PRO PHARMACEUTICALS INC Form S-1/A February 02, 2009 Table of Contents

As filed with the Securities and Exchange Commission on February 2, 2009

Registration No. 333-155491

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

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)

7 Wells Avenue

04-3562325

(I.R.S. Employer Identification No.)

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. x

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

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

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

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

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

CALCULATION OF REGISTRATION FEE

Accelerated filer "Smaller reporting company x

Title of Each Class of Securities	Amount to be Registered	Proposed Maximum Offering Price per Share	Estimated Proposed Maximum Aggregate Offering Price	Amount of Registration
to be Registered	(1)	(1)	(3)	Fee
Subscription Rights (<u>Rights</u>), each to purchase two				
shares of common stock, \$0.001 par value per share				
(<u>Common Stoc</u> k)				(2)
Shares of Common Stock underlying the Rights			\$20,000,000	\$786 (4)
Total			\$20,000,000	\$786 (5)

- (1) This registration statement relates to (a) the Rights to purchase Common Stock and (b) the shares of Common Stock deliverable upon the exercise of 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. Previously paid.
- (5) A registration fee of \$1,572 has been previously paid. The registrant has reduced the estimated proposed maximum aggregate offering price from \$40,000,000 to \$20,000,000. As a result, the amount of the registration fee for this offering will be \$786. In accordance with Rule 457(p), the registrant may offset the amount of \$786 against a future registration fee due for a subsequent 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 February 2, 2009

Up to Shares of Common Stock

Issuable Upon Exercise of Rights to Subscribe for such Shares at \$ per Two Shares

We are distributing at no charge to the holders of our common stock on February , 2009, which we refer to as the record date, subscription rights to purchase up to an aggregate of 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 two shares of common stock at the subscription price of \$ per two shares, which we refer to as the basic subscription right. Each right may only be exercised for two whole shares.

Holders who fully exercise their basic subscription rights will be entitled to subscribe for additional shares 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 for which such holder was otherwise entitled to subscribe.

The rights will expire at 5:00 p.m., New York City time, on March , 2009, 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 (net of expenses) from the exercise of basic and over-subscription rights by the expiration date, unless waived or reduced by our board of directors and with the consent of the dealer-manager. In no event, will we raise more than \$ in this offering. However, this amount does not include additional amounts that we may receive upon the exercise of rights which may be subsequently acquired after the date hereof as a result of exercises of outstanding warrants and options and conversion of any securities convertible into common stock.

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. As a result of our current lack of financial liquidity and negative stockholders equity, our auditors have expressed substantial concern about our ability to continue as a going concern. You should purchase these securities only if you can afford a complete loss of your investment. In addition, your holdings in our company will be diluted if you do not exercise the full amount of your basic subscription rights. See <u>Risk Factors</u> beginning on page 15 of this prospectus.

The rights will be exercisable for shares of our common stock that will be quoted on the OTC Bulletin Board. Our common stock is presently quoted on the OTC Bulletin Board under the symbol PRWP.OB. The closing price of our shares of common stock on January 30, 2009 was \$0.12 per share. The subscription rights will not be listed for trading on any stock exchange or market or quoted on the OTC Bulletin Board. The subscription rights may not be sold, transferred or assigned, unless otherwise required by applicable law.

		Dealer-Manager	Proceeds, Before
	Subscription Price	Fee (2)	Expenses, to us
Per right (1)	\$	\$	\$
Total (3)	\$	\$	\$

(1) Each right entitles the holder to purchase, and may only be exercised for, two shares of common stock at the subscription price of \$ per two shares.

- (2) In connection with the rights offering, we have agreed to: (i) pay to Maxim Group LLC, the dealer-manager for this offering (A) a cash fee of 6.5% of the gross proceeds from the exercise of the rights in consideration of the advisory services provided to us, (B) a cash fee (subject to certain conditions) of 1.0% of such gross proceeds in consideration of soliciting the exercise of the rights and (C) a non-accountable expense allowance of 1.0% of such gross proceeds and (ii) grant to Maxim Group LLC a warrant to purchase 4.0% of the shares of common stock sold pursuant to the exercise of the rights, with such warrant having a exercise price equal to \$ (or 125% of the subscription price). Maxim Group LLC will not participate in the offering nor receive any commissions or compensation in certain states where we are relying on an exemption from registration under such state s securities laws.
- (3) Assumes that the rights offering is fully subscribed and that the maximum of approximately \$570,000.

