on its consolidated financial statements.

In June 2007, the FASB issued Emerging Issues Task Force, “Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities” (“EITF 07-3”). EITF 07-3 provides that nonrefundable advance payments for goods or services that will be used or renders for future research and development activities should be deferred and capitalized. The Company has historically expensed such payments and will begin capitalizing such payments in the first quarter of 2008. As of December 31, 2007 there are no such payments currently recorded as expense.

### 3. PROPERTY AND EQUIPMENT

Property and equipment consists of the following at December 31:

	<u>2007</u>	<u>2006</u>
Leasehold improvements	\$ 15	\$ 119
Computer and office equipment	192	189
Furniture and fixtures	107	107
Total	314	415
Less accumulated depreciation	(241)	(303)
Property and equipment—net	<u>\$ 73</u>	<u>\$ 112</u>

### 4. ACCRUED EXPENSES

Accrued expenses consist of the following at December 31:

	<u>2007</u>	<u>2006</u>
Legal and accounting fees	\$ 14	\$215
Scientific and clinical fees	214	198
Accrued payroll	97	87
Other	37	12
Total	<u>\$362</u>	<u>\$512</u>

### 5. RELATED PARTY TRANSACTIONS

In 2002, a stockholder and director of the Company agreed to receive compensation for certain 2002 scientific advisory services in the form of 25,354 shares of common stock and 25,354 options at an exercise price of \$2.96 to purchase common stock of the Company. As of December 31, 2002, the Company recorded the deemed fair value of such compensation of approximately \$122 as an accrued liability. The common stock was valued at \$76, based on the closing price of the publicly traded shares of common stock on the date of grant. The options were valued at \$46 using the Black-Scholes option-pricing model, based on a deemed fair value of the Company’s common stock of \$3.00 per share. The accrued liability at December 31, 2002 was converted to equity in 2003 when the 25,354 shares of common stock and 25,354 options were issued to this individual. There are no other related party transactions.

## 6. CONVERTIBLE DEBT AND WARRANT LIABILITIES

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

*2000 and 2001 Convertible Notes* – During 2001 and 2000, the Company issued \$1,036 and \$285 of convertible notes, respectively. In August 2001, the Company offered warrants to holders of its outstanding convertible notes as an inducement to convert the notes prior to the maturity. Holders representing \$1,126 of the outstanding principal and accrued interest chose to convert at a conversion price of \$2.00 per share and received 598,229 common shares and 562,801 warrants. The unexercised warrants expired in 2005. As described in Note 7, the Company valued the warrants at \$503 using the Black-Scholes option-pricing model, and recorded such value as a debt conversion in 2001.

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

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

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

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

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

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“Warrant Liabilities”. Changes in fair value are recognized as either a gain or loss in the consolidated statement of operations under the caption “Change in fair value of warrant liabilities”.

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

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

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

On March 20, 2007, the Company entered into a Waiver and Exchange Agreement (the “Agreement”) with six of seven remaining holders of the Debentures, representing \$3,889 of the \$4,444 outstanding principal. Pursuant to the Agreement, on March 21, 2007, the Company issued approximately 5.2 million shares of its common stock at \$0.75 per share to discharge the principal, accrued and unpaid interest and any other obligations under the Debentures subject to the Agreement. The Agreement also provided that the exercise price of the common stock purchase warrants issued by the Company contemporaneously with the Debentures, would be reduced to \$1.00 (and the number of shares issuable on exercise proportionately increased) to take into account the dilutive effect of this transaction.

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

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

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

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

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

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

	Fair Value of Debentures	Fair Value of Warrant Liabilities	Total
Balance January 1, 2004	\$	\$ 1,925	\$ 1,925
April 2004 Investor Warrants, April 2004 Placement Agent Warrants, August 2004 Investor Warrants and August 2004 Placement Agent Warrants issuance		7,110	7,110
Fair value adjustment		(3,410)	(3,410)
Balance December 31, 2004		5,625	5,625
Fair value adjustment		311	311
Balance December 31, 2005		5,936	5,936
February 2006 PIPE Transaction allocation of initial proceeds	7,747	2,253	10,000
Cash transaction costs	(700)		(700)
Conversions, at net carrying amount (1)	(1,726)		(1,726)
Redemptions, at net carrying amount (2)	(2,936)		(2,936)
Redemptions paid in cash	(1,000)		(1,000)
Amortization of debt discount	1,358		1,358
Fair value adjustment	2,394	(7,818)	(5,424)
Balance December 31, 2006	\$ 5,137	\$ 371	\$ 5,508
Redemptions, at net carrying amount (3)	(556)		(556)
Conversions, related to waiver and exchange agreement dated March 20, 2007 at net carrying amount (4)	(5,315)		(5,315)
Redemptions paid in cash	(555)		(555)
Amortization of debt discount	257		257
Fair value adjustment	1,032	1,698	2,730
Balance December 31, 2007	\$ —	\$ 2,069	\$ 2,069

- (1) Represents conversions of principal value of \$1,575, debt discount charge of \$336 and a fair value adjustment credit of \$487. These amounts plus \$19 of accrued interest were credited to common stock and additional paid in capital.
- (2) Represents payments in common stock of principal value of \$2,500 prepayment of January 1 and February 1, 2007 scheduled maturity of principal value of \$500 each and a fair value adjustment credit of \$436. These amounts plus \$427 of accrued interest were credited to common stock and additional paid in capital.
- (3) Represents payments in common stock of principal value of \$481 and a fair value adjustment credit of \$75. These amounts plus \$29 of accrued interest were credited to common stock and additional paid in capital.

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

The following table summarizes information with regard to outstanding warrants issued in connection with equity and debt financings as of December 31, 2007. These warrants are classified as warrant liabilities with the exception of the 2001 Placement Agent Warrants which expire on February 1, 2012 and are classified in additional paid-in capital:

<u>Issued in Connection With</u>	<u>Number Issued</u>	<u>Exercise Price</u>	<u>Exercisable Date</u>	<u>Expiration Date</u>
2001 Placement Agents	110,000	\$ 3.50	February 1, 2002	February 1, 2012
October 2003 PIPE Transaction (1)				
2003 Investor Warrants	657,293	4.75	October 2, 2003	October 2, 2008
April 2004 PIPE Transaction (2)				
April 2004 Investor Warrants	618,056	4.82	April 7, 2004	April 7, 2009
August 2004 PIPE Transaction				
August 2004 Investor Warrants	2,000,000	4.20	February 13, 2005	August 12, 2009
August 2004 Placement Agent Warrants	100,000	4.20	February 13, 2005	August 12, 2009
February 2006 PIPE Transaction				
2006 Investor Warrants (3)	4,493,295	1.00	August 15, 2006	August 14, 2011
2006 Investor Warrants (4)	149,031	3.35	August 15, 2006	August 14, 2011
2006 Placement Agent Warrants	149,031	3.35	August 15, 2006	August 14, 2011
<b>Total</b>	<b>8,276,706</b>			

- (1) The exercise price of the warrants have been adjusted from \$5.29 per share to \$4.75 per share due to the subsequent issuance of equity related instruments.
- (2) The exercise price of the warrants have been adjusted from \$5.30 per share to \$4.82 per share due to the subsequent issuance of equity related instruments.
- (3) The exercise price of the warrants has been adjusted from \$3.35 per share to \$1.00 per share and an additional 3,152,014 warrants were issued in connection with the Waiver and Exchange Agreement dated March 20, 2007, entered into with certain holders of the 7% Convertible Debentures.
- (4) Original investor warrants not subject to the Waiver and Exchange Agreement dated March 20, 2007.

The Company used a binomial financial model to calculate the fair value of the Debentures. The Company uses the Black-Scholes pricing model to calculate fair value of the 2006 Investor Warrants, 2006 Placement Agent Warrants, August 2004 Investor Warrants, August 2004 Placement Agent Warrants, April 2004 Investor Warrants, April 2004 Placement Agent Warrants (expired unexercised in 2007) and the 2003 Investor Warrants.

Key assumptions used to apply these models as of December 31, 2007 and 2006 are as follows:

	<u>Warrants</u>		<u>Debentures 2006</u>
	<u>2007</u>	<u>2006</u>	
Risk free interest rate	3.16% -3.34%	4.71% - 5.00%	5.00%
Expected life	0.75 years -3.62 years	0.25 years - 5.08 years	1 year
Expected volatility of common share price	95%	65% - 80%	104%
Common share price	\$ 0.70	\$ 0.45	\$ 0.45

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

## 7. STOCKHOLDERS' (DEFICIT) EQUITY

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

*2001 Private Placement* – From May 25, 2001 through December 3, 2001, the Company sold a total of 689,300 shares of common stock for proceeds of \$2,221, net of \$17 of issuance costs through a private placement of securities (the "2001 Private Placement").

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

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

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

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

*2002 Private Placement* – In September 2002, the Company began a private placement (the "2002 Private Placement") of up to 10,000,000 shares of common stock at \$1.00 per share. As of December 31, 2002, the Company had sold 3,223,360 shares for proceeds of \$2,861, net of issuance costs of \$212 and stock subscription receivable of \$150, which related to shares purchased but for which payment had not been received as of December 31, 2002. This offering was closed on January 14, 2003, although subsequent to year end the Company sold an additional 1,088,000 shares for additional proceeds of \$1,070, net of \$18 of offering costs.

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

Shares placed by such registered adviser, finder and finder's agent were accounted for as offering costs and valued at \$1.00 per share, consistent with the price paid for the shares placed in the offering. Such offering costs were netted against the proceeds of the 2002 Private Placement. Since none of the 174,250 shares had been

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issued as of December 31, 2002, the Company recorded the obligation to issue such shares as offering costs payable. The additional 12,250 shares issued in January 2003 were also valued at \$1.00 per share and included in the \$18 offering costs recorded at the closing. These shares were subsequently issued in 2003.

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

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

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

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

*October 2003 “PIPE” Transaction* – On October 2, 2003 the Company closed a private offering, structured as a Private Investment, Public Equity (“PIPE”), exempt from registration under Section 4(2) of the Securities Act of 1933, in which it sold to institutional investors 1,314,571 of the 1,428,571 offered shares of common stock at \$3.50 per share for proceeds of \$4,041, net of issuance costs of \$559. In connection with this offering, the Company issued warrants (defined in Note 6 as the 2003 Investor Warrants and the 2003 Placement Agent Warrants). The Company allocated proceeds from this offering in the amounts of \$2,531 and \$191 representing the fair value of the 2003 Investor Warrants and the 2003 Placement Agent Warrants, respectively. See Note 6 for additional description of these warrants which are recorded as derivative liabilities.

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

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

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In 2004, the stockholders approved an increase in the number of “undesigned” shares that the Company is authorized to issue by 5,000,000 such that the total number of authorized “undesigned” shares following the effectiveness of such increase is 10,000,000 at December 31, 2006.

*2008 Private Placement.* – On February 4, 2008, the Company closed a private placement begun in October 2007 of its Series A 12% Convertible Preferred Stock (the “Series A Preferred”) and related warrants to accredited investors (the “2008 Private Placement”). In the 2008 Private Placement, the Company offered to sell, for \$1.00 per unit, a unit comprised of (i) one share of Series A 12% Convertible Preferred Stock, (ii) a warrant to purchase one share of common stock for \$1.50, and (iii) a warrant to purchase one share of common stock for \$2.00. The Series A Preferred accrues interest at 12% per annum payable at the Company’s option in cash or shares of common stock valued per share at the higher of \$1.00 or 100% of the value weighted average price of the Company’s share price for the 20 consecutive trading days prior to the applicable dividend payment date. Each share of Series A Preferred is entitled to one vote on matters presented to stockholders for action, and is convertible at any time by the holder to one share of common stock, subject to adjustment in the event of a stock dividend, stock split or combination, reclassification or similar event. The Company has the right to require conversion if the closing price of the Common Stock exceeds \$3.00 for 15 consecutive trading days and a registration statement covering the resale of the shares of common stock issuable upon conversion of the Series A Preferred is then in effect. Each warrant is exercisable at the option of the holder solely for cash beginning August 13, 2008 and expires on February 4, 2012. The exercise price of each warrant is adjustable in the event of a stock split or stock combination, capital reorganization, merger or similar event.

As of December 31, 2007, the Company had received subscription advances of \$1,637 net of transaction expenses of \$31. In 2008, the Company received additional subscription proceeds of \$75. The subscriptions for the securities offered in the 2008 Private Placement were accepted by the Company and the 2008 Private Placement was closed on February 4, 2008. As of December 31, 2007, the Company had not accepted the subscriptions or issued securities to investors whose subscription advances had been received prior to year end. The advanced proceeds received in 2007 from subscribers are recorded on the consolidated balance sheet as “Advances received from subscribers for Series A 12% Convertible Preferred Stock and related warrants.”

## **8. STOCK BASED COMPENSATION**

*Summary of Stock-Based Compensation Plans* – In October 2001, the Company’s Board of Directors adopted the Pro-Pharmaceuticals, Inc. 2001 Stock Incentive Plan (the “Incentive Plan”), which permits awards of incentive and nonqualified stock options and other forms of incentive compensation to employees and non-employees such as directors and consultants. The Board has 5,000,000 shares of common stock for issuance upon exercise of grants made under the Incentive Plan. Options granted under the Incentive Plan vest either immediately or over a period of up to three years, and expire 3 years to 10 years from the grant date. At December 31, 2007, 1,907,000 shares were available for future grant under the Incentive Plan.

In 2003, the stockholders approved the Pro-Pharmaceuticals, Inc. 2003 Non-Employee Director Stock Option Plan (the “Director Plan”), which permits awards of stock options to non-employee directors. The stockholders reserved 1,000,000 shares of common stock for issuance upon exercise of grants made under the Director Plan. At December 31, 2007, 829,750 shares were available for future grant under the Director Plan.

In addition, the Company has awarded 464,604 non-plan stock option grants to non-employees. The non-plan grants have vesting periods and expiration dates similar to those options granted under the Incentive Plan. All 464,604 non-plan grants are outstanding at December 31, 2007.

*Change in Accounting for Stock-Based Compensation* – As disclosed in Note 2, on January 1, 2006, the Company adopted SFAS No. 123(R). Due to the adoption of SFAS No. 123(R), the Company’s results for the years ended December 31, 2007 and December 31, 2006 include incremental compensation related to stock options totaling \$616 and \$416 respectively.

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Stock-based compensation expense for both employees and non-employees totaled \$616, \$416 and \$22 in 2007, 2006 and 2005 respectively. Members of the Board of Directors receive stock options for each Board and Committee meeting attended. The options are typically granted in the year following service. The Company expends the value of stock options as earned. In 2007 and 2006, Board members earned approximately 67,000 and 42,000 stock options respectively.

Prior to January 1, 2006, the Company accounted for stock-based compensation plans in accordance with the provisions of APB Opinion No. 25, as permitted by SFAS No. 123. Under APB Opinion No. 25, the Company was not required to recognize compensation expense for the cost of stock options, when such options had an exercise price equal to the market price at the date of grant. If the employee fair value based method as prescribed by SFAS No. 123 had been applied by the Company, the effect on net loss and loss per share for 2005 and net loss for the cumulative period from inception to December 31, 2007 would have been as follows:

Net loss	<u>2005</u> \$(6,855)
Deduct stock-based compensation determined under the fair-value method	(287)
Net loss—pro forma	<u>\$ (7,142)</u>
Basic and diluted loss per share:	
As reported	\$ (0.25)
Pro forma	\$ (0.26)

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

	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>Cumulative Period from Inception (July 10, 2000) to December 31, 2007</u>
Risk-free interest rate	3.41% – 4.45%	4.75%	3.48%	3.21%
Expected life of the options	5 years	5 years	3 years	3.70 years
Expected volatility of the underlying stock	95%	65%	75%	91%
Expected dividend rate	None	None	None	None

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

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

The risk-free interest rate used in the Black-Scholes option pricing model is determined by reference to historical U.S. Treasury zero-coupon bond issues with terms equal to the expected terms of the equity awards. In addition, an expected dividend yield of zero is used in the option valuation model, because the Company does not expect to pay any cash dividends in the foreseeable future. Lastly, in accordance with SFAS No. 123(R), the Company is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if

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actual forfeitures differ from those estimates. In order to determine an estimated pre-vesting option forfeiture rate, the Company used historical forfeiture data. This estimated forfeiture rate has been applied to all unvested options outstanding as of January 1, 2006 and to all options granted since January 1, 2006. Therefore, stock-based compensation expense is recorded only for those options that are expected to vest. At December 31, 2007, the Company does not anticipate any awards will be forfeited in the calculation of compensation expense due to the limited number of employees that receive stock option grants and the Company's historical employee turnover.