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 February , 2009

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ABOUT THIS PROSPECTUS

Unless the context otherwise requires, all references to Pro-Pharmaceuticals, we, us, our, our company, or the Company in this prospectu 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.

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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 15 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 (February , 2009), subscription rights to purchase up to an aggregate of 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. Each subscription right will entitle you to purchase two shares of our common stock. 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 \$377,047 of available cash and cash equivalents as of December 31, 2008, we believe that we have sufficient capital to fund our operations into March 2009. If we fail to raise capital in March 2009, 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 approximately \$ million of dealer-manager commissions and fees and other offering expenses payable by us. However, subject to satisfying the minimum condition of raising \$2,500,000 (net of expenses) in this offering (unless waived or reduced by our board of directors and with the consent of Maxim Group LLC), 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 \$ in this offering, except for additional amounts that we may receive upon the exercise of rights which may be subsequently acquired after the date hereof as a result of exercises of outstanding warrants and options and conversion of any securities convertible into common stock. See Risk Factors Completion of this offering is subject to us raising a minimum of \$2,500,000 and a maximum of \$

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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 two shares of common stock at the subscription price of \$ per two shares.

Q: What is a basic subscription right?

A: Each basic subscription right gives you the opportunity to purchase two shares 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. Each right may only be exercised for two whole shares.

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 2,000 shares of common stock, subject to exercising each right for two whole shares. 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 available to you pursuant to your basic subscription right, you may also elect to subscribe for any number of additional shares 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, 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 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) 2,000 shares which are available for you to purchase, then, you may also *concurrently* exercise your over-subscription right to purchase up to 8,000 additional shares of common stock 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, you would receive a total of 10,000 shares 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 the available shares?

A. We will allocate the remaining available shares *pro rata* among rights holders who exercised their over-subscription rights, based on the number of over-subscription shares to which they subscribed. The allocation process will assure that the total number of remaining shares 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 two whole shares.

Payments for basic subscriptions and over-subscriptions will be deposited upon receipt by the subscription agent and held in a segregated non-interest bearing 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 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, or credit your account at your nominee holder with shares of our common stock, 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.

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- 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 12% convertible preferred stock, or Series A preferred stock, into common stock, we would be obligated to distribute basic subscription rights for shares 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, 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 be quoted on the OTC Bulletin Board?
- A: Yes. The shares of common stock that you receive upon exercise of your rights will be quoted on the OTC Bulletin Board under the symbol PRWP.OB.
- 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.

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 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.

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Q:	Am I required	to subscribe in	the rights offering?
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A: No.

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, and other stockholders of the company do exercise their rights, the percentage of our common stock that you own will decrease. In addition, 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 (net of expenses) from the exercise of basic and over-subscription rights by the expiration date, unless waived or reduced by our board of directors and with the consent of Maxim Group LLC. In no event, will we raise more than \$ in this offering. However, this amount does not include additional amounts that we may receive upon the exercise of rights which may be subsequently acquired after the date hereof as a result of exercises of outstanding warrants and options and conversion of any securities convertible into common stock.

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 March , 2009, 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 of the Rights Offering and Extensions, Amendments and Terminations. 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: Generally, no. The rights being distributed to the holders are not tradable or transferable, unless otherwise required by applicable law.

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 (net of expenses) from the exercise of basic and over-subscription rights by the expiration date, unless waived or reduced by our board of directors and with the consent of Maxim Group LLC.

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.