The following table summarizes the stock option activity in the stock based compensation plans from January 1, 2005 through December 31, 2007:

	Shares	Exercise Price Per Share	Weighted Average Exercise Price
Outstanding, January 1, 2005	2,403,354	\$ 1.90 – 5.80	\$ 3.61
Granted	272,000	2.61 – 5.16	3.31
Outstanding, December 31, 2005	2,675,354	\$ 1.90 – 5.80	\$ 3.57
Granted	399,000	3.75	3.75
Forfeited	(15,000)	3.75	3.75
Outstanding, December 31, 2006	3,059,354	\$ 1.90 – 5.80	\$ 3.60
Granted	1,048,500	0.63 – 1.01	0.94
Forfeited	(430,000)	1.01 – 5.80	2.82
Outstanding, December 31, 2007	<u>3,677,854</u>	<u>\$ 0.63 – 4.05</u>	<u>\$ 2.93</u>

The following tables summarize information about stock options outstanding at December 31, 2007:

Exercise Price	Options Outstanding			Options Exercisable	
	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
\$0.63 – \$0.70	225,000	4.97	\$ 0.69	205,000	\$ 0.70
\$1.01 – \$2.70	955,500	4.69	\$ 1.32	385,500	\$ 1.78
\$2.92 – \$4.05	2,497,354	4.63	\$ 3.75	2,302,356	\$ 3.75
	<u>3,677,854</u>	4.66	\$ 2.93	<u>2,892,856</u>	\$ 3.27

The weighted-average grant-date fair values of options granted during 2007, 2006 and 2005 were \$0.70, \$2.20 and \$1.41, respectively. As of December 31, 2007 there were 784,998 of unvested options which will vest as follows: 296,671 in 2008, 291,663 in 2009 and 196,664 in 2010. Total expected unrecognized compensation cost related to such unvested options is \$570, which is expected to be recognized over a weighted-average period of 1.0 years. As of December 31, 2007, the aggregate intrinsic value of outstanding options is \$18 based on the Company's closing common stock price of \$0.70 as of December 31, 2007. The aggregate intrinsic value of outstanding fully vested options and exercisable options is \$4, based on the Company's closing common stock price of \$0.70 as of December 31, 2007.

No options were exercised during the years ended December 31, 2007, 2006 and 2005. No cash has been received from the exercise of employee stock options during the cumulative period from inception to December 31, 2007. The intrinsic value of options exercised for the cumulative period from inception was \$74 resulting from the cashless exercise of options in October 2003.

During the years ended December 31, 2007, 2006, 2005 and the cumulative period from inception to December 31, 2007, 485,169, 160,667, 193,667 and 2,892,856 stock options, net of forfeitures vested respectively. The total fair value of options vested during the years ended December 31, 2007, 2006, 2005 and the cumulative period from inception to December 31, 2007 was \$491, \$241, \$250 and \$5,568, respectively.

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

In March 2002, the Company entered into a second agreement with the same non-employee, by which the Company granted 2,000 options a month to purchase common stock at an exercise price of \$3.50 in consideration for monthly consulting services. On November 11, 2002 such agreement was superseded by an amendment, which was effective retroactively to the date of the original agreement, March 1, 2002. Under the amended agreement, the Company granted 24,000 options on March 1, 2002, which vest at a rate of 2,000 options per month, as services are performed. These options were valued at \$11 using the Black-Scholes option-pricing model, based on a grant date fair value of the Company's common stock of \$2.16 per share. During 2002, the Company recorded a \$41 charge to stock compensation expense related to the 20,000 options that vested during the year. As of December 31, 2002, the Company had deferred compensation of \$11 that related to the remaining unvested options, which was recognized in 2003.

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

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

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

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

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

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

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

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

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

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

## 9. EARNINGS PER SHARE

Basic loss per share is based on the weighted-average number of common shares outstanding during each period. Diluted loss per share is based on basic shares as determined above plus the incremental shares that would be issued upon the assumed exercise of in-the-money stock options and warrants using the treasury stock method and convertible debenture using the if-converted method. The computation of diluted net loss per share does not assume the issuance of common shares that have an anti-dilutive effect on net loss per share. For the years ended December 31, 2007, 2006 and 2005, all stock options and warrants were excluded from the computation of diluted net income (loss) per share. For the year ended December 31, 2006 all potential shares related to conversion of the convertible debentures were excluded from the computation of diluted net income (loss) per share as the effect would be anti-dilutive. During the year ended December 31, 2007 all potential shares related to the conversion of the convertible debenture were excluded from the computation of diluted net income (loss) per share since to include them would be anti-dilutive and as of December 31, 2007 the convertible debenture has been repaid in full. Dilutive shares which could exist pursuant to the exercise of outstanding stock options and warrants at December 31, 2007, 2006 and 2005 totaled approximately 11,954,561, 8,245,853, and 6,397,851 respectively. These amounts were not included in the calculation because their affect would have been anti-dilutive.

	<u>2007</u>	<u>2006</u>	<u>2005</u>
Net Loss-basic and diluted	\$(9,433)	\$(3,193)	\$(6,855)
	<u>2007</u>	<u>2006</u>	<u>2005</u>
Weighted average common shares outstanding-basic and diluted	38,980,548	28,472,898	27,315,411
Net Loss Per Share-basic and diluted	\$ (0.24)	\$ (0.11)	\$ (0.25)

## 10. COMMITMENTS AND CONTINGENCIES

*Lease Commitments* – The Company leases its facility under a non-cancelable operating lease that expires in August 2011. In connection with the operating lease, the Company has issued a letter of credit which is secured by restricted cash on deposit with the bank as a security deposit of approximately \$59. Prior to this lease, the Company leased its facility under a non-cancelable operating lease that expired in May of 2006. Rent expense under these operating leases was \$259, \$170, and \$111 for the years ended December 2007, 2006, 2005 and the cumulative period from inception (July 10, 2000) to December 31, 2007, respectively.

Future minimum payments under this lease as of December 31, 2007 are approximately as follows:

<u>Year ended December 31,</u>	
2008	\$289
2009	267
2010	276
2011	167
2012	—
Total lease payments	<u>\$999</u>

*Contingency* – In January 2004, David Platt, Ph.D., the Company's Chairman and Chief Executive Officer, filed a lawsuit in Massachusetts Superior Court against GlycoGenesys, Inc. for various claims including breach of contract. GlycoGenesys asserted counterclaims against us and Dr. Platt alleging tortious interference, misappropriation of proprietary rights, defamation and unfair competition, and seeks monetary damages and injunctive relief related to our intellectual property. The Company and Dr. Platt have denied any liability for the counterclaims. Prospect Therapeutics, Inc. (formerly known as Marlborough Research and Development, Inc.)

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purchased certain assets including this lawsuit from the GlycoGenesys bankruptcy estate and continues prosecuting the counterclaims against the Company and Dr. Platt. The Company filed a motion for summary judgment relative to the counterclaims on November 8, 2007. Limited discovery may still be taken. The Company believes these claims are without merit and intends to contest them vigorously. Additionally, the Company believes that any impact on the financial statements is neither probable or reasonably estimable and therefore no amounts have been recorded as of December 31, 2007.

The Company's Board of directors authorized the indemnification of Platt for the expenses of his defense of the counterclaims. In 2007 the Company incurred no expenses in connection with this defense. Through December 31, 2007 the Company has incurred cumulative expenses of approximately \$438 in connection with this defense.

In January 2005, the Company filed a request with the U.S. Patent and Trademark Office for an inter partes re-examination of U.S. Patent No. 6,680,306 owned by GlycoGenesys, Inc. because the Company believes that the invention claimed in this patent is anticipated by other inventions (technically, "prior art"), including the Company's U.S. Patent No. 6,645,946 for DAVANAT®. The Patent Office agreed with the Company's argument that all claims stated in the '306 patent are anticipated by prior art. The matter is now before the Patent Office for a final decision. The Company believes that the actions of the Patent Office support the Company's belief that the invention claimed in the Company's DAVANAT® patent is prior art relative to the GlycoGenesys patent. Additionally, the Company believes that any impact on the financial statements is neither probable nor reasonably estimable and therefore no amounts have been recorded as of December 31, 2007.

On January 30, 2008, Custom Equity Research, Incorporated (d/b/a Summer Street Research Partners) ("Summer Street") filed a lawsuit against the Company in the Superior Court of the Commonwealth of Massachusetts, alleging claims for breach of contract, declaratory judgment and unjust enrichment arising out of an engagement letter under which Summer Street agreed to provide institutional investment placement services to the Company. Summer Street claims it is entitled to a placement fee for each placement made during the term of the agreement and for each issuance of securities made or agreed to be made by the Company from October 17, 2007 through November 16, 2008. On February 20, 2008, the Company filed a Motion to Dismiss. The Company believes the lawsuit is without merit and intend to contest it vigorously. Additionally, the Company believes that any impact on the financial statements is neither probable or reasonably estimable and therefore no amounts have been recorded as of December 31, 2007.

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

## **11. INCOME TAXES**

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

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

	<u>2007</u>	<u>2006</u>
Operating loss carryforwards	14,187	\$ 11,901
Tax credit carryforwards	82	1,035
Other temporary differences	19	(85)
	<u>14,288</u>	<u>12,851</u>
Less valuation allowance	(14,288)	(12,851)
Net deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

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

	<u>2007</u>	<u>2006</u>	<u>2005</u>
Tax benefit at U.S. statutory rates	(34.0)%	(34.0)%	(34.0)%
State tax benefit	(6.2)%	(10.9)%	(6.2)%
Permanent differences	12.1%	(38.8)%	.2%
Research and development credits	(0.8)%	(12.2)%	(2.3)%
Valuation allowance	28.9%	95.9%	42.3%
	<u>0%</u>	<u>0%</u>	<u>0%</u>

As of December 31, 2007, the Company has federal and state net operating loss carryforwards totaling \$36,012 and \$30,993, respectively, which expire through 2027. In addition, the Company has federal and state research and development credits of \$49 and \$29 and investment tax credits of approximately \$4, which expire through 2027. Changes in the Company's ownership, as defined by Section 382 of the Internal Revenue Code, could limit the amount of carryforwards which may be realized in future periods. Because of the Company's limited operating history and its recorded losses, management has provided, in each of the last two years, a 100% allowance against the Company's net deferred tax assets.

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

Beginning Uncertain Tax Benefits	\$ 1,031
Current Year—Increase	51
Current Year—Decrease	None
Current Year—Interest/Penalties	None
Settlements	None
Expire Statutes	None
Ending Uncertain Tax Benefits	\$ 1,082

Included in the balance of unrecognized tax benefits at December 31, 2007, are \$1,082 of tax benefits \$890 of which, would affect the effective tax rate. We have not recognized an adjustment to the deficit accumulated during the development stage for unrecognized tax benefits because we have recorded a full valuation allowance against net operating loss carry forwards.

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

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

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

### 12. SUBSEQUENT EVENTS

On January 29, 2008 the Company filed registration statement on Form S-3 with the Securities and Exchange Commission (“SEC”), under which the Company may offer shares of its common stock, preferred stock, common stock, warrants and units in one or more offerings with a total value of up to \$10 million. Unless otherwise stated in a prospectus supplement, net proceeds of securities issued and sold may include working capital, capital expenditures, research and development expenditures and other matters stated in the prospectus contained in the registration statement. The staff of the SEC declared the registration statement effective on February 5, 2008. On February 15, 2008, the Company filed a prospectus supplement (the “Prospectus Supplement”) in which it offered (i) an aggregate of 7,500,000 shares of common stock at \$0.50 per share, (ii) warrants , with a term of five years, to purchase an aggregate of 7,500,000 share of its common stock at an exercise price of \$0.70 per share, and (iii) warrants, with a term of four months, to purchase an aggregate of 3,000,000 share of its common stock at an exercise price of \$0.67 per share. The warrants are exercisable 181 days after the transaction closes. On February 25, 2008, the Company closed the transaction set forth in the Prospectus Supplement and received net proceeds of approximately \$3.4 million after transaction costs.

### 13. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

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

	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
<b>2007</b>				
Total operating expenses	\$ 1,924	\$ 1,772	\$ 1,368	\$ 1,391
Total other income (expense)	(3,650)	1,808	(1,218)	82
Net income (loss)	(5,574)	36	(2,586)	(1,309)
Net income (loss) per share:				
Basic	(0.16)	(0.00)	(0.06)	(0.02)
Diluted	(0.16)	(0.00)	(0.06)	(0.02)
	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
<b>2006</b>				
Total operating expenses	\$ 1,724	\$ 2,099	\$ 1,929	\$ 1,296
Total other income (expense)	(6,602)	2,329	7,600	528
Net income (loss)	(8,326)	230	5,671	(768)
Net income (loss) per share:				
Basic	(0.30)	0.01	0.20	(0.03)
Diluted	(0.30)	(0.03)	0.18	(0.03)

**PRO-PHARMACEUTICALS, INC.**  
**(A Development-Stage Company)**  
**CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)**  
**(dollars in thousands except share and per share data)**

	September 30, 2008	December 31, 2007
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 816	\$ 1,319
Prepaid expenses and other current assets	79	70
Total current assets	<u>\$ 895</u>	<u>\$ 1,389</u>
PROPERTY AND EQUIPMENT—NET	48	73
RESTRICTED CASH	62	70
INTANGIBLE ASSETS—NET	228	250
<b>TOTAL ASSETS</b>	<u><b>\$ 1,233</b></u>	<u><b>\$ 1,782</b></u>
<b>LIABILITIES AND STOCKHOLDERS' DEFICIT</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 160	\$ 601
Accrued expenses	244	362
Accrued dividends payable	104	—
Advances received from subscribers for Series A 12% Convertible Preferred Stock and related warrants	—	1,637
Advances received for equity consideration	200	—
Total current liabilities	<u>\$ 708</u>	<u>\$ 2,600</u>
WARRANT LIABILITIES	868	2,069
OTHER LONG TERM LIABILITIES	40	37
Total liabilities	<u>\$ 1,616</u>	<u>\$ 4,706</u>
CONTINGENCIES (Note 7)		
STOCKHOLDERS' DEFICIT:		
Undesignated shares, \$0.01 par value; 10,000,000 shares authorized; 5,000,000 shares designated Series A 12% Convertible Preferred Stock and 5,000,000 shares undesignated at September 30, 2008 and December 31, 2007	\$ —	\$ —
Series A 12% Convertible Preferred Stock; 5,000,000 shares designated, 1,742,500 issued and outstanding at September 30, 2008 and 1,667,500 shares subscribed, none issued and outstanding at December 31, 2007	704	—
Common stock, \$0.001 par value; 200,000,000 shares authorized, 47,947,609 and 40,364,792 issued and outstanding at September 30, 2008 and December 31, 2007 respectively;	48	40
Additional paid-in capital	36,547	32,196
Deficit accumulated during the development stage	(37,682)	(35,160)
Total stockholders' deficit	<u>\$ (383)</u>	<u>\$ (2,924)</u>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT</b>	<u><b>\$ 1,233</b></u>	<u><b>\$ 1,782</b></u>

*See notes to unaudited condensed consolidated financial statements.*

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

**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)**  
**(dollars in thousands except share and per share data)**

	Three Months Ended September 30,		Nine Months Ended September 30,		Cumulative Period from Inception (July 10, 2000) to September 30, 2008
	2008	2007	2008	2007	
<b>OPERATING EXPENSES:</b>					
Research and development	\$ 338	\$ 332	\$ 1,504	\$ 1,668	\$ 17,085
General and administrative	601	1,036	2,721	3,396	25,176
Total operating loss	\$ (939)	\$ (1,368)	\$ (4,225)	\$ (5,064)	\$ (42,261)
<b>OTHER INCOME AND EXPENSE</b>					
Interest income	5	11	27	91	764
Interest expense		(18)		(343)	(4,451)
Change in fair value of convertible debt instrument		5		(1,091)	(3,426)
Change in fair value of warrant liabilities	1,148	(1,216)	1,863	(1,717)	11,879
Total other income (expense)	\$ 1,153	\$ (1,218)	\$ 1,890	\$ (3,060)	\$ 4,766
NET INCOME (LOSS)	\$ 214	\$ (2,586)	\$ (2,335)	\$ (8,124)	\$ (37,495)
<b>SERIES A 12% CONVERTIBLE PREFERRED STOCK DIVIDEND</b>					
	52	—	187	\$ —	(187)
NET INCOME (LOSS) APPLICABLE TO COMMON STOCK	\$ 162	\$ —	\$ (2,522)	\$ —	\$ (37,682)
NET INCOME (LOSS) PER SHARE—BASIC	\$ 0.00	\$ (0.06)	\$ (0.05)	\$ (0.21)	
<b>WEIGHTED AVERAGE COMMON SHARES OUTSTANDING—BASIC</b>					
	47,947,609	40,364,792	46,402,947	38,519,133	
NET INCOME (LOSS) PER SHARE—DILUTED	\$ 0.00	\$ (0.06)	\$ (0.05)	\$ (0.21)	
<b>WEIGHTED AVERAGE COMMON SHARES OUTSTANDING—DILUTED</b>					
	47,947,609	40,364,792	46,402,947	38,519,133	

*See notes to unaudited condensed consolidated financial statements.*

**PRO-PHARMACEUTICALS, INC.**  
**(A Development-Stage Company)**  
**CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT**  
**SIX MONTHS ENDED SEPTEMBER 30, 2008 (UNAUDITED)**  
**(dollars in thousands except share data)**

	<u>Common Stock</u>		<u>Preferred Stock</u>		<u>Additional Paid in Capital</u>	<u>Deficit Accumulated During the Development Stage</u>	<u>Total Stockholders' Deficit</u>
	<u>Number of Shares</u>	<u>Amount</u>	<u>Number of Shares</u>	<u>Amount</u>			
BALANCE, JANUARY 1, 2008	40,364,792	\$ 40	—	\$ —	\$ 32,196	\$ (35,160)	\$ (2,924)
Net loss						(2,335)	(2,335)
Series A 12% Convertible Preferred Dividend						(187)	(187)
Series A 12% Convertible Preferred Stock issued in a February 4, 2008 private placement (net of cash issuance costs of \$52)			1,742,500	704			704
Common stock issued in a February 25, 2008 offering (net of cash issuance costs of \$369)	7,500,000	8			1,036		1,044
Issuance of common stock in payment of Series A 12% Convertible Preferred Dividend	82,817	—			83		83
Issuance of Common Stock Warrants					20		20
Reclassification of Warrant Liabilities					2,662		2,662
Stock-based compensation expense					550		550
BALANCE, SEPTEMBER 30, 2008	<u>47,947,609</u>	<u>\$ 48</u>	<u>1,742,500</u>	<u>\$ 704</u>	<u>\$ 836,547</u>	<u>\$ (37,682)</u>	<u>\$ (383)</u>

*See notes to unaudited condensed consolidated financial statements.*

**PRO-PHARMACEUTICALS, INC.**  
**(A Development-Stage Company)**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)**  
**(dollars in thousands)**

	Nine Months Ended September 30,		Cumulative Period from Inception (July 10, 2000) to September 30, 2008
	2008	2007	
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net loss	\$ (2,335)	\$ (8,124)	\$ (37,495)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	39	49	478
Stock-based compensation expense	550	479	2,638
Non-cash interest expense	—	328	4,279
Change in fair value of convertible debt instrument	—	1,091	3,426
Change in fair value of warrant liabilities	(1,863)	1,717	(11,879)
Write off of intangible assets	11	—	181
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(9)	51	(76)
Accounts payable and accrued expenses	(559)	184	522
Other long term liabilities	3	11	40
Net cash used in operating activities	<u>\$ (4,163)</u>	<u>\$ (4,214)</u>	<u>\$ (37,886)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Maturity of certificate of deposit	\$ —	\$ 5,000	\$ —
Purchases of property and equipment	(2)	(2)	(421)
Change in restricted cash	8	(11)	(62)
Increase in patents costs and other assets	—	(74)	(404)
Net cash provided by (used in) investing activities	<u>\$ 6</u>	<u>\$ 4,913</u>	<u>\$ (887)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Net proceeds from issuance of common stock and warrants	\$ 3,381	\$ —	\$ 28,690
Net proceeds from issuance of Series A 12% Convertible Preferred Stock and related warrants	53	—	1,690
Net proceeds from issuance of convertible debt instruments	—	—	10,621
Repayment of convertible debt instruments	—	(334)	(1,641)
Proceeds from issuance of common stock warrants	20	—	20
Proceeds from shareholder advances	200	—	209
Net cash provided by (used in) financing activities	<u>\$ 3,654</u>	<u>\$ (334)</u>	<u>\$ 39,589</u>
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>(503)</b>	<b>365</b>	<b>816</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD</b>	<b>1,319</b>	<b>773</b>	<b>—</b>
<b>CASH AND CASH EQUIVALENTS, END OF PERIOD</b>	<b><u>\$ 816</u></b>	<b><u>\$ 1,138</u></b>	<b><u>\$ 816</u></b>
<b>SUPPLEMENTAL DISCLOSURE – Cash paid for interest</b>	<b><u>\$ —</u></b>	<b><u>\$ 15</u></b>	<b><u>\$ 114</u></b>
<b>NONCASH FINANCING ACTIVITIES:</b>			
Issuance of equity warrants in connection with equity offerings	—	—	<u>\$ 1,172</u>
Conversion of accrued expenses into common stock	—	—	<u>\$ 303</u>
Cashless exercise of employee stock options	—	—	<u>\$ 74</u>
Conversion and redemptions of convertible notes and accrued interest into common stock	—	<u>\$ 5,915</u>	<u>\$ 12,243</u>
Conversion of extension costs related to convertible notes into common stock	—	—	<u>\$ 171</u>
Conversion of prepaid interest into common stock	—	<u>\$ (32)</u>	<u>—</u>
Payment of 12% Convertible Preferred dividend in common stock	<u>\$ 83</u>	—	<u>\$ 83</u>
Dividends payable on preferred stock	<u>\$ 104</u>	—	<u>\$ 104</u>
Issuance of warrants to induce conversion of notes payable	—	—	<u>\$ 503</u>
Issuance of stock to acquire Pro-Pharmaceuticals-NV	—	—	<u>\$ 107</u>

*See notes to unaudited condensed consolidated financial statements.*

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

**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**

**1. BASIS OF PRESENTATION**

The unaudited condensed consolidated financial statements as reported in this Quarterly Report on Form 10-Q reflect all adjustments which are, in the opinion of management, necessary to present fairly the financial position of Pro-Pharmaceuticals, Inc. (the "Company") as of September 30, 2008 and the results of its operations for the three and nine months ended September 30, 2008 and September 30, 2007 and the cumulative period from inception (July 10, 2000) through September 30, 2008, the statement of stockholders' deficit for the nine months ended September 30, 2008 and its cash flows for the nine months ended September 30, 2008 and September 30, 2007 and for the cumulative period from inception (July 10, 2000) to September 30, 2008. All adjustments made to the interim financial statements include all those of a normal and recurring nature. The results for interim periods are not necessarily indicative of results which may be expected for any other interim period or for the full year.

The unaudited condensed consolidated financial statements of the Company should be read in conjunction with its Annual Report on Form 10-K for the year ended December 31, 2007.

The financial statements of the Company have been prepared assuming that the Company will continue as a going concern. As shown in the unaudited condensed consolidated financial statements, the Company incurred net losses of approximately \$37.5 million for the cumulative period from inception (July 10, 2000) through September 30, 2008. The Company's net losses have resulted principally from costs associated with (i) research and development expenses, including clinical trial costs, (ii) general and administrative activities and (iii) the Company's financing transactions including interest and the costs related to fair value accounting for the Company's convertible debt instrument and warrant liabilities. As a result of planned expenditures for future research, discovery, development and commercialization activities and potential legal cost to protect its intellectual property, the Company expects to incur additional losses and use additional cash in its operations for the foreseeable future. From inception (July 10, 2000) through September 30, 2008, the Company has raised approximately \$41.2 million in capital through sale and issuance of common stock, common stock purchase warrants, and debt securities in public and private offerings. From inception (July 10, 2000) through September 30, 2008, the Company has used approximately \$37.9 million of cash in its operations. At September 30, 2008, the Company had approximately \$816,000 of cash and cash equivalents to fund future operations. The Company believes there is sufficient cash only to fund operations only into December 2008. If the Company is unsuccessful in raising additional capital before the end of December 2008, the Company may be required to cease operations or seek bankruptcy protection. In light of the Company's current financial position and the uncertainty of raising sufficient capital to achieve its business plan, there is substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result if such circumstances arise.

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

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*Impact of New Accounting Standards* – In September 2006, the Financial Accounting Standards Board (“FASB”), issued SFAS No. 157, “Fair Value Measurements” (“SFAS No. 157”). SFAS No. 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements are separately disclosed by level within the fair value hierarchy. In February 2008, the FASB decided that an entity need not apply this standard to nonfinancial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a nonrecurring basis until the subsequent year. The Company adopted SFAS No. 157 in the first quarter of fiscal year 2008. See Note 4. We believe there is sufficient cash to fund operations only into December 2008.

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

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

## 2. STOCK-BASED COMPENSATION

The Company accounts for stock-based compensation in accordance with SFAS No. 123(R), “Share-Based Payment” (“SFAS No. 123(R)”), which was adopted January 1, 2006. The Company has two stock-based compensation plans where the Company’s common stock has been made available for option grants as part of the Company’s compensation programs (the “Plans”). These Plans are described in more detail in the 2007 Form 10-K.

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

	Nine Months Ended September 30,		Cumulative Period from Inception (July 10, 2000) to September 30, 2008
	2008	2007	
Risk-free interest rate	2.65%	4.45%	3.04%
Expected life of the options	5 years	5 years	3.99 years
Expected volatility of the underlying stock	95%	95%	92%
Expected dividend rate	None	None	None
Expected forfeiture rate	None	None	None

Stock-based compensation expense for both employees and non-employees totaled approximately \$148,000 and \$159,000 for the three months ended September 30, 2008 and 2007. For the nine months ended September 30, 2008 and 2007, stock-based compensation expense was approximately \$550,000 and \$479,000, respectively.

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Members of the Board of Directors receive stock options for each Board and Committee meeting attended. The options are typically granted in the year following service. The Company expenses the value of stock options as earned. In the three and nine month periods ended September 30, 2008 Board members earned approximately 11,000 and 34,000 stock options respectively.

The following table summarizes the stock option activity in the equity incentive plans from January 1, 2008 through September 30, 2008:

	Shares	Exercise Price Per Share	Weighted Average Exercise Price
Outstanding, January 1, 2008	3,677,854	\$ 0.63-4.05	\$ 2.93
Granted	1,130,000	0.38-0.44	0.44
Options expired	(100,354)	2.96-4.05	3.64
Outstanding, September 30, 2008	<u>4,707,500</u>	<u>\$ 0.38-4.05</u>	<u>\$ 2.32</u>

The following tables summarize information about stock options outstanding at September 30, 2008:

Exercise Price	Options Outstanding			Options Exercisable		
	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)
\$0.38 – \$0.70	1,355,000	\$ 0.48	4.31	1,123,000	\$ 0.48	4.47
\$1.01 – \$2.70	955,500	1.32	3.94	575,503	1.52	4.27
\$2.92 – \$4.05	2,397,000	3.75	4.05	2,302,003	3.75	4.12
	<u>4,707,500</u>	<u>\$ 2.32</u>	<u>4.10</u>	<u>4,000,506</u>	<u>\$ 2.52</u>	<u>4.24</u>

During the three month periods ended September 30, 2008 and September 30, 2007 no options were granted. During the nine month periods ended September 30, 2008 and 2007, respectively, 1,130,000 options and 823,500 options were granted. The weighted-average grant date fair value for options granted during the nine month period ended September 30, 2008 and 2007 was \$0.32 and \$0.74, respectively. The total fair value of options vested during the three month period ended September 30, 2008 was approximately \$58,000. No options vested during the three month period ended September 30, 2007. The total fair value of options vested during the nine month periods ended September 30, 2008 and 2007 was approximately \$656,000 and \$403,000, respectively. During the three month periods ended September 30, 2008 and 2007, 50,000 and no options expired, respectively. During the nine month period ended September 30, 2008 and 2007, 100,354 and 85,000 options expired, respectively. During the three and nine month periods ended September 30, 2008 no options were cancelled. During the three and nine month periods ended September 30, 2007, no and 45,000 options were cancelled.

As of September 30, 2008, there were 706,994 unvested options which will vest as follows: 186,667 in 2008, 307,663 in 2009, and 212,664 in 2010. Total expected unrecognized compensation cost related to such unvested options is approximately \$357,000 which is expected to be recognized over a weighted-average period of 0.63 years. As of September 30, 2008, there was no intrinsic value of outstanding options based on the Company's closing common stock price of \$0.20 at September 30, 2008. As of September 30, 2008, there was no intrinsic value of outstanding fully vested options and exercisable options based on the Company's closing common stock price of \$0.20 at September 30, 2008.

No cash was received from employees as a result of employee stock option exercises during the three and nine month periods ended September 30, 2008 and 2007 and during the cumulative period from inception (July 10, 2000) to September 30, 2008. No options were exercised during the three and nine month periods ended

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September 30, 2008 and 2007 and the intrinsic value of options exercised for the cumulative period from inception was approximately \$74,000 resulting from the cashless exercise of options in October 2003.

**3. ACCRUED EXPENSES**

Accrued expenses consist of the following:

	September 30, 2008 (000)	December 31, 2007 (000)
Legal and accounting fees	\$ 70	\$ 14
Scientific and clinical fees	71	214
Accrued payroll and vacation	82	97
Other	21	37
<b>Total</b>	<b>\$ 244</b>	<b>\$ 362</b>

#### 4. COMMON STOCK WARRANTS

The following table summarizes information with regard to outstanding warrants issued in connection with equity and debt financings and as compensation as of September 30, 2008. The 2001 Placement Agents, February 4, 2008 Transaction and February 25, 2008 Transaction, Cork Investments and Investor Relations Group Warrants are classified as equity. The October 2003, April 2004, August 2004 and February 2006 Transaction Warrants do not meet the requirements of equity classification and are classified as liabilities:

<u>Issued in Connection With</u>	<u>Number Issued</u>	<u>Exercise Price</u>	<u>Exercisable Date</u>	<u>Expiration Date</u>
October 2003 Transaction (1)				
Investor Warrants	657,293	\$ 3.19	October 2, 2003	October 2, 2008
April 2004 Transaction (2)				
Investor Warrants	618,056	\$ 3.23	April 7, 2004	April 7, 2009
August 2004 Transaction				
Investor Warrants	2,000,000	\$ 4.20	February 13, 2005	August 12, 2009
Placement Agent Warrants	100,000	\$ 4.20	February 13, 2005	August 12, 2009
February 2006 Transaction				
Investor Warrants (3)	9,985,097	\$ 0.50	August 15, 2006	August 14, 2011
Placement Agent Warrants (4)	998,508	\$ 0.50	August 15, 2006	August 14, 2011
2001 Placement Agents	110,000	\$ 3.50	February 1, 2002	February 1, 2012
February 4, 2008 Transaction				
\$1.50 Investor Warrants	1,742,500	\$ 1.50	August 3, 2008	February 4, 2012
\$2.00 Investor Warrants	1,742,500	\$ 2.00	August 3, 2008	February 4, 2012
\$1.50 Placement Agent Warrants	8,400	\$ 1.50	August 3, 2008	February 4, 2012
February 25, 2008 Transaction				
\$0.70 Investor Warrants	7,500,000	\$ 0.70	August 25, 2008	August 25, 2013
\$0.63 Investor Warrants	3,000,000	\$ 0.63	August 25, 2008	December 26, 2008
\$0.70 Placement Agent Warrants	206,250	\$ 0.70	August 25, 2008	August 25, 2013
Investor Relations Group	39,000	\$ 0.50	September 30, 2008	September 30, 2011
Cork Investments	300,000	\$ 1.00	July 2, 2008	July 2, 2011
Total	<u>29,007,604</u>			

- (1) The exercise price of the warrants has been adjusted from \$5.29 per share to \$3.19 per share due to the subsequent issuance of equity related instruments.
- (2) The exercise price of the warrants has been adjusted from \$5.30 per share to \$3.23 per share due to the subsequent issuance of equity related instruments.
- (3) The exercise price of the warrants has been adjusted from \$3.35 per share to \$0.50 per share and an additional 8,494,784 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments.
- (4) The exercise price of the warrants has been adjusted from \$3.35 per share to \$0.50 per share and an additional 849,477 shares of the Company's common stock are issuable upon exercise of the warrants due to subsequent issuance of equity related instruments.