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- 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 February , 2009, 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 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 \$ subscription price established?
- A: The subscription price 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 historical and current market price of our common stock, the fact that holders of rights will be receiving two shares of common stock upon exercise of each right and 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. Based upon the factors described above, our board of directors determined that the subscription price represented an appropriate subscription price.
- Q. If I also own shares of Pro-Pharmaceuticals Series A preferred stock, will I receive rights on those shares?
- A. No, unless you convert one or more shares of your Series A preferred stock into shares of our common stock before February , 2009, 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

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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. Will holders of our outstanding warrants and options that have not been exercised prior to the record date be able to participate in the rights offering?
- A. Prior to the record date and during the subscription period of this rights offering, we may provide opportunities for holders of our outstanding warrants and options which have not been exercised as of the record date to participate in the rights offering. We anticipate we would do so by offering to exchange some or all of their warrants and options for basic subscription rights and over-subscription rights and conditions to be agreed on. Following any such exchange, the terms for exercise of the basic subscription rights and over-subscription rights received by warrant or option holders who elected to make the exchange would be identical to the basic subscription rights and over subscription rights distributed to our shareholders in this rights offering, and the warrants and options subject to the exchange would be cancelled in whole or in part. We cannot assure you that any holders of our warrants or options will agree to make such an exchange or that, if an exchange occurs, any or all of these holders will exercise the rights received in the exchange.
- 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 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.
- 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 subscription price on a per share basis. You should not exercise your subscription rights unless you are certain that you wish to purchase additional shares of our common stock 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 (net of expenses) is subscribed for (unless waived or reduced by our board of directors and with the consent of Maxim Group LLC), but in each case, excluding any issuance of shares of common stock to holders of 2006 investor warrants exercising their exchange

rights and participating in the rights offering.

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- Q: If I exercise my subscription rights, when will I receive shares of common stock 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 that you 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 to you. In each case, the deliveries will be made promptly after payment for all the shares subscribed for has cleared and all proration calculations and reductions contemplated by the terms of the rights offering have been effected.
- 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 advisory and solicitation services to our company in connection with this offering. We have agreed to pay or grant to Maxim Group LLC:

a cash fee of 6.5% of the gross proceeds from the exercise of the rights in consideration of the advisory services provided to us.

a cash fee (subject to certain conditions) of 1.0% of such gross proceeds in consideration of soliciting the exercise of the rights,

a non-accountable expense allowance of 1.0% of such gross proceeds, and

a warrant to purchase 4.0% of the shares of common stock sold pursuant to the exercise of the rights, with such warrant having a exercise price equal to \$ (or 125% of the subscription price).

Maxim Group LLC will not participate in the offering nor receive any commissions or compensation in certain states where we are relying on an exemption from registration under such state s securities laws. We have agreed to reimburse Maxim Group LLC for its reasonable out-of-pocket expenses incurred in connection with this offer (other than legal fees or expenses) and have also agreed to indemnify Maxim Group LLC and their respective affiliates against certain liabilities arising under the Securities Act of 1933, as amended. Maxim Group LLC 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.

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PROSPECTUS SUMMARY

This summary highlights important features of this offering and the information included in this prospectus. This summary does not contain all of the information that you should consider before investing in our securities. You should read this prospectus carefully. 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 on July 10, 2000, our primary focus has been the development of a new generation of anti-cancer treatments using carbohydrate polymers which are aimed at increasing survival and improving the quality of life for cancer patients. Our lead product candidate, $DAVANAT^{\otimes}$, 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 $DAVANAT^{\otimes}$, which was invented by company founders David Platt, Ph.D., our Chief Executive Officer, and Anatole Klyosov, Ph.D., our former 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® 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® in combination with 5-FU enables greater absorption of the chemotherapy in cancer cells while reducing its toxic side effects.

The FDA has also granted us an IND for DAVANAT® to be administered with Avastin®, 5-FU and leucovorin in a combination therapy to treat early-stage colorectal cancer patients. In addition, the FDA 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® 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® 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® than when 5-FU is administered alone in the mice. Our pre-clinical and clinical trial data also show that DAVANAT® is tolerable, safe and non-toxic.

In early 2007, in an effort to lower clinical development costs and accelerate the approval and commercialization of DAVANAT®, we chose 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® will seek FDA approval for co-administration of DAVANAT® with 5-FU for intravenous injection for the treatment of colorectal cancer. These 505(b)(2) NDAs are often used for drugs involving previously-approved products and, as a result, are less costly to prepare and file with the FDA. Although we believe, based on the outcome of our clinical trials to date, that DAVANAT® when 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® in the second quarter of 2009.

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

According to its published guidance, the FDA initially determines whether an NDA filing is complete for purposes of allowing a review, and, if allowed, then determines whether to approve the NDA, a process that takes six or ten months. Upon approval, an applicant may commence commercial marketing and distribution of the approved products. We have retained Camargo Pharmaceutical Services, LLC for regulatory support of our submission with the FDA. Camargo s expertise in regulatory affairs and submissions includes the preparation and submission of NDAs, 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® to the FDA. This is an important step toward the filing of our DAVANAT® NDA because a DMF contains confidential detailed information in support of the NDA about facilities, processes or articles used in the manufacturing, processing, packaging, and storing or stability of drugs. We believe the DMF represents a significant milestone in our eventual commercialization of DAVANAT® because we believe it demonstrates our ability to produce commercial quantities of pharmaceutical-grade DAVANAT® 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® NDA. The FDA reported to us in its minutes for the December 22, 2008 meeting that we will be required to conduct a Phase III trial to demonstrate superiority to the best standard of care for late stage colorectal cancer patients. As part of the Phase III trial, we plan to open the study to conduct a pharmacokinetic (PK) analysis of approximately 60 patients, which may allow us to file an NDA for DAVANAT® as an adjuvant when administered with 5-FU. Adjuvants are pharmacological or immunological agents that modify the effect of other agents, such as drugs or vaccines. We also plan to file a Special Protocol Assessment, or SPA, for the Phase III trial. The benefit of a successful SPA is that the FDA agrees that an uncompleted Phase III trial s design, clinical endpoints and statistical analyses are acceptable for FDA approval. As noted above, using the 505(b)(2) regulatory pathway, which allows us to rely on previous FDA findings, is important to our near-term product development strategy because it enables us to lower the clinical development costs and accelerate the approval and commercialization of DAVANAT®.

On October 31, 2008, our board of directors authorized Medi-Pharmaceuticals, Inc., 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. This deployment was accomplished by: (i) a merger of FOD Enterprises, Inc., a Nevada corporation, with and into Medi-Pharmaceuticals on November 25, 2008, following which Medi-Pharmaceuticals became the surviving corporation and we became the owner of 10% of the outstanding capital stock of Medi-Pharmaceuticals; and (ii) our entering into a license agreement with Medi-Pharmaceuticals dated November 25, 2008, and clarified by an amendment dated December 15, 2008. Pursuant to the license agreement, we granted Medi-Pharmaceuticals an exclusive, 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 must advance \$1.0 million in cash to us by May 30, 2009 or we will have the ability to terminate the license agreement.

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

Principal Executive Offices

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

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The Rights Offering

Securities Offered

We are distributing at no charge to the holders of our common stock on February , 2009, which we refer to as the record date, subscription rights to purchase up to an aggregate of 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 will also distribute rights to any holders of 2006 investor warrants who elect to 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. 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 2006 investor warrants exercising their exchange rights and participating in the rights offering.

Basic Subscription Right

Each right entitles the holder to purchase two shares of common stock at the subscription price of \$ per two shares, which we refer to as the basic subscription right. Each right may only be exercised for two whole shares of common stock.

Over-Subscription Right

Holders who fully exercise their basic subscription rights will be entitled to subscribe for additional shares 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 for which such holder was otherwise entitled to subscribe. Each right may only be exercised for two whole shares of common stock; 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 February , 2009.

Commencement Date of Subscription Period

February , 2009.

Expiration Date of Subscription Period

5:00 p.m., New York City time, on March , 2009, 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.

Subscription Price

\$ per two shares, payable in immediately available funds.

Use of Proceeds

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®, as well as for general working capital purposes.

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Transferability

The rights being distributed to the holders are not tradable or transferable and may not be sold, transferred or assigned, unless otherwise required by applicable law.