*October 2003, April 2004, August 2004 Transactions* – In connection with the October 2003, April 2004 and August 2004 PIPE transactions, the Company issued common stock purchase warrants. The warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet under the caption "Warrant Liabilities". Changes in fair value are recognized as either a gain or loss in the consolidated statement of operations under the caption "Gain/loss on change in fair value of warrant liabilities".

*February 2006 Transaction* – In February 2006, the Company issued \$10 million in aggregate principal amount of convertible debentures ("Debentures") together with warrants to investors and the placement agent to purchase approximately 1,490,313 and 149,031 shares respectively, of the Company's common stock.

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The warrants are accounted for as freestanding derivative instruments in the consolidated balance sheet under the caption “Warrant Liabilities”. Changes in fair value are recognized as either a gain or loss in the consolidated statement of operations under the caption “Gain/loss on change in fair value of warrant liabilities”.

The exercise price of the investor and placement agent warrants are each subject to certain anti-dilution protections, including for stock splits, stock dividends, change in control events and dilutive issuances of common stock or common stock equivalents, such as stock options, at an effective price per share that is lower than the then exercise price. In the event of a dilutive issuance of common stock or common stock equivalents, the exercise price is reduced to equal the lower price per share of the subsequent transaction.

In March 2007, under a Waiver and Exchange Agreement with six of the seven remaining holders of the Debentures, the exercise price of the investor warrants was reduced to \$1.00 per share, which, in accordance with the anti-dilution provisions of the warrants would result in an additional 3,152,014 shares of the Company’s common stock becoming issuable upon exercise of the investor warrants. Pursuant to the same agreement, approximately \$3.9 million of the then remaining \$4.4 million of outstanding Debentures was discharged in exchange for shares of the Company’s common stock. In connection with the February 2008 finance transactions, as a result of the anti-dilution provisions of the warrant instruments, the exercise price of the investor and placement agent warrants was reduced to \$0.50 and an additional 5,342,770 and 849,477 shares of the Company’s common stock are issuable, respectively, upon exercise of the investor and placement agent warrants. The Warrant Agreement contains a provision that limits the number of shares that can be issued to holders of the warrant.

*February 4, 2008 Transaction* – On February 4, 2008, the Company closed a private placement in which it sold units of securities comprised of 1,742,500 shares of Series A 12% Convertible Preferred Stock together with warrants to purchase 1,742,500 shares of common stock exercisable at \$1.50 and warrants to purchase 1,742,500 shares of common stock exercisable at \$2.00. In addition the Company issued to placement agents warrants to purchase 8,400 shares of common stock at \$1.50. The warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet formerly under the caption “Warrant Liabilities”. These warrants were originally classified as a liability because the February 2006 warrants contain an anti-dilution provision in the event of a subsequent dilutive issuance and the potential number of shares issuable exceeded the Company’s authorized shares. Changes in fair value were recognized as either a gain or loss in the consolidated statement of operations under the caption “Gain/loss on change in fair value of warrant liabilities”. In the second quarter of 2008, the warrants were reclassified to equity as a result of an amendment to the Company’s articles of incorporation approved at the May 21, 2008 annual meeting of shareholders increasing the Company’s authorized common stock from 100,000,000 to 200,000,000 shares (the “Charter Amendment”). The Charter Amendment authorization of the additional shares coupled with a provision in the February 2006 warrants limiting the number of shares that can be issued to holders of the February 2006 warrants, ensures that sufficient shares are available for issuance upon exercise of these warrants, thereby enabling them to be reclassified from a liability to equity. Through May 21, 2008, these warrants were marked to market resulting in a reduction in warrant liabilities in the balance sheet and an offsetting credit to change in fair value of warrant liabilities in the statement of operations in the amount of approximately \$100,000. The remaining fair value of approximately \$502,000 was credited to additional paid-in capital in the balance sheet.

*February 25, 2008 Transaction* – On February 25, 2008, the Company sold to investors 7,500,000 shares of its common stock, 7,500,000 warrants to purchase shares of common stock exercisable at \$0.70, and 3,000,000 warrants to purchase shares of common stock exercisable at \$0.63. In addition, the Company issued to a placement agent 206,250 warrants to purchase shares of common stock at \$0.70. The warrants were accounted for as freestanding derivative instruments in the consolidated balance sheet under the caption “Warrant Liabilities”. These warrants were originally classified as a liability because the February 2006 warrants contain an anti-dilution provision in the event of a subsequent dilutive issuance and the potential number of shares issuable exceeded the Company’s authorized shares prior to the Charter Amendment. Changes in fair value were recognized as either a gain or loss in the consolidated statement of operations under the caption “Gain/loss on

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change in fair value of warrant liabilities”. In the second quarter of 2008 the warrants were reclassified to equity as a result of the Charter Amendment. The Charter Amendment authorization of the additional shares coupled with a provision in the February 2006 warrants limiting the number of shares that can be issued to holders of the February 2006 warrants ensures that sufficient shares are available for issuance upon exercise of these warrants, thereby enabling them to be reclassified from a liability to equity. Through May 21, 2008, these warrants were marked to market resulting in a reduction in warrant liabilities in the balance sheet and an offsetting credit to change in fair value of warrant liabilities in the statement of operations in the amount of approximately \$356,000. The remaining fair value of approximately \$2,160,000 was credited to additional paid-in capital in the balance sheet.

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

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

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

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

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

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

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

Key assumptions used to apply these models as of September 30, 2008 and December 31, 2007 are as follows:

	Warrants	
	September 30, 2008	December 31, 2007
Risk free interest rate	1.02-2.24%	3.16% - 3.34%
Expected life	0.01years – 2.87years	0.75 years – 3.62 years
Expected volatility of common share price	95%	95%
Common share price	\$ 0.20	\$ 0.70

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Below is a summary of our fair value measurements at September 30, 2008:

<u>Description</u>	<u>Value at 9/30/2008 (000)</u>	<u>Quoted Prices in Active Markets for Identical Assets (Level 1) (000)</u>	<u>Significant Other Observable Inputs (Level 2) (000)</u>	<u>Significant Unobservable Inputs (Level 3) (000)</u>
Warrant Liabilities	\$ 868	\$ —	\$ 868	\$ —
Totals	<u>\$ 868</u>	<u>—</u>	<u>\$ 868</u>	<u>—</u>
				<u>Fair Value of Warrant Liabilities (000)</u>
Balance December 31, 2007				\$ 2,069
Fair value assigned to February 4, 2008 transaction warrants upon issuance				986
Fair value assigned to February 25, 2008 transaction warrants upon issuance				2,337
Change in fair value of warrant liabilities				587
Balance March 31, 2008				\$ 5,979
Change in fair value of warrant liabilities reclassified to Stockholders' Deficit at May 21, 2008.				(456)
Reclassification of warrant liabilities to Stockholders' Deficit				(2,662)
Change in fair value of warrant liabilities				(845)
Balance June 30, 2008				\$ 2,016
Change in fair value of warrant liabilities				(1,148)
Balance September 30, 2008				<u>868</u>

## 5. STOCKHOLDERS' (DEFICIT)

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

The shares of Series A Preferred are entitled to vote as a class with the Company’s common stock and each share of Series A Preferred is convertible at any time to one share of common stock, subject to adjustment in the event of a stock dividend, stock split or combination, reclassification or similar event. The Company has the right to require conversion if the closing price of the common stock exceeds \$3.00 for 15 consecutive trading days and a registration statement covering the resale of the shares of common stock issuable upon conversion of the Series A Preferred is then in effect. Each warrant is exercisable solely for cash beginning August 3, 2008 and expires on February 4, 2012. The exercise price of each warrant is adjustable in the event of a stock split or stock combination, capital reorganization, merger or similar event.

As of December 31, 2007, the Company had received subscription advances of approximately \$1,667,500 for the units of securities described above. In 2008, the Company received additional subscription advances of approximately \$75,000 resulting in total gross proceeds of approximately \$1,742,500. On February 4, 2008 the

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Company closed the private placement. The Company incurred approximately \$52,000 of cash transaction costs resulting in net cash proceeds of approximately \$1,690,500. In addition, the Company incurred approximately \$2,000 of costs for warrants issued to placement agents. Proceeds of approximately \$984,000 were allocated to investor warrants using the Black-Scholes method with the following assumptions as of February 4, 2008: risk free interest rate 2.51%, volatility 95%, fair market value of the company's common stock on February 4, 2008, and the share price on the closing date of the transaction of \$0.59.

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

In the second quarter of 2008, these warrants liabilities were marked to market as a consequence of the Charter Amendment increasing the Company's authorized shares of common stock, resulting in a change in fair value of warrant liabilities gain in the Statement of Operations of approximately \$100,000 and reclassified to Stockholders' Equity. Please see Footnote 4. "Common Stock Warrants" for further explanation.

*February 25, 2008 Offering* – On February 25, 2008, the Company closed an offering in which it sold to investors (i) an aggregate of 7,500,000 shares of the Company's common stock at \$0.50 per share, (ii) warrants, which expire on August 25, 2013, to purchase an aggregate of 7,500,000 share of the Company's common stock at an exercise price of \$0.70 per share, and (iii) warrants, which expire on December 26, 2008, to purchase an aggregate of 3,000,000 shares of the Company's common stock at an exercise price of \$0.67 per share. In addition, the Company issued to a placement agent warrants, which expire on August 25, 2013, to purchase 206,250 shares of the Company's common stock at an exercise price of \$0.70. The warrants are exercisable beginning on August 25, 2008. The warrants provide for cashless exercise if at any time during the term of the warrants if there is no effective registration statement for the issuance or resale of the underlying warrant shares. The exercise price of each warrant is adjustable in the event of a stock split or stock combination, capital reorganization, merger or similar event.

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

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

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

In the second quarter of 2008, these warrants liabilities were marked to market as a consequence of the Charter Amendment increasing the Company's authorized shares of common stock, resulting in a change in fair value of warrant liabilities gain in the Statement of Operations of approximately \$356,000 and reclassified to Stockholders' Equity. Please see Footnote 4. "Common Stock Warrants" for further explanation.

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

## 6. EARNINGS PER SHARE

Basic income or loss per share is based on the weighted-average number of common shares outstanding during each period. Diluted loss per share is based on basic shares as determined above plus the incremental shares that would be issued upon the assumed exercise of in-the-money stock options and warrants using the treasury stock method and assumed conversion of convertible preferred stock using the if converted method. The computation of diluted net income or loss per share does not assume the issuance of common shares that have an anti-dilutive effect on net income or loss per share. For the three and nine month periods ended September 30, 2008 and September 30, 2007, all stock options, warrants and potential shares related to conversion of the convertible debentures were excluded from the computation of diluted net income or loss per share as their effect is anti-dilutive. Dilutive shares which could exist pursuant to the exercise of outstanding stock options and warrants and conversion of preferred stock at September 30, 2008, and 2007, totaled 35,457,604 and 12,029,561 respectively.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2008	2007	2008	2007
Net Income (loss) applicable to common stock-basic and diluted	\$ 162,000	\$ (2,586,000)	\$ (2,522,000)	\$ (8,124,000)
Weighted average common shares outstanding-basic and diluted	47,947,609	40,364,792	46,402,947	38,519,133
Net Income (loss) per Share-basic and diluted	\$ 0.00	\$ (0.06)	\$ (0.05)	\$ (0.21)

## 7. INCOME TAXES

As of December 31, 2007, the total amount of unrecognized tax benefits was approximately \$1,082,000. Of this amount, approximately \$890,000 would impact the effective tax rate prior to the adjustment for the Company's valuation allowance. The Company has not recognized an adjustment to the deficit accumulated during the development stage for unrecognized tax benefits because the Company has recorded a full valuation allowance against net operating loss carryforwards.

The Company is subject to U.S. Federal income tax as well as income tax of certain state jurisdictions. The tax years ranging from 2000 through 2007 remain open to examination by various taxing jurisdictions as the statute of limitations has not expired.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits in income tax expense. Since the Company's net deferred tax assets and the unrecognized tax benefits determined under FASB Interpretation No. 48, "Accounting for Uncertainty in Income taxes" ("FIN 48"), would not result in a tax liability, the Company has not accrued for any interest and penalties relating to these unrecognized tax benefits.

## 8. CONTINGENCIES

In January 2004, David Platt, Ph.D., the Company's Chairman and Chief Executive Officer, filed a lawsuit in Massachusetts Superior Court against GlycoGenesys, Inc. for various claims including breach of contract. GlycoGenesys asserted counterclaims against the Company and Dr. Platt alleging tortious interference, misappropriation of proprietary rights, defamation and unfair competition, and sought monetary damages and injunctive relief related to the Company's intellectual property. Prospect Therapeutics, Inc. (formerly known as Marlborough Research and Development, Inc.) purchased certain assets including this lawsuit from the GlycoGenesys bankruptcy estate and continues prosecuting the counterclaims against the Company and Dr. Platt. Concluding that certain disputes of fact could not be resolved as a matter of law, the Court on May 27, 2008 denied the Company's motion for summary judgment. Prospect Therapeutics informed the Court that it does not seek monetary damages other than recovery of attorney fees. The lawsuit is expected to proceed to trial in March 2009. The Company and Dr. Platt believe the counterclaims are without merit and intend to contest them vigorously. Additionally, the Company believes that any impact on the financial statements is neither probable nor reasonably estimable and therefore no amounts have been recorded as of September 30, 2008.

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The Company's Board of directors authorized the indemnification of Dr. Platt for the expenses of his defense of the counterclaims. In the nine months ended September 30, 2008, Company incurred no expenses in connection with this defense. Through September 30, 2008 the Company has incurred cumulative expenses of approximately \$438,000 in connection with this defense.

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

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

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

## **9. SUBSEQUENT EVENTS**

In October 2008, a number of holders representing approximately 73% of the outstanding Convertible Debenture warrants agreed to waive their right to receive cash, at their option, in the event of a fundamental transaction related to the Company. Because they now receive the same treatment as common shareholders, the warrant liability associated with these warrants will be reclassified to stockholders equity in the fourth quarter of 2008. In addition, the placement agent waived all future rights to the anti-dilution provisions of the warrant agreement.

On October 31, 2008, the Company's board of directors authorized Medi-Pharmaceuticals, Inc., its wholly-owned Nevada subsidiary, to enter into a joint venture to deploy certain technology it owns, as well as original technology to be developed by the joint venture, for use in nutraceutical cardiovascular therapies. The Company expects that this deployment will be accomplished by: (i) a merger of FOD Enterprises, Inc., a Nevada corporation, with and into Medi-Pharmaceuticals, following which Medi-Pharmaceuticals will be the surviving corporation and the Company will be the owner of 10% of the outstanding capital stock of Medi-Pharmaceuticals; and (ii) the Company entering into a license agreement with Medi-Pharmaceuticals. Pursuant to the proposed terms of the license agreement, the Company would grant Medi-Pharmaceuticals a worldwide perpetual license to commercialize all of its polysaccharide technology exclusively in the field of cardiovascular therapies (both preventive and therapeutic) in exchange for a royalty equal to 10% of Medi-Pharmaceuticals' net

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revenues from products sold based on the licensed technology. Medi-Pharmaceuticals would advance \$1.0 million in cash from the royalty payments to the Company within six months of the effective date of the license agreement or the Company would have the ability to terminate the license agreement. None of the parties have entered into definitive documents with respect to these transactions.

On November 7, 2008, the Company received notice from the NYSE Alternext US that it intends to commence proceedings to delist the Company's common stock from trading on the exchange due to the Company's failure to comply with its continuing listing requirements. Specifically, the delisting notice states that the Company has failed to meet the exchange's minimum stockholders' equity requirement with losses in three of the last four years and have failed to make progress consistent with its plan to regain and sustain compliance with the listing requirements. This follows a similar notice that the Company received from the NYSE Alternext US in June 2007. The Company has notified the NYSE Alternext US that it is appealing the delisting decision and a hearing on its appeal has been scheduled for December 23, 2008.



**PART II. INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

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

SEC filing fee	\$ 1,572
FINRA filing fee	\$ 2,500
Blue Sky fees and expenses	*
Accounting fees and expenses	*
Legal fees and expenses	*
Printing and engraving expenses	*
Other	*
Total	_____

(\*) To be provided by Amendment.

**Item 14. Indemnification of Directors and Officers.**

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

NRS 78.7502 states:

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

- (a) Is not liable pursuant to NRS 78.138; or
- (b) Acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

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

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

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attorneys' fees actually and reasonably incurred by him in connection with the defense or settlement of the action or suit if he:

- (a) Is not liable pursuant to NRS 78.138; or
- (b) Acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation.

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

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

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

NRS 78.751 states:

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

- (a) By the stockholders;
- (b) By the board of directors by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding;
- (c) If a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding so orders, by independent legal counsel in a written opinion; or
- (d) If a quorum consisting of directors who were not parties to the action, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion.

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

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

- (a) Does not exclude any other rights to which a person seeking indemnification or advancement of expenses may be entitled under the articles of incorporation or any bylaw, agreement, vote of

## [Table of Contents](#)

stockholders or disinterested directors or otherwise, for either an action in his official capacity or an action in another capacity while holding his office, except that indemnification, unless ordered by a court pursuant to NRS 78.7502 or for the advancement of expenses made pursuant to subsection 2, may not be made to or on behalf of any director or officer if a final adjudication establishes that his acts or omissions involved intentional misconduct, fraud or a knowing violation of the law and was material to the cause of action.

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

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

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

### **Item 15. Recent Sales of Unregistered Securities.**

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

On February 14, 2006, the Registrant completed a private placement in which it issued and sold to institutional accredited investors 7% Convertible Debentures (the “Debentures”) and related common stock purchase warrants exercisable to purchase approximately 1,490,000 shares of the Registrant’s common stock (the “Warrants”). The Warrants were exercisable at \$3.35 per share, subject to adjustment, for five years beginning August 15, 2006. The Registrant subsequently registered the resale of the shares issuable upon redemption of, or as interest payments on, the Debentures, and upon exercise of the Warrants.

On March 20, 2007, the Registrant entered into Waiver and Exchange Agreements (together, the “Exchange Agreement”) with certain investors to whom it issued the Debentures and Warrants pursuant to the terms and conditions of a Securities Purchase Agreement dated as of February 14, 2006.

On June 19, 2007, the Registrant entered into a Securities Purchase Agreement (the “Securities Purchase Agreement”) with certain institutional investors named therein to sell shares of the Registrant’s common stock and related common stock purchase warrants exercisable to purchase approximately 4,173,460 shares of the Registrant’s common stock.

On June 29, 2007, the Securities Purchase Agreement was terminated following the notice received from the NYSE Alternext US (then known as the American Stock Exchange) that the Registrant was not in compliance with certain listing standards.

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

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Each share of the Series A Preferred Stock has voting rights and is convertible at any time at the election of the holder into one share of the Registrant's common stock subject to adjustment for stock splits, recapitalizations and the like. The Registrant may require conversion if the closing price of its common stock exceeds \$3.00 for 15 consecutive trading days. Each share of the Series A Preferred Stock accrues interest at 12% per annum payable at the Registrant's option in cash or shares of common stock valued per share at the higher of \$1.00 or 100% of the value weighted average price of its shares of common stock for the 20 consecutive trading days prior to the applicable dividend payment date. The warrants are exercisable for cash consideration for four years beginning the 181st day after the date of issue. The exercise price is subject to adjustment for stock splits, recapitalizations and the like and in the event of certain business combinations.

### **Item 16. Exhibits.**

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

<b>Exhibit Number</b>	<b>Description</b>
1.1	Form of Dealer-Manager Agreement by and between Pro-Pharmaceuticals and Maxim Group LLC.*
3.1	Articles of Incorporation of the Registrant, dated January 23, 2001, as filed with the Secretary of State of the State of Nevada. (1)
3.2	Certificate of Amendment to Articles of Incorporation of the Registrant, as filed with the Secretary of State of the State of Nevada Secretary of State on May 28, 2004. (2)
3.3	Certificate of Designation of Preferences, Rights and Limitations of Series A 12% Convertible Preferred Stock of the Registrant, as filed with the Secretary of State of the State of Nevada on October 5, 2007. (3)
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3.6	Amendment to Amended and Restated Bylaws of the Registrant. (6)
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4.5	Form of Notice to Stockholders who are Acting as Nominees.
4.6	Form of Notice to Clients of Stockholders who are Acting as Nominees.
4.7	Form of Beneficial Owner Election Form.
5.1	Form of Opinion of Greenberg Traurig, LLP (including the consent of such firm) regarding the legality of the securities being offered.
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10.22	Form of Common Stock Purchase Warrant issued on February 25, 2008. (18)
10.23	Placement Agent Agreement dated February 12, 2008 between Maxim Group LLC and the Registrant. (18)
10.24	Form of Subscription Agent Agreement between Continental Stock Transfer & Trust Company and the Registrant.
16.1	Letter from Deloitte & Touche LLP to the SEC dated April 14, 2008. (19)
21.1	Subsidiaries of the Registrant. (20)
23.1	Consent of Deloitte & Touche LLP, an independent registered public accounting firm.

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23.2 Consent of Greenberg Traurig, LLP (included as part of Exhibit 5 hereto).

24 Powers of Attorney (included on signature page).

\* To be filed by amendment.

- (1) Incorporated by reference to the Registrant's Registration Statement on Form 10-SB, as filed with the SEC on June 13, 2001.
- (2) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 16, 2004.
- (3) Incorporated by reference to the Registrant's Current Report on Form 8-K filed with the SEC on October 9, 2007.
- (4) Incorporated by reference to the Registrant's Current Report on Form 8-K filed with the SEC on June 8, 2007.
- (5) Incorporated by reference to the Registrant's Current Report on Form 8-K filed with the SEC on December 17, 2007.
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- (9) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2003, as filed with the SEC on March 30, 2004.
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- (19) Incorporated by reference to the Registrant's Current Report on Form 8-K as filed with the SEC on April 14, 2008.
- (20) Incorporated by reference to the Registrant's Annual Report on Form 10-K as filed with the SEC on March 28, 2008.

**Item 17. Undertakings.**

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

The undersigned registrant hereby undertakes that:

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

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

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

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

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

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

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

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

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

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

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

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

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

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Newton, State of Massachusetts on November 19th, 2008.

PRO-PHARMACEUTICALS, INC.

By: /S/ DAVID PLATT

Name: David Platt, Ph.D.

Title: Chief Executive Officer

**POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David Platt his/her true and lawful attorney-in-fact and agent with full power of substitution and re-substitution, for him/her and in his/her name, place and stead, in any and all capacities to sign any or all amendments (including, without limitation, post-effective amendments) to this Registration Statement, any related Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933 and any or all pre- or post-effective amendments thereto, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent, or any substitute or substitutes for him, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates stated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/S/ DAVID PLATT</u> David Platt, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	November 19, 2008
<u>/S/ ANTHONY D. SQUEGLIA</u> Anthony D. Squeglia	Chief Financial Officer (Principal Financial and Accounting Officer)	November 19, 2008
<u>/S/ MILDRED S. CHRISTIAN</u> Mildred S. Christian, Ph.D.	Director	November 19, 2008
<u>/S/ DALE H. CONAWAY</u> Dale H. Conaway, D.V.M.	Director	November 19, 2008
<u>/S/ HENRY S. ESBER</u> Henry S. Esber, Ph.D.	Director	November 19, 2008
<u>/S/ JAMES T. GOURZIS</u> James T. Gourzis, M.D., Ph.D.	Director	November 19, 2008
<u>/S/ S. COLIN NEILL</u> S. Colin Neill	Director	November 19, 2008
<u>/S/ STEVEN PRELACK</u> Steven Prelack	Director	November 19, 2008
<u>/S/ JERALD K. ROME</u> Jerald K. Rome	Director	November 19, 2008
<u>/S/ THEODORE D. ZUCCONI</u> Theodore D. Zucconi, Ph.D.	President and Director	November 19, 2008

**EXHIBIT INDEX**

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23.1	Consent of Deloitte & Touche LLP, an independent registered public accounting firm.
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(2)	Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 16, 2004.
(3)	Incorporated by reference to the Registrant's Current Report on Form 8-K filed with the SEC on October 9, 2007.

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- (4) Incorporated by reference to the Registrant's Current Report on Form 8-K filed with the SEC on June 8, 2007.
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- (6) Incorporated by reference to the Registrant's Current Report on Form 8-K filed with the SEC on April 15, 2007.
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# Pro-Pharmaceuticals, Inc.

INCORPORATED UNDER THE LAWS OF THE STATE OF NEVADA

NUMBER

TOTAL SHARES

SEE REVERSE FOR CERTAIN DEFINITIONS

COMMON STOCK

This certifies that: \_\_\_\_\_

is the owner of: \_\_\_\_\_

FULLY PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK OF \$.001 PAR VALUE EACH OF  
**PRO-PHARMACEUTICALS, INC.**

transferable on the books of the Corporation in person or by attorney upon surrender of this certificate duly endorsed or assigned.

This certificate and the shares represented hereby are subject to the laws of the State of Nevada, and to the Articles of Incorporation and Bylaws of the Corporation, as now or hereafter amended. This certificate is not valid until countersigned by the Transfer Agent.

Witness the facsimile seal of the Corporation and the facsimile signatures of its duly authorized officers.

Dated:

Countersigned:

Continental Stock Transfer & Trust Company  
Jersey City, NJ  
Transfer Agent

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
President

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	as tenants in common	UNIF GIFT MIN ACT - _____ Custodian _____
TEN ENT	as tenants by the entireties	(Cust) (Minor)
JT TEN	as joint tenants with right of survivorship and not as tenants in common	under Uniform Gifts to Minors Act
		_____
		(State)

Additional Abbreviations may also be used though not in the above list.

For value received, \_\_\_\_\_ hereby sell, assign and transfer unto

PLEASE INSERT SOCIAL  
SECURITY OR OTHER  
IDENTIFYING  
NUMBER OF ASSIGNEE

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE OF ASSIGNEE)

Shares

of the capital stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

Attorney

to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated \_\_\_\_\_

By: \_\_\_\_\_

**NOTICE:** The signature to this assignment must correspond with the name as written upon the face of the certificate in every particular, without alteration or enlargement or any change whatsoever.

THE SIGNATURE TO THE ASSIGNMENT MUST CORRESPOND TO THE NAME AS WRITTEN UPON THE FACE OF THIS CERTIFICATE IN EVERY PARTICULAR WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER, AND MUST BE GUARANTEED BY COMMERCIAL BANK OR TRUST COMPANY OR A MEMBER FIRM OF A NATIONAL OR REGIONAL OR OTHER RECOGNIZED STOCK EXCHANGE IN CONFORMANCE WITH A SIGNATURE GUARANTEE MEDALLION PROGRAM.

RIGHTS CERTIFICATE #:

NUMBER OF RIGHTS

THE TERMS AND CONDITIONS OF THE RIGHTS OFFERING ARE SET FORTH IN THE COMPANY'S PROSPECTUS DATED \_\_\_\_\_, 2008 (THE "PROSPECTUS") AND ARE INCORPORATED HEREIN BY REFERENCE. COPIES OF THE PROSPECTUS ARE AVAILABLE UPON REQUEST FROM MACKENZIE PARTNERS, INC., THE INFORMATION AGENT.

**Pro-Pharmaceuticals, Inc.**

Incorporated under the laws of the State of Nevada

**SUBSCRIPTION RIGHTS CERTIFICATE**

Evidencing Subscription Rights to Purchase Shares of Common Stock and Series C Warrants of Pro-Pharmaceuticals, Inc.

Subscription Price: \$[\_\_\_\_\_] per Share

**THE SUBSCRIPTION RIGHTS WILL EXPIRE IF NOT EXERCISED ON OR BEFORE 5:00 P.M., NEW YORK CITY TIME, ON DECEMBER [ ], 2008, UNLESS EXTENDED BY THE COMPANY**

**REGISTERED  
OWNER:**

THIS CERTIFIES THAT the registered owner whose name is inscribed hereon is the owner of the number of subscription rights ("Rights") set forth above. Each whole Right entitles the holder thereof to subscribe for and purchase one share of Common Stock, with a par value of \$0.001 per share, of Pro-Pharmaceuticals, Inc., a Nevada corporation, and one Series C Warrant to purchase an additional share of common stock, at a subscription price of \$[\_\_\_\_\_] per share (the "Basic Subscription Right"), pursuant to a rights offering (the "Rights Offering"), on the terms and subject to the conditions set forth in the Prospectus. Holders who fully exercise their Basic Subscription Rights are entitled to subscribe

for additional shares of common stock and warrants that remain unsubscribed for as a result of any unexercised Basic Subscription Rights pursuant to the terms and conditions of the Rights Offering, subject to proration, as described in the Prospectus (the "Over-Subscription Right"). The Rights represented by this Subscription Rights Certificate may be exercised by completing Form 1 and any other appropriate forms on the reverse side hereof and by returning the full payment of the subscription price for each share of Common Stock and each Warrant.

This Subscription Rights Certificate is not valid unless countersigned by the subscription agent and registered by the registrar. Witness the seal of Pro-Pharmaceuticals, Inc. and the signatures of its duly authorized officers.

Date:

\_\_\_\_\_  
[Chief Executive Officer  
and Principal Executive Officer]

\_\_\_\_\_  
[Executive Vice President]

DELIVERY OPTIONS FOR SUBSCRIPTION RIGHTS CERTIFICATE

Delivery other than in the manner or to the addresses listed below will not constitute valid delivery.

If delivering by Hand/Mail/Overnight Courier:
Continental Stock Transfer & Trust Company
Attn: Reorganization Department
17 Battery Place, 8th Floor
New York, New York 10004

PLEASE PRINT ALL INFORMATION CLEARLY AND LEGIBLY.

FORM 1-EXERCISE OF SUBSCRIPTION RIGHTS

To subscribe for shares and warrants pursuant to your Basic Subscription Right, please complete lines (a) and (c) and sign under Form 4 below. To subscribe for shares and warrants pursuant to your Over-Subscription Right, please also complete line (b) and sign under Form 4 below. To the extent you subscribe for more shares and warrants than you are entitled under either the Basic Subscription Right or the Over-Subscription Right, you will be deemed to have elected to purchase the maximum number of shares and warrants for which you are entitled to subscribe under the Basic Subscription Right or Over-Subscription Right, as applicable.