No Recommendation

Neither we, 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.

Minimum Condition

We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 (net of expenses) from the exercise of basic and over-subscription rights by the expiration date, unless waived or reduced by our board of directors and with the consent of Maxim Group LLC.

Maximum Offering Size

In no event will we raise more than \$ in this offering, except for additional amounts that we may receive upon the exercise of rights which may be subsequently acquired after the date hereof as a result of exercises of outstanding warrants and options and conversion of any securities convertible into common stock.

No Revocation

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.

U.S. Federal Income Tax Considerations

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 announced as promptly as practicable 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 announced as promptly as practicable and in no event later than 9:00 a.m., New York City time, on the next business day following the termination or cancellation, and any money received from subscribing stockholders will be promptly returned, without interest or deduction.

Procedure for Exercising Rights

If you are the record holder of shares of our common stock or otherwise entitled to participate in the rights offering, 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 or otherwise entitled to participate in the rights offering, 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 of common stock outstanding on the date hereof

shares of common stock.

Shares of common stock 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 (net of expenses) is subscribed for, but in each case, excluding any issuance of shares of common stock to holders of 2006 investor warrants exercising their exchange rights and participating in the rights offering.

Issuance of our Common Stock

If you purchase shares pursuant to the basic or over-subscription right, we will issue certificates representing the shares of common stock to you or DTC on your behalf, as the case may be, promptly after payment for all the shares subscribed for has cleared and all proration calculations and reductions contemplated by the terms of the rights offering have been effected.

Risk Factors

Investing in our securities involves a high degree of risk. As a result of our current lack of financial liquidity and negative stockholders equity, our auditors have expressed substantial concern about our ability to continue as a going concern. 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.

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OTC Bulletin Board Symbol

Our common stock is presently quoted on the OTC Bulletin Board under the symbol PRWP.OB , and the shares to be issued in connection with the rights offering will be quoted on the OTC Bulletin Board.

Stockholder Lock-Ups

Each of Dr. Platt, our chief executive officer and chairman of the Board, and Dr. Klyosov, our former 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 Maxim Group LLC and us which restricts each of them from, directly or indirectly, selling, pledging, transferring or otherwise disposing of shares of our common stock (including any shares of common stock they may acquire upon exercise of their rights) as follows:

during the period from and after the date of the lock-up agreement until the expiration of the date that is six months from the date of this prospectus, neither of them may sell, pledge, transfer or otherwise dispose of any such shares of our common stock without the consent of Maxim Group LLC; and

during the period from and after the date that is six months from the date of this prospectus until the expiration of the date that is one year from the date of this prospectus, neither of them may sell, pledge, transfer or otherwise dispose of any such shares of our common stock without our consent in excess of the number of shares that an affiliate of ours would be permitted to sell during that period in accordance with the volume limitations of Rule 144 under the Securities Act (whether or not either of them are an affiliate of ours at any time during such period).

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 LLC certain fees for providing advisory and solicitation services to us as dealer-manager and to reimburse them for certain expenses other than legal fees and expenses. 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 LLC 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: February , 2009.
Distribution Date: February , 2009.

Subscription Period: February , 2009 through March , 2009 (unless

extended by us).

Expiration Date: March , 2009 (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 issued in connection with this offering.

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

The subscription price (on a per share basis), together with the number of shares of common stock 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 received upon exercise of those rights 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 (on a per share basis).

You could be committed to buying shares of common stock (on a per share basis) 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 quoted on the OTC Bulletin Board under the symbol PRWP.OB . 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 February , 2009, the last trading day before the date of this prospectus, the closing sales price of our shares of common stock on the OTCBB was \$ 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 are 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 (on a per share basis).

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If we terminate this offering for any reason, we will have no obligation other than to return your subscription funds 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 funds 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.