(a) EXERCISE OF BASIC SUBSCRIPTION RIGHT:

I apply for \_\_\_\_\_ shares x \$ [\_\_\_\_\_] = \$\_\_\_\_\_
(no. of new shares) (subscription price) (amount enclosed)

(b) EXERCISE OF OVER-SUBSCRIPTION RIGHT

If you have exercised your Basic Subscription Right in full and wish to subscribe for additional shares in an amount equal to up to 400% of the shares of Common Stock for which you are otherwise entitled to subscribe pursuant to your Over-Subscription Right:

I apply for \_\_\_\_\_ shares x \$ [\_\_\_\_\_] = \$\_\_\_\_\_
(no. of new shares) (subscription price) (amount enclosed)

(c) Total Amount of Payment Enclosed = \$\_\_\_\_\_

METHOD OF PAYMENT (CHECK ONE)

- Check or bank draft drawn on a U.S. bank, or postal telegraphic or express.
Money order payable to "Continental Stock Transfer & Trust Company, as Subscription Agent." Funds paid by an uncertified check may take at least five business days to clear.
Wire transfer of immediately available funds directly to the account maintained by Continental Stock Transfer & Trust Company, as Subscription Agent, for purposes of accepting subscriptions in this Rights Offering at [\_\_\_\_\_]Bank, [Address], ABA #[\_\_\_\_\_] Account # [\_\_\_\_\_] [Continental Stock Transfer & Trust Company FBO Pro-Pharmaceuticals, Inc.], with reference to the rights holder's name.

FORM 2-DELIVERY TO DIFFERENT ADDRESS

If you wish for the Common Stock underlying your subscription rights, a certificate representing unexercised subscription rights or the proceeds of any sale of subscription rights to be delivered to an address different from that shown on the face of this Subscription Rights Certificate, please enter the alternate address below, sign under Form 3 and have your signature guaranteed under Form 4.

\_\_\_\_\_
\_\_\_\_\_

FORM 3-SIGNATURE

TO SUBSCRIBE: I acknowledge that I have received the Prospectus for this Rights Offering and I hereby irrevocably subscribe for the number of shares indicated above on the terms and conditions specified in the Prospectus.

Signature(s): \_\_\_\_\_

IMPORTANT: The signature(s) must correspond with the name(s) as printed on the reverse of this Subscription Rights Certificate in every particular, without alteration or enlargement, or any other change whatsoever.

FORM 4-SIGNATURE GUARANTEE

This form must be completed if you have completed any portion of Form 2.

Signature Guaranteed: \_\_\_\_\_
(Name of Bank or Firm)

By: \_\_\_\_\_
(Signature of Officer)

IMPORTANT: The signature(s) should be guaranteed by an eligible guarantor institution (bank, stock broker, savings & loan association or credit union) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15.

FOR INSTRUCTIONS ON THE USE OF PRO-PHARMACEUTICALS, INC. SUBSCRIPTION RIGHTS CERTIFICATES, CONSULT MACKENZIE PARTNERS, INC., THE INFORMATION AGENT, AT (800) 322-2885.

**[FORM OF NOTICE TO STOCKHOLDERS]****PRO-PHARMACEUTICALS, INC.****NOTICE TO STOCKHOLDERS WHO ARE RECORD HOLDERS**

Up to [\_\_\_\_\_] Shares of Common Stock and Series C Common Stock  
Purchase Warrants to purchase an additional [\_\_\_\_\_] Shares of Common  
Stock Issuable Upon Exercise of Rights to Subscribe for Such Shares at \$[ ] per Share

Enclosed for your consideration is a prospectus, dated November [ ], 2008 (the “**Prospectus**”), relating to the offering by Pro-Pharmaceuticals, Inc. (the “**Company**”) of subscription rights (the “**Rights Offering**”) to purchase (i) shares of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”), and (ii) transferable Series C Common Stock purchase warrants to purchase additional shares of the Common Stock (“**Warrants**”), by stockholders of record (“**Record Date Stockholders**”) as of 5:00 p.m., New York City time, on November [ ], 2008 (the “**Record Date**”).

Pursuant to the offering, the Company is issuing Rights to subscribe for up to [\_\_\_\_\_] shares of the Company’s Common Stock and [\_\_\_\_\_] Warrants, on the terms and subject to the conditions described in the Prospectus. The Rights may be exercised at any time during the subscription period, which commences on November [ ], 2008 and ends at 5:00 p.m., New York City time, on December [ ], 2008, unless extended by the Company in its sole discretion (as it may be extended, the “**Expiration Date**”). The Common Stock is presently traded on the NYSE Alternext US under the symbol “PRW”. Neither the Rights nor the Warrants underlying the Rights will be listed for trading on any stock exchange or market or on the OTC Bulletin Board. The Warrants, but not the Rights, may be sold, transferred or assigned. The Company expects the Rights and Warrants will be exercisable for shares of Common Stock listed on the NYSE Alternext US or the OTC Bulletin Board. In addition, the Warrants will be governed by a Warrant Agreement between the Company and Continental Stock Transfer & Trust Company.

As described in the Prospectus, Record Date Stockholders will receive one (1) Right for each share of Common Stock owned on the Record Date.

Each Right entitles the holder (the “**Rights Holders**”) to purchase: (i) one share of Common Stock at the subscription price of \$[ ] per share and (ii) one Warrant that entitles the Rights Holder to purchase one share of Common Stock (the “**Basic Subscription Right**”). Each Warrant will be immediately exercisable following issuance through November [ ], 2009 to purchase one share of Common Stock at 125% of the price of the Basic Subscription Right, or \$[ ] per share. If during the term of the Warrant the closing price of the Common Stock is equal to or greater than 400% of the warrant exercise price, or \$[ ] per share, for at least ten consecutive trading days, the Company may call, or cancel any outstanding Warrants that are not exercised during the 15 trading day period following the date the Company gives notice to the holders of the remaining unexercised warrants.

Rights Holders who fully exercise their Basic Subscription Rights will be entitled to subscribe for additional shares and warrants that remain unsubscribed as a result of any unexercised Basic Subscription Rights (the “**Over-Subscription Right**” and together with the Basic Subscription Right, the “**Rights**”). Each Over-Subscription Right entitles the holder to subscribe for an additional amount equal to up to 400% of the shares of Common Stock and Warrants for which such holder was otherwise entitled to subscribe (calculated prior to the exercise of any rights). If sufficient remaining shares of Common Stock and Warrants are available, all over-subscription requests will be honored in full. If requests for shares of Common Stock and Warrants pursuant to the Over-Subscription Right exceed the remaining shares of Common Stock and Warrants available, the remaining shares of Common Stock and Warrants will be allocated pro-rata among Rights Holders who over-subscribe based on the number of Rights then held. Rights may only be exercised for whole numbers of shares; no fractional shares of Common Stock will be issued in the Rights Offering.

The rights will be evidenced by subscription rights certificates (the “**Subscription Certificates**”).

Enclosed are copies of the following documents:

1. Prospectus, dated November [ ], 2008;
2. Subscription Certificate; and
3. A return envelope, addressed to Continental Stock Transfer & Trust Company (the “**Subscription Agent**”).

Your prompt attention is requested. To exercise your Rights, you should properly complete and sign the Subscription Certificate and forward it, with payment of the subscription price in full for each share of Common Stock and the Warrants subscribed for pursuant to the Basic Subscription Right and the Over-Subscription Right to the Subscription Agent, as indicated on the Subscription Certificate. The Subscription Agent must receive the properly completed and duly executed Subscription Certificate and full payment at or prior to 5:00 p.m., New York City time, on the Expiration Date.

You will have no right to rescind your subscription after receipt of your payment of the subscription price, except as described in the Prospectus. Rights not exercised at or prior to 5:00 p.m., New York City time, on the Expiration Date will expire.

**ANY QUESTIONS OR REQUESTS FOR ASSISTANCE CONCERNING THE RIGHTS OFFERING SHOULD BE DIRECTED TO MACKENZIE PARTNERS, INC., THE INFORMATION AGENT, TOLL-FREE AT THE FOLLOWING TELEPHONE NUMBER: (800) 322-2885.**

**[FORM OF NOTICE TO STOCKHOLDERS ACTING AS NOMINEES]****PRO-PHARMACEUTICALS, INC.****NOTICE TO STOCKHOLDERS WHO ARE ACTING AS NOMINEES**

Up to [\_\_\_\_\_] Shares of Common Stock and  
 Series C Common Stock Purchase Warrants to purchase an additional [\_\_\_\_\_] Shares of Common Stock Issuable Upon  
 Exercise of Rights to Subscribe for Such Shares at \$[\_\_\_\_\_] per Share

This letter is being distributed to broker-dealers, trust companies, banks and other nominees in connection with the offering by Pro-Pharmaceuticals, Inc. (the “**Company**”) of subscription rights (the “**Rights Offering**”) to purchase (i) shares of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”), and (ii) transferable Series C Common Stock purchase warrants to purchase additional shares of the Common Stock (“**Warrants**”), by stockholders of record (“**Record Date Stockholders**”) as of 5:00 p.m., New York City time, on November [\_\_\_\_\_] 2008 (the “**Record Date**”).

Pursuant to the offering, the Company is issuing Rights to subscribe for up to [\_\_\_\_\_] shares of the Company’s Common Stock and [\_\_\_\_\_] Warrants, on the terms and subject to the conditions described in the Prospectus. The Rights may be exercised at any time during the subscription period, which commences on November [\_\_\_\_\_] 2008 and ends at 5:00 p.m., New York City time, on December [\_\_\_\_\_] 2008, unless extended by the Company in its sole discretion (as it may be extended, the “**Expiration Date**”). The Common Stock is presently traded on the NYSE Alternext US under the symbol “PRW”. Neither the Rights nor the Warrants underlying the Rights will be listed for trading on any stock exchange or market or on the OTC Bulletin Board. The Warrants, but not the Rights, may be sold, transferred or assigned. The Company expects the Rights and Warrants will be exercisable for shares of Common Stock listed on the NYSE Alternext US or the OTC Bulletin Board. In addition, the Warrants will be governed by a Warrant Agreement between the Company and Continental Stock Transfer & Trust Company.

As described in the Prospectus, Record Date Stockholders will receive one (1) Right for each share of Common Stock owned on the Record Date.

Each Right entitles the holder (the “**Rights Holders**”) to purchase: (i) one share of Common Stock at the subscription price of \$[\_\_\_\_\_] per share and (ii) one Warrant that entitles the Rights Holder to purchase one share of Common Stock (the “**Basic Subscription Right**”). Each Warrant will be immediately exercisable following issuance through November [\_\_\_\_\_] 2009 to purchase one share of Common Stock at 125% of the price of the Basic Subscription Right, or \$[\_\_\_\_\_] per share. If during the term of the Warrant the closing price of the Common Stock is equal to or greater than 400% of the warrant exercise price, or \$[\_\_\_\_\_] per share, for at least ten consecutive trading days, the Company may call, or cancel any outstanding Warrants that are not exercised during the 15 trading day period following the date the Company gives notice to the holders of the remaining unexercised warrants.

Rights Holders who fully exercise their Basic Subscription Rights will be entitled to subscribe for additional shares and warrants that remain unsubscribed as a result of any unexercised Basic Subscription Rights (the “**Over-Subscription Right**” and together with the Basic Subscription Right, the “**Rights**”). Each Over-Subscription Right entitles the holder to subscribe for an additional amount equal to up to 400% of the shares of Common Stock and Warrants for which such holder was otherwise entitled to subscribe (calculated prior to the exercise of any rights). If sufficient remaining shares of Common Stock and Warrants are available, all over-subscription requests will be honored in full. If requests for shares of Common Stock and Warrants pursuant to the Over-Subscription Right exceed the remaining shares of Common Stock and Warrants available, the remaining shares of Common Stock and Warrants will be allocated pro-rata among Rights Holders who over-subscribe based on the number of Rights then held. Rights may only be exercised for whole numbers of shares; no fractional shares of Common Stock will be issued in the Rights Offering.

The Rights are evidenced by a subscription rights certificate (a “**Subscription Certificate**”) registered in your name or the name of your nominee.

We are asking persons who hold shares of the Company’s Common Stock beneficially, and who have received the Rights distributable with respect to those shares through a broker-dealer, trust company, bank or other nominee, to contact the appropriate institution or nominee and request it to effect the transactions for them.

If you exercise the Over-Subscription Right on behalf of beneficial owners of Rights, you will be required to certify to the Subscription Agent and the Company, in connection with the exercise of the Over-Subscription Right, as to the aggregate number of Rights that have been exercised pursuant to the Subscription Right, whether the Rights exercised pursuant to the Basic Subscription Right on behalf of each beneficial owner for which you are acting have been exercised in full and the number of shares of Common Stock and Warrants being subscribed for pursuant to the Over-Subscription Right by each beneficial owner of Rights on whose behalf you are acting.

Enclosed are copies of the following documents:

1. Prospectus, dated November [ ], 2008; and
2. A form of letter which may be sent to beneficial holders of the Company’s Common Stock.

Rights not exercised at or prior to 5:00 p.m., New York City time, on the Expiration Date will expire.

Additional copies of the enclosed materials may be obtained from the Information Agent, MacKenzie Partners, Inc., toll-free at the following telephone number: (800) 322-2885.

**NOTHING HEREIN OR IN THE ENCLOSED DOCUMENTS SHALL MAKE YOU OR ANY OTHER PERSON AN AGENT OF THE COMPANY; THE DEALER-MANAGER, THE SUBSCRIPTION AGENT, THE INFORMATION AGENT OR ANY OTHER PERSON MAKING OR DEEMED TO BE MAKING OFFERS OF THE SECURITIES ISSUABLE UPON VALID EXERCISE OF THE RIGHTS, OR AUTHORIZE YOU OR ANY OTHER PERSON TO MAKE ANY STATEMENTS ON BEHALF OF ANY OF THEM WITH RESPECT TO THE OFFERING, EXCEPT FOR STATEMENTS MADE IN THE PROSPECTUS.**

**[FORM OF NOTICE TO BENEFICIAL STOCKHOLDERS OF COMMON STOCK]****PRO-PHARMACEUTICALS, INC.****NOTICE TO CLIENTS OF STOCKHOLDERS WHO ARE ACTING AS NOMINEES**

Up to [\_\_\_\_\_] Shares of Common Stock and  
 Series C Common Stock Purchase Warrants to purchase  
 an additional [\_\_\_\_\_] Shares of Common Stock Issuable Upon  
 Exercise of Rights to Subscribe for Such Shares at \$[\_\_\_\_\_] per Share

Enclosed for your consideration is a prospectus, dated November [ ], 2008 (the “**Prospectus**”), relating to the offering by Pro-Pharmaceuticals, Inc. (the “**Company**”) of subscription rights (the “**Rights Offering**”) to purchase (i) shares of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”), and (ii) transferable Series C Common Stock purchase warrants to purchase additional shares of the Common Stock (“**Warrants**”), by stockholders of record (“**Record Date Stockholders**”) as of 5:00 p.m., New York City time, on November [ ], 2008 (the “**Record Date**”).

Pursuant to the offering, the Company is issuing Rights to subscribe for up to [\_\_\_\_\_] shares of the Company’s Common Stock and [\_\_\_\_\_] Warrants, on the terms and subject to the conditions described in the Prospectus. The Rights may be exercised at any time during the subscription period, which commences on November [ ], 2008 and ends at 5:00 p.m., New York City time, on December [ ], 2008, unless extended by the Company in its sole discretion (as it may be extended, the “**Expiration Date**”). The Common Stock is presently traded on the NYSE Alternext US under the symbol “PRW”. Neither the Rights nor the Warrants underlying the Rights will be listed for trading on any stock exchange or market or on the OTC Bulletin Board. The Warrants, but not the Rights, may be sold, transferred or assigned. The Company expects the Rights and Warrants will be exercisable for shares of Common Stock listed on the NYSE Alternext US or the OTC Bulletin Board. In addition, the Warrants will be governed by a Warrant Agreement between the Company and Continental Stock Transfer & Trust Company.

As described in the Prospectus, Record Date Stockholders will receive one (1) Right for each share of Common Stock owned on the Record Date.

Each Right entitles the holder (the “**Rights Holders**”) to purchase: (i) one share of Common Stock at the subscription price of \$[\_\_\_\_\_] per share and (ii) one Warrant that entitles the Rights Holder to purchase one share of Common Stock (the “**Basic Subscription Right**”). Each Warrant will be immediately exercisable following issuance through November [ ], 2009 to purchase one share of Common Stock at 125% of the price of the Basic Subscription Right, or \$[\_\_\_\_\_] per share. If during the term of the Warrant the closing price of the Common Stock is equal to or greater than 400% of the warrant exercise price, or \$[\_\_\_\_\_] per share, for at least ten consecutive trading days, the Company may call, or cancel any outstanding Warrants that are not exercised during the 15 trading day period following the date the Company gives notice to the holders of the remaining unexercised warrants.

Rights Holders who fully exercise their Basic Subscription Rights will be entitled to subscribe for additional shares and warrants that remain unsubscribed as a result of any unexercised Basic Subscription Rights (the “**Over-Subscription Right**” and together with the Basic Subscription Right, the “**Rights**”). Each Over-Subscription Right entitles the holder to subscribe for an additional amount equal to up to 400% of the shares of Common Stock and Warrants for which such holder was otherwise entitled to subscribe (calculated prior to the exercise of any rights). If sufficient remaining shares of Common Stock and Warrants are available, all over-subscription requests will be honored in full. If requests for shares of Common Stock and Warrants pursuant to the Over-Subscription Right exceed the remaining shares of Common Stock and Warrants available, the remaining shares of Common Stock and Warrants will be allocated pro-rata among Rights Holders who over-subscribe based on the number of Rights then held. Rights may only be exercised for whole numbers of shares; no fractional shares of Common Stock will be issued in the Rights Offering.

The Rights will be evidenced by subscription certificates (the “**Subscription Certificates**”).

Enclosed are copies of the following documents:

1. Prospectus, dated November [ ], 2008; and
2. Beneficial Owner Election Form.

**THE MATERIALS ENCLOSED ARE BEING FORWARDED TO YOU AS THE BENEFICIAL OWNER OF COMMON STOCK CARRIED BY US IN YOUR ACCOUNT BUT NOT REGISTERED IN YOUR NAME. EXERCISES OF RIGHTS MAY ONLY BE MADE BY US AS THE RECORD OWNER AND PURSUANT TO YOUR INSTRUCTIONS.**

Accordingly, we request instructions as to whether you wish us to elect to subscribe for any shares of Common Stock and Warrants to which you are entitled pursuant to the terms and subject to the conditions set forth in the enclosed Prospectus. However, we urge you to read the Prospectus carefully before instructing us to exercise any Rights. Your instructions to us should be forwarded as promptly as possible in order to permit us to exercise the Rights on your behalf in accordance with the provisions of the offering. The Rights Offering will expire at 5:00 p.m., New York City time, on the Expiration Date. You will have no right to rescind your subscription after receipt of your payment of the subscription price, except as described in the Prospectus. Rights not exercised at or prior to 5:00 p.m., New York City time, on the Expiration Date will expire.

If you wish to have us, on your behalf, exercise your Rights for any shares of Common Stock and Warrants to which you are entitled, please so instruct us by completing, executing and returning to us the Beneficial Owner Election Form included with this letter.

**ANY QUESTIONS OR REQUESTS FOR ASSISTANCE CONCERNING THE RIGHTS OFFERING SHOULD BE DIRECTED TO MACKENZIE PARTNERS, INC., THE INFORMATION AGENT, TOLL-FREE AT THE FOLLOWING TELEPHONE NUMBER: (800) 322-2885.**

**FORM OF BENEFICIAL OWNER ELECTION**

The undersigned acknowledge(s) receipt of your letter and the enclosed materials referred to therein relating to the offering by Pro-Pharmaceuticals, Inc., a Nevada corporation (the “**Company**”) of subscription rights (the “**Rights**”) to purchase (i) shares of the Company’s common stock, par value \$0.001 per share and (ii) transferable Series C Common Stock purchase warrants to purchase additional shares of the Common Stock (the “**Rights Offering**”).

**With respect to any instructions to exercise (or not to exercise) the Rights, the undersigned acknowledges that this form must be completed and returned such that it will actually be received by you by 5:00 p.m., New York City time, on December [\_\_], 2008, the last business day prior to the scheduled expiration date of the Rights Offering of December [\_\_], 2008 (which may be extended by the Company in its sole discretion).**

This will instruct you whether to exercise Rights to purchase shares of the common stock and warrants distributed with respect to the shares of the common stock held by you for the account of the undersigned, pursuant to the terms and subject to the conditions set forth in the Prospectus and the related Subscription Rights Certificates.

Box 1.  • Please DO NOT EXERCISE RIGHTS for shares of common stock and warrants.

Box 2.  • Please EXERCISE RIGHTS for shares of common stock and warrants as set forth below.

The number of Rights for which the undersigned gives instructions for exercise under the Basic Subscription Rights should not exceed the number of Rights that the undersigned is entitled to exercise.

	<u>Number of Shares</u>	<u>Per Share Subscription Price</u>	<u>Payment</u>
Basic Subscription Rights	[_____] X	\$[_____] =	\$_____ (Line 1)
Over-Subscription Rights	[_____] X	\$[_____] =	\$_____ (Line 2)
	Total Payment Required		\$_____ (Sum of Lines 1 and 2 must equal total of amounts in Boxes 3 and 4)

Box 3.  • Payment in the following amount is enclosed \$\_\_\_\_\_.

Box 4.  • Please deduct payment from the following account maintained by you as follows:

Type of Account: \_\_\_\_\_  
 Account No.: \_\_\_\_\_  
 Amount to be deducted: \_\_\_\_\_ \$  
  
 Signature: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_, 2008

## FORM OF LEGAL OPINION

November [ ], 2008

Pro-Pharmaceuticals, Inc.  
7 Wells Avenue  
Newton, Massachusetts 02459

**Re: Pro-Pharmaceuticals, Inc.**  
**Registration Statement on Form S-1**

Ladies and Gentlemen:

We have acted as counsel to Pro-Pharmaceuticals, Inc., a Nevada corporation (the "Company"), in connection with the preparation and filing of the Registration Statement on Form S-1 (the "Registration Statement"), initially filed by the Company on November [ ], 2008, by the Company with the United States Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement includes a prospectus (the "Prospectus") to be furnished to stockholders of the Company in connection with the issuance by the Company to its stockholders of subscription rights (the "Basic Subscription Rights") entitling the holders thereof to purchase (i) shares of the Company's common stock, par value \$0.001 per share (the "Common Stock") and (ii) transferable Series C common stock purchase warrants to purchase additional shares of Common Stock (the "Warrants"), including the right to the Company's stockholders who exercise their Basic Subscription Rights in full, to subscribe for additional shares that remain unsubscribed as a result of any unexercised rights for an additional amount equal to up to 400% of the shares of Common Stock for which the subscriber was otherwise entitled to subscribe (the "Over-Subscription Rights" and together with the Basic Subscription Rights, the "Rights") and the issuance of up to an aggregate of [ ] shares of the Company's Common Stock upon the exercise of the Rights and [ ] shares of the Company's Common Stock upon the exercise of the shares of Common Stock underlying the Warrants (the "Rights Offering"). The Rights, Common Stock and Warrants are collectively referred to herein as the "Securities."

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

As counsel to the Company and in connection with this opinion, we have examined and relied upon such records, documents, certificates and other instruments as in our judgment are necessary or appropriate to form the basis for the opinions set forth herein. In our examinations, we have assumed the genuineness of all signatures, the legal capacity of natural persons signing or delivering any instrument, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photocopies and the authenticity of the originals of such latter documents.

Our opinion expressed below is limited to the Nevada Corporation Law, the applicable provisions of the Nevada constitution and the reported judicial decisions interpreting such laws, and we do not express any opinion concerning any other laws.

Based upon and subject to the foregoing and to the other qualifications and limitations set forth herein, we are of the opinion that:

1. The Rights have been duly authorized and, when issued, will be the valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, except to the extent that enforcement thereof may be limited by (a) bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium, or other similar laws now or hereafter in effect relating to creditors' rights generally and (b) general principles of equity (regardless of whether enforceability is considered in a proceeding at law or in equity).

2. The Common Stock has been duly authorized and, when issued and delivered against payment therefor upon due exercise of the Rights or the Warrants as contemplated in the Registration Statement, will be validly issued, fully paid and nonassessable.

3. The Warrants have been duly authorized and, when issued and delivered as contemplated in the Registration Statement, will be validly issued.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. We also consent to the reference to our firm under the caption "Legal Matters" in the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder. This opinion is expressed as of the date hereof unless otherwise expressly stated, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable laws.

Very truly yours,

/s/ Greenberg Traurig, LLP

GREENBERG TRAURIG, LLP

## FORM OF SUBSCRIPTION AGENT AGREEMENT

THIS SUBSCRIPTION AGENT AGREEMENT (“**Agreement**”) between Pro-Pharmaceuticals, Inc., a Nevada corporation (the “**Company**”), and Continental Stock Transfer & Trust Company, a New York corporation (“**Continental**”), is dated as of [ ], 2008.

1. Appointment.

(a) The Company is making an offer (the “**Rights Offering**”) to its stockholders of record at the close of business on November [ ], 2008 (the “**Record Date**”), of non-transferable subscription rights (the “**Rights**”) to purchase up to an aggregate of [ ] shares of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”) and transferable [ ] Series C common stock purchase warrants to purchase an additional [ ] shares of Common Stock (the “**Warrants**”) at a purchase price of \$[ ] per Right (the “**Subscription Price**”). The term “**Subscribed**” shall mean submitted for purchase from the Company by a stockholder in accordance with the terms of the Rights Offering, and the term “**Subscription**” shall mean any such submission. The Warrants will be governed by a Warrant Agreement between the Company and Continental, as Warrant Agent.

(b) The Rights Offering will expire on December [ ], 2008 at 5:00 p.m. New York City Time (the “**Expiration Time**”), unless the Company shall have extended the period of time for which the Rights Offering is open, in its sole discretion for up to 45 days, in which event the term “**Expiration Time**” shall mean the latest time and date at which the Rights Offering, as so extended by the Company from time to time, shall expire.

(c) The Company filed a Registration Statement on Form S-1 (File No. 333- ) relating to the Rights Offering with the United States Securities and Exchange Commission (the “**SEC**”) under the Securities Act of 1933, as amended, on November [ ], 2008 (the “**Registration Statement**”). The terms of the Rights Offer are more fully described in the Prospectus (the “**Prospectus**”) forming part of the Registration Statement as such Registration Statement may be declared effective by the SEC. A copy of the Prospectus is attached hereto as Exhibit 1. All terms used and not defined herein shall have the same meaning as in the Prospectus. Promptly after the Record Date, the Company will provide Continental with a list of holders of Common Stock as of the Record Date (the “**Record Stockholders List**”).

(d) The Company hereby appoints Continental to act as subscription agent (the “**Subscription Agent**”) for the Rights Offering in accordance with and subject to the following terms and conditions.

2. Subscription of Rights.

(a) The Rights are evidenced by subscription rights certificates (the “**Certificates**”), a copy of the form of which is attached hereto as Exhibit 2. The Certificates entitle the holders to subscribe, upon payment of the Subscription Price, for (i) shares of Common Stock at the rate of one share per Right evidenced by a Certificate and (ii) Warrants at a rate of one Warrant per Right evidenced by a Certificate (the “**Basic Subscription Right**”). No fractional shares will be issued.

(b) The Rights Offering includes an over-subscription right entitling the subscribing stockholders who exercise their Basic Subscription Right in full to subscribe and pay the Subscription Price for additional Rights representing up to an additional amount equal to up to 400% of the shares and warrants for which such holder was otherwise entitled to subscribe (the “**Over-Subscription Right**”). Reference is made to the Prospectus for a complete description of the Basic Subscription Right and the Over-Subscription Right and the allocation thereof.

3. Duties of Subscription Agent. As Subscription Agent, Continental is authorized and directed to:

(a) Issue the Certificates in accordance with this Agreement in the names of the holders of the Common Stock of record or other nominees on the Record Date, keep such records as are necessary for the purpose of recording such issuance, and furnish a copy of such records to the Company. The Certificates may be signed on behalf of the Subscription Agent by the manual or facsimile signature of a Vice President or Assistant Vice President of the Subscription Agent, or by the manual signature of any of its other authorized officers.

(b) Promptly after Continental receives the Record Stockholders List, Continental shall:

(i) mail or cause to be mailed, by first class mail, or deliver (which delivery may be done electronically through the facilities of the Depository Trust Company (“**DTC**”) or otherwise) to each holder of Common Stock of record on the Record Date whose address of record is within the United States and Canada, (i) a Certificate evidencing the Rights to which such stockholder is entitled under the Rights Offering, (ii) a copy of the Prospectus and (iii) a return envelope addressed to the Subscription Agent; and

(ii) mail or cause to be mailed, by air mail, to each holder of Common Stock of record on the Record Date whose address of record is outside the United States and Canada, or is an A.P.O. or F.P.O. address, a copy of the Prospectus. Continental shall refrain from mailing Certificates issuable to any holder of Common Stock of record on the Record Date whose address of record is outside the United States and Canada, or is an A.P.O. or F.P.O. address, and hold such Certificates for the account of such stockholder subject to such stockholder making satisfactory arrangements with the Subscription Agent for the exercise of the Rights evidenced thereby, and follow the instructions of such stockholder for the exercise of such Rights if such instructions are received at or before 11:00 a.m., New York City Time, on \_\_\_\_\_.

(c) Mail or deliver (which delivery may be done electronically through the facilities of DTC or otherwise) a copy of the Prospectus with certificates for shares of Common Stock and Warrants when such are issued to persons other than the registered holder of the Certificate.

(d) Accept Subscriptions upon the due exercise (including payment of the Subscription Price) on or prior to the Expiration Time of Rights in accordance with the terms of the Certificates and the Prospectus.

(e) Subject to the next sentence, accept Subscriptions from stockholders whose Certificates are alleged to have been lost, stolen or destroyed upon receipt by Continental

of an affidavit of theft, loss or destruction and a bond of indemnity in form and substance reasonably satisfactory to Continental, accompanied by payment of the Subscription Price for the total number of Rights Subscribed for. Upon receipt of such affidavit and bond of indemnity and compliance with any other applicable requirements, stop orders shall be placed on said Certificates and Continental shall withhold delivery of the Rights Subscribed for until after the Certificates have expired and it has been determined that the Rights evidenced by the Certificates have not otherwise been purported to have been exercised or otherwise surrendered.

(f) Accept Subscriptions, without further authorization or direction from the Company, without procuring supporting legal papers or other proof of authority to sign (including without limitation proof of appointment of a fiduciary or other person acting in a representative capacity), and without signatures of co-fiduciaries, co-representatives or any other person:

(i) if the Certificate is registered in the name of a fiduciary and is executed by, and the Rights are to be issued in the name of, such fiduciary;

(ii) if the Certificate is registered in the name of joint tenants and is executed by one of the joint tenants, provided the certificate representing the Rights is issued in the names of, and is to be delivered to, such joint tenants;

(iii) if the Certificate is registered in the name of a corporation and is executed by a person in a manner which appears or purports to be done in the capacity of an officer, or agent thereof, provided the Rights are to be issued in the name of such corporation; or

(iv) if the Certificate is registered in the name of an individual and is executed by a person purporting to act as such individual's executor, administrator or personal representative, provided, the Rights are to be registered in the name of the subscriber as executor or administrator of the estate of the deceased registered holder and there is no evidence indicating the subscriber is not the duly authorized representative that he purports to be.

(g) Accept Subscriptions not accompanied by Certificates if submitted by a firm having membership in the New York Stock Exchange or another national securities exchange or by a commercial bank or trust company having an office in the United States and accompanied by proper payment for the total number of Rights Subscribed for.

(h) Refer to the Company, for specific instructions as to acceptance or rejection, Subscriptions received after the Expiration Time, Subscriptions not authorized to be accepted, and Subscriptions otherwise failing to comply with the requirements of the Prospectus and the terms and conditions of the Certificates.