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

We will only consummate the rights offering if we are able to raise a minimum of \$2,500,000 (net of expenses), unless waived or reduced by our board of directors and with the consent of Maxim Group LLC, 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). However, in no event will we raise more than \$ (excluding additional amounts that we may receive upon the exercise of rights which may be subsequently acquired after the date hereof as a result of exercises of outstanding warrants and options and conversion of any securities convertible into common stock). 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 (net of expenses) of shares. 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. If the minimum raise requirement is waived, we may raise less money than anticipated and may not have sufficient funds to meet our short term capital requirements.

We will have 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®, we will have discretion in determining how the proceeds of this offering will be used consistent with the uses set forth in this prospectus in the section entitled Use of Proceeds. 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 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.

You may not receive any or all of the amount of shares for which you over-subscribed.

Holders who fully exercise their basic subscription rights will be entitled to subscribe for an additional amount of shares equal to up to 400% of the shares 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 to which they subscribed. As such, you may not receive any or all of the amount of shares for which you over-subscribed. If the pro rated amount of shares 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 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 that exceed the number 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 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.

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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 issuable upon exercise of the basic subscription or over subscription rights. Under our agreement with the dealer-manager, Maxim Group LLC 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 LLC 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 December 31, 2008, we have outstanding warrants to purchase 25,350,311 shares of our common stock at a weighted average exercise price of \$1.11 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.

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.

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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 \$377,047 of available cash and cash equivalents as of December 31, 2008 and strategic reductions in operating expenses, we believe that we have sufficient capital to fund our operations into March 2009. Our cash burn rate is approximately \$150,000 per month. As of December 31, 2007 and September 30, 2008, we had stockholders deficits of approximately \$2,924,000 and \$383,000, respectively. If we fail to raise capital in March 2009, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection. In addition, if we only raise the minimum of \$2,500,000 in proceeds (net of expenses) from this offering (which minimum amount may be waived or reduced by our board of directors and with the consent of Maxim Group LLC), such amount, together with all other sources of financing currently available to us, may be insufficient to sustain our activities for twelve months following the completion of the offering.

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 March 2009 and thereafter.

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 March 2009, we may need to significantly curtail operations, cease operations or seek federal bankruptcy protection.

Even if we raise funds in this offering, we will likely be required to raise additional capital through public or private equity financings, partnerships, debt financings, bank borrowings, or other sources as we anticipate that the funds raised in this offering will not fully satisfy our near and long term capital requirements. 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 our Chief Executive Officer that relates to certain of our intellectual property.

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 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

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denied our motion for summary judgment. Prospect Therapeutics informed the Court that it does not seek monetary damages other than recovery of attorney fees. On December 12, 2008, in response to a motion for withdrawal by counsel in this case, the court amended its order dated October 6, 2008 to state that by January 9, 2009, a default judgment will be entered against us if new defense counsel has not entered an appearance on our behalf or we have not restored our relationship with our current counsel. On January 7, 2009, our successor counsel entered a notice of appearance to represent us at trial which the court has scheduled to commence on March 10, 2009. If we do not prevail at trial, we could be prevented from the exclusive use of the intellectual property that is the subject of the litigation and accordingly there could be a material adverse impact on our financial position, results of operations and cash flows.

We are involved in litigation with Summer Street Research Partners.

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

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

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to manufacture on a large scale, be uneconomical to produce, fail to achieve market acceptance, or be precluded from commercialization by proprietary rights of third parties. Our inability to commercialize out products would substantially impair the viability of our company.

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

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

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

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

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

Moreover, as we develop products eligible for clinical trials, we 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 may not be able to obtain or maintain adequate product liability insurance on acceptable terms, if at all, or such insurance may not provide adequate coverage against our potential liabilities. Furthermore, our current and potential partners with whom we have collaborative agreements or our future licensees may not be willing to indemnify us against these types of liabilities and may not themselves be sufficiently insured or have sufficient liquidity to satisfy any

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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

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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, 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. In addition, we are highly dependent on Anatole Klyosov, Ph.D., our former Chief Scientist. Although in connection with our recent cash conservation efforts the employment of Dr. Klyosov was terminated, he continues to provide services to our company on a voluntary basis. If this offering is successful, we may offer to reinstate him to his former position or offer him a consulting opportunity with us, but cannot assure you that he would accept our offer. 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 is 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. We are a counterclaim defendant in a lawsuit instituted by our chief executive officer that relates to our intellectual property as described under Risks Related to Our Company above.