4. Acceptance of Subscriptions. Upon acceptance of a Subscription, Continental shall from time to time during the offering:

(a) Hold all monies received in a dedicated, non-interest bearing account for the benefit of the Company. Promptly following the Expiration Time, Continental shall distribute to the Company the funds from exercise of the Basic Subscription Rights and Over-Subscription Rights in such account and following the Expiration Date issue (in physical form or electronically through the facilities of DTC, in each case in a manner approved by the Company) certificates for shares of Common Stock and

Warrants issuable with respect to Subscriptions that have been accepted. Continental will not be obligated to calculate or pay interest to any holder or any other party claiming through a holder or otherwise. It is hereby agreed immediately following the effective date of the Subscription, immediately available funds, represented by certified check, money order, or wire transfer but not personal check, will be deposited with Continental.

(b) Advise the Company daily by facsimile transmission and confirm by letter to the attention of [Anthony Squeglia] (the “**Company Representative**”) as to the total number of shares of Common Stock and Warrants Subscribed for, the total number of Rights partially Subscribed for and the amount of funds received, with cumulative totals for each; and in addition advise the Company Representative, by telephone at (617) 559-0033, confirmed by facsimile transmission, of the amount of funds received identified in accordance with (a) above, deposited, available or transferred in accordance with (a) above, with cumulative totals; and

(c) As promptly as possible but in any event on or before 3:30 p.m., New York City Time, on the first full business day following the Expiration Time, advise the Company Representative in accordance with (b) above of the number of shares Subscribed for and the number of shares of Common Stock and Warrants unsubscribed for.

5. Completion of Rights Offering. Upon completion of the Rights Offering:

(a) Continental shall issue (in physical form or electronically through the facilities of DTC, in each case in a manner approved by the Company) certificates for the Common Stock and Warrants for which Subscriptions have been received.

(b) The Certificates may be physical certificates but may, as instructed by the Company be issued electronically through the facilities of DTC. The Company shall appoint and have in office at all times a Transfer Agent and Registrar for the Certificates, which may be Continental and which shall keep books and records of the registration and transfers and exchanges of Certificates (such books and records are hereinafter called the “**Certificate Register**”). The Company shall promptly notify the Transfer Agent and Registrar of the exercise of any Certificates. The Company shall promptly notify Continental of any change in the Transfer Agent and Registrar of the Certificates.

(c) All Certificates issued upon any registration of transfer or exchange of Certificates shall be the valid obligations of the Company, evidencing the same obligations, and entitled to the same benefits under this Agreement, as the Certificates surrendered for such registration of transfer or exchange.

(d) For so long as this Agreement shall be in effect, the Company will reserve for issuance and keep available free from preemptive rights a sufficient number of shares of Common Stock to permit the exercise in full of all Rights and Warrants issued pursuant to the Rights Offering. Subject to the terms and conditions of this Agreement, Continental will request the Transfer Agent for the Common Stock and Warrants to issue (in physical form or electronically through the facilities of DTC, in each case in a manner approved by the Company) certificates evidencing the appropriate number of shares of Common Stock and Warrants as required from time to time in order to effectuate the Subscriptions.

(e) The Company shall take any and all action, including without limitation obtaining the authorization, consent, lack of objection, registration or approval of any governmental authority, or the taking of any other action under the laws of the United States of

America or any political subdivision thereof, to insure that all shares of Common Stock and Warrants issuable upon the exercise of the Certificates at the time of delivery of the certificates therefor (subject to payment of the Subscription Price) will be duly and validly issued and fully paid and non-assessable shares of Common Stock and Warrants, free from all preemptive rights and taxes, liens, charges and security interests created by or imposed upon the Company with respect thereto.

(f) The Company shall from time to time take all action necessary or appropriate to obtain and keep effective all registrations, permits, consents and approvals of the SEC and any other governmental agency or authority and make such filings under Federal and state laws which may be necessary or appropriate in connection with the issuance and delivery of Certificates or the issuance, sale, transfer and delivery of Common Stock and Warrants issued upon exercise of Certificates.

6. Procedure for Discrepancies. Continental shall follow its regular procedures to attempt to reconcile any discrepancies between the number of shares of Common Stock and Warrants that any Certificate may indicate are to be issued to a stockholder and the number that the Record Stockholders List indicates may be issued to such stockholder. In any instance where Continental cannot reconcile such discrepancies by following such procedures, Continental will consult with the Company for instructions as to the number of shares of Common Stock and Warrants, if any, it is authorized to issue. In the absence of such instructions, Continental is authorized not to issue any shares of Common Stock and Warrants to such stockholder.

7. Procedure for Deficient Items. Continental shall examine the Certificates received by it as Subscription Agent to ascertain whether they appear to have been properly completed and executed. In the event Continental determines that any Certificate does not appear to have been properly completed or executed, or where the Certificates do not appear to be in proper form for Subscription, or any other irregularity in connection with the Subscription appears to exist, Continental shall follow, where possible, its regular procedures to attempt to cause such irregularity to be corrected. Continental is not authorized to waive any irregularity in connection with the Subscription, unless Continental shall have received from the Company the Certificate which was delivered, duly dated and signed by an authorized officer of the Company, indicating that any irregularity in such Certificate has been cured or waived and that such Certificate has been accepted by the Company. If any such irregularity is neither corrected nor waived, Continental will return to the subscribing stockholder (at its option by either first class mail under a blanket surety bond or insurance protecting Continental and the Company from losses or liabilities arising out of the non-receipt or nondelivery of Certificates or by registered mail insured separately for the value of such Certificates) to such stockholder's address as set forth in the Subscription any Certificates surrendered in connection therewith and any other documents received with such Certificates, and a letter of notice to be furnished by the Company explaining the reasons for the return of the Certificates and other documents.

8. Date/Time Stamp. Each document received by Continental relating to its duties hereunder shall be dated and time stamped when received.

9. Transfer Procedures. If certificates representing shares of Common Stock or Warrants are to be delivered by Continental to a person other than the person in whose name a

surrendered Certificate is registered, Continental shall issue no certificate for Common Stock or Warrants until the Certificate so surrendered has been properly endorsed (or otherwise put in proper form for transfer).

10. Tax Reporting. Should any issue arise regarding federal income tax reporting or withholding, Continental shall take such action as the Company reasonably instructs in writing.

11. Termination. The Company may terminate this Agreement at any time by so notifying Continental in writing. Continental may terminate this Agreement upon 60 days' prior written notice to the Company. Upon any such termination, Continental shall be relieved and discharged of any further responsibilities with respect to its duties hereunder. Upon payment of all Continental's outstanding fees and expenses, Continental shall forward to the Company or its designee promptly any Certificate or other document relating to Continental's duties hereunder that Continental may receive after its appointment has so terminated. Sections 12, 13, 14 and 19 of this Agreement shall survive any termination of this Agreement.

12. Authorizations and Protections. As agent for the Company, Continental:

(a) shall have no duties or obligations other than those specifically set forth herein or as may subsequently be agreed to in writing by Continental and the Company;

(b) shall have no obligation to issue any shares of Common Stock or Warrants unless the Company shall have provided a sufficient number of certificates for such Common Stock or Warrants;

(c) shall be regarded as making no representations and having no responsibilities as to the validity, sufficiency, value, or genuineness of any Certificates surrendered to Continental hereunder or shares of Common Stock or Warrants issued in exchange therefor, and will not be required to or be responsible for and will make no representations as to, the validity, sufficiency, value or genuineness of the Rights Offering;

(d) shall not be obligated to take any legal action hereunder; if, however, Continental determines to take any legal action hereunder, and where the taking of such action might, in Continental's judgment, subject or expose it to any expense or liability, Continental shall not be required to act unless it shall have been furnished with an indemnity reasonably satisfactory to it;

(e) may rely on and shall be fully authorized and protected in acting or failing to act upon any certificate, instrument, opinion, notice, letter, telegram, telex, facsimile transmission or other document or security delivered to Continental and believed by it to be genuine and to have been signed by the proper party or parties;

(f) shall not be liable or responsible for any recital or statement contained in the Prospectus or any other documents relating thereto;

(g) shall not be liable or responsible for any failure on the part of the Company to comply with any of its covenants and obligations relating to the Rights Offering, including without limitation obligations under applicable securities laws;

(h) may rely on and shall be fully authorized and protected in acting or failing to act upon the written, telephonic or oral instructions of officers of the Company with respect to any matter relating to Continental acting as Subscription Agent covered by this Agreement (or supplementing or qualifying any such actions);

(i) may consult with counsel satisfactory to Continental, including internal counsel, and the advice of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered, or omitted by Continental hereunder in good faith and in reliance upon the advice of such counsel; and

(j) are not authorized, and shall have no obligation, to pay any brokers, dealers, or soliciting fees to any person.

13. Indemnification. The Company agrees to indemnify Continental for, and hold it harmless from and against, any loss, liability, claim or expense (“Loss”) arising out of or in connection with Continental’s performance of its duties under this Agreement or this appointment, including the costs and expenses of defending itself against any Loss or enforcing this Agreement, except to the extent that such Loss shall have been determined by a court of competent jurisdiction to be a result of Continental’s negligence or intentional misconduct.

14. Limitation of Liability.

(a) In the absence of negligence or intentional misconduct on its part, Continental shall not be liable for any action taken, suffered, or omitted by it or for any error of judgment made by it in the performance of its duties under this Agreement. Anything in this agreement to the contrary notwithstanding, in no event shall Continental be liable for special, indirect, incidental or consequential loss or damage of any kind whatsoever (including but not limited to lost profits), even if Continental has been advised of the likelihood of such damages and regardless of the form of action. Any liability of Continental will be limited to the amount of fees paid by the Company hereunder.

(b) In the event any question or dispute arises with respect to the proper interpretation of this Agreement or Continental’s duties hereunder or the rights of the Company or of any holders surrendering certificates for shares of Common Stock or Warrants pursuant to the Rights Offering, Continental shall not be required to act and shall not be held liable or responsible for refusing to act until the question or dispute has been judicially settled (and Continental may, if it deems it advisable, but shall not be obligated to, file a suit in interpleader or for a declaratory judgment for such purpose) by final judgment rendered by a court of competent jurisdiction, binding on all stockholders and parties interested in the matter which is no longer subject to review or appeal, or settled by a written document in form and substance satisfactory to Continental and executed by the Company and each such stockholder and party. In addition, Continental may require for such purpose, but shall not be obligated to require, the execution of such written settlement by all the stockholders and all other parties that may have an interest in the settlement.

15. Representations, Warranties and Covenants. The Company represents, warrants and covenants that (a) it is duly incorporated, validly existing and in good standing under the

laws of its jurisdiction of incorporation, (b) the making and consummation of the Rights Offering and the execution, delivery and performance of all transactions contemplated thereby (including without limitation this Agreement) have been duly authorized by all necessary corporate action and will not result in a breach of or constitute a default under the articles of incorporation or bylaws of the Company or any indenture, agreement or instrument to which either is a party or is bound, (c) this Agreement has been duly executed and delivered by the Company and constitutes a legal, valid, binding obligation of the Company, enforceable against the Company in accordance with its terms, (d) the Rights Offering will comply in all material respects with all applicable requirements of law, and (e) to the best of their knowledge, there is no litigation pending or threatened as of the date hereof in connection with the Rights Offering.

16. Notices. All notices, demands and other communications given pursuant to the terms and provisions hereof shall be in writing, shall (except as provided for in Section 18 hereof) be deemed effective on the date of receipt, and may be sent by facsimile, overnight delivery services, or by certified or registered mail, return receipt requested to:

If to the Company:

Pro-Pharmaceuticals, Inc.  
7 Wells Avenue  
Newton, Massachusetts 02459  
Telephone: (617) 559-0033  
Facsimile: (617) 928-3450  
Attn: Anthony Squeglia

with a copy to:

Jonathan Guest  
Greenberg Traurig, LLP  
One International Place  
Boston, Massachusetts 02110  
Telephone: (617) 310-6000  
Facsimile: (617) 310-6001

If to Continental:

Continental Stock Transfer & Trust Company  
17 Battery Place, 8th Floor  
New York, NY 10004  
Telephone: (212) 845-3287  
Facsimile: (212) 616-7616  
Attn: Compliance Department

17. Specimen Signatures. Set forth in Exhibit 3 hereto is a list of the names and specimen signatures of the persons authorized to act for the Company under this Agreement. The Secretary of the Company shall, from time to time, certify to Continental the names and signatures of any other persons authorized to act for the Company, as the case may be, under this Agreement.

18. Instructions. Any instructions given to Continental orally, as permitted by any provision of this Agreement, shall, upon the request of Continental, be confirmed in writing by the Company (which for these purposes only may be undertaken by e-mail transmission) as soon as practicable. Continental shall not be liable or responsible and shall be fully authorized and protected for acting, or failing to act, in accordance with any oral instructions which do not conform with the written confirmation received in accordance with this Section.

19. Fees. Whether or not any Certificates are surrendered to Continental, for its services as Subscription Agent hereunder, the Company shall pay to Continental a fee of Ten Thousand and no/100 Dollars (\$10,000.00), together with reimbursement for reasonable out-of-pocket expenses. All amounts owed to Continental hereunder are due upon receipt of the invoice.

20. Force Majeure. Continental shall not be liable for any failure or delay arising out of conditions beyond its reasonable control including, but not limited to, work stoppages, fires, civil disobedience, riots, rebellions, storms, electrical, mechanical, computer or communications facilities failures, acts of God or similar occurrences.

21. Miscellaneous.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of New York without giving effect to conflict of laws, rules or principles.

(b) No provision of this Agreement may be amended, modified or waived, except in writing signed by all of the parties hereto.

(c) Except as expressly set forth elsewhere in this Agreement, all notices, instructions and communications under this Agreement shall be in writing, shall be effective upon receipt and shall be addressed as provided in Section 16 to such other address as a party hereto shall notify the other parties in writing.

(d) In the event that any claim of inconsistency between this Agreement and the terms of the Rights Offering arise, as they may from time to time be amended, the terms of the Rights Offering shall control, except with respect to Continental's duties, liabilities and rights, including without limitation compensation and indemnification, which shall be controlled by the terms of this Agreement.

(e) If any provision of this Agreement shall be held illegal, invalid, or unenforceable by any court, this Agreement shall be construed and enforced as if such provision had not been contained herein and shall be deemed an Agreement among the parties hereto to the full extent permitted by applicable law.

(f) This Agreement shall be binding upon, inure to the benefit of, and be enforceable by, the respective successors and assigns of the parties hereto.

(g) This Agreement may not be assigned by any party without the prior written consent of all parties.

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(h) Sections 12, 13, 14 and 19 hereof shall survive termination of this Agreement.

(i) This Agreement may be executed in counterparts, each of which, when taken together, shall constitute one and the same agreement, and each of which may be delivered by the parties by facsimile or other electronic transmission, which shall not impair the validity of such counterparts.

(Signature page follows)

**Signature Page  
to  
Subscription Agent Agreement**

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers as of the day and year above written.

PRO-PHARMACEUTICALS, INC.

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

CONTINENTAL STOCK TRANSFER & TRUST COMPANY,  
as Subscription Agent

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

- Exhibit 1 Prospectus
- Exhibit 2 Form of Subscription Rights Certificate
- Exhibit 3 List of Authorized Representatives

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**Exhibit 1**  
**to**  
**Subscription Agent Agreement**

**Prospectus**

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**Exhibit 2**  
**to**  
**Subscription Agent Agreement**  
**Form of Subscription Rights Certificate**

**Exhibit 3**  
**to**  
**Subscription Agent Agreement**  
**List of Authorized Representatives**

**Authorized  
Representative**

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**Specimen Signature**

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/s/

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/s/

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the use in this Registration Statement on Form S-1 of our report dated March 28, 2008, relating to the consolidated financial statements of Pro-Pharmaceuticals, Inc. (which report expresses an unqualified opinion and includes explanatory paragraphs relating to the adoption of Statement of Financial Accounting Standards (“SFAS”) No. 123(R), “Share-Based Payment” effective January 1, 2006, and the adoption of Financial Accounting Standards Board (“FASB”) Interpretation (“FIN”) No. 48, “Accounting For Uncertainty in Income Taxes” on January 1, 2007, and to the substantial doubt about the Company’s ability to continue as a going concern) appearing in the Prospectus which is part of such Registration Statement, and to the reference to us under the heading “Experts” in such Prospectus.

/S/ DELOITTE & TOUCHE LLP

Boston, Massachusetts

November 19, 2008