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

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

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

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

Products based on our patents or intellectual property that we may in the future license from others may 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

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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

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

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

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.

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

Our Articles of Incorporation authorizes issuance of capital stock including 10,000,000 undesignated preferred shares, and empowers our Board of Directors to prescribe by resolution and without shareholder approval a class or series of undesignated shares, including the number of shares in the class or series and the voting powers, designations, rights, preferences, restrictions and the relative rights in each such class or series. The Board previously authorized a series of preferred stock comprised of 5,000,000 shares designated as Series

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A 12% Convertible Preferred Stock in which each share, like a share of common stock, has one vote. The Board, however, has authority to designate the remaining 5,000,000 shares in one or more series with conversion or voting rights, such as multiple votes per share, the result of which could adversely affect the voting rights of holders of our common stock.

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

We are authorized to issue 200,000,000 shares of common stock, of which 48,052,159 shares were issued and outstanding on December 31, 2008. Assuming full participation in the rights offering (but excluding any issuance of shares of common stock to holders of 2006 investor warrants exercising their exchange rights and participating in the rights offering), we would have shares issued and outstanding. An additional 30,057,811 shares are reserved for issuance upon exercise of stock options and warrants outstanding prior to this rights offering. 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 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) 25,350,311 shares of common stock issuable upon exercise of our outstanding warrants at a weighted average exercise price of \$1.11 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.

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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 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 March 2009, 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 and sale of basic and over-subscription rights at \$ each, but excluding any issuance of shares of common stock to holders of 2006 warrants exercising their exchange rights and participating in the rights offering, we estimate the net proceeds from the rights offering will be approximately \$ million, after deducting approximately \$ million of dealer-manager commissions and fees and other offering expenses payable by us.

We intend to use the net proceeds from this offering for the following purposes and in the following order of priority:

		Percentage of
Purpose	Amount	Net Proceeds
Research and Development		
Pharmacokinetic study for DAVANAT®(1)	\$	18%
File NDA for DAVANAT®		4%
Phase III clinical trial for DAVANAT ^{®(2)}		41%
Hire personnel to administer clinical trial		5%
Working capital ⁽³⁾		32%
Total	\$	100%

- (1) Comprises the portion (approximately 60 patients) of the Phase III clinical trial required to submit a 505(b)(2) NDA for DAVANAT® (bioequivalance) as an adjuvant, which upon approval by the FDA would enable us to market DAVANAT®.
- (2) Estimated to include approximately 300 patients (approximately 60 of whom comprise the pharmacokinetic study).
- (3) Administration, salaries, business development, accounting, and legal, including patent prosecution and intellectual property protection. We believe that if we raise the \$2,500,000 minimum (net of expenses) required to consummate the rights offering, the net proceeds would be sufficient for us to complete the pharmacokinetic study, and, if successful, file a DAVANAT® NDA based on bioequivalence, which would allow us to begin commercialization. Successful completion of a full Phase III trial would enable us to submit the DAVANAT® NDA based on a superiority claim.

No assurances can be given that we will raise any funds in this offering or that any funds raised, net of expenses, will be sufficient to meet our near or long term capital requirements.

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 2006 investor warrants exercising their exchange rights and participating in the rights offering), assuming a subscription price of \$ per two shares, and our receipt of the net proceeds of approximately \$

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 Pro For		
	A	etual (dollars in	As Adjusted 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		40	
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	\$

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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 \$\frac{\text{million}}{\text{million}}\$ and after deducting approximately \$\frac{\text{million}}{\text{million}}\$ of dealer-manager commissions and fees (assuming full participation in the offering) and other offering expenses payable by us, our pro forma net tangible book value as of September 30, 2008 would have been approximately \$\frac{\text{million}}{\text{million}}\$, or \$\frac{\text{per share}}{\text{per share}}\$ an immediate increase in pro forma net tangible book value to existing stockholders of \$\frac{\text{per share}}{\text{per share}}\$ and an immediate dilution to purchasers in the rights offering of \$\frac{\text{per share}}{\text{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) 2006 investor warrants exercising their exchange rights and participating in the rights offering and (ii) shares of Series A preferred stock upon conversion of these shares):

Subscription price per share

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

\$

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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,			Nine Months Ended September 30,					
	2	2007		2006		2005		2004 (dollar in	thou	2003 (sands)		2000) to cember 31, 2007		2008		2007
Consolidated Statements of Operations Data:																
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
		.,		.,		-,		-,		_,,		,		_,,		-,
0		(C AEE)		(7.049)		(((55)		(7.204)		(4.020)		(20.026)		(4.225)		(F O(4)
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																(1.001)
convertible debt instrument																(1,091)
Change in fair value of														1.062		(4.545)
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	\$	(9,433)	\$	(3,193)	\$	(6,855)	\$	(3,770)	\$	(4,076)	\$	(35,160)	\$	(2,335)	Ф	(8,124)
Net loss	Ф	(9,433)	Ф	(3,193)	Ф	(0,833)	Ф	(3,770)	Ф	(4,076)	Ф	(55,100)	Ф	(2,333)	Ф	(8,124)
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)	\$	(0.24)	\$	(0.11)	\$	(0.25)	\$	(0.15)	\$	(0.19)				(0.05)		(0.21)
and dridled (1)	Ψ	(0.2-1)	Ψ	(0.11)	Ψ	(0.23)	Ψ	(0.13)	Ψ	(0.17)				(0.03)		(0.21)
Weighted average shares																
outstanding: basic and																
diluted	38,	,980,548	2	28,472,898	2	7,315,411	2	25,750,789	2	21,360,572			4	16,402,947	3	8,519,133

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	As of December 31,										As of September 30	
	2007		2006			2005 (dollars in t		2004 thousands)		2003		2008
Consolidated Balance Sheet Data:												
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 on July 10, 2000, our primary focus has been the development of a new generation of anti-cancer treatments using carbohydrate polymers which are aimed at increasing survival and improving the quality of life for cancer patients. Our lead product candidate, DAVANAT®, is a patented new chemical entity that we believe, when administered in combination with a chemotherapy, increases the efficacy while reducing adverse side effects of the chemotherapy. We hold the patent on DAVANAT®, which was invented by company founders David Platt, Ph.D., our Chief Executive Officer, and Anatole Klyosov, Ph.D., our former Chief Scientist.

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

The FDA has also granted us an IND for DAVANAT® to be administered with Avastin®, 5-FU and leucovorin in a combination therapy to treat early-stage colorectal cancer patients. In addition, the FDA 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® 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® 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® than when 5-FU is administered alone in the mice. Our pre-clinical and clinical trial data also show that DAVANAT® is tolerable, safe and non-toxic.

In early 2007, in an effort to lower clinical development costs and accelerate the approval and commercialization of DAVANAT®, we chose to change our regulatory strategy to what is known as a 505(b)(2) NDA. Our 505(b)(2) NDA for DAVANAT® will seek FDA approval for co-administration of DAVANAT® with 5-FU for intravenous injection for the treatment of colorectal cancer. These 505(b)(2) NDAs are often used for drugs involving previously-approved products and, as a result, are less costly to prepare and file with the FDA. Although we believe, based on the outcome of our clinical trials to date, that DAVANAT® when 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® in the second quarter of 2009.

We also plan additional NDAs for DAVANAT $^{\circ}$ 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 DMF for DAVANAT® to the FDA. This is an important step toward the filing of our DAVANAT® NDA because a DMF contains confidential detailed information in support of the NDA about facilities, processes or articles used in the manufacturing, processing, packaging, and storing or stability of drugs. We believe the DMF represents a significant milestone in our eventual commercialization of DAVANAT® because we believe it demonstrates our ability to produce commercial quantities of pharmaceutical-grade DAVANAT® 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® NDA. The FDA reported to us in its minutes for the December 22, 2008 meeting that we will be required to conduct a Phase III trial to demonstrate superiority to the best standard of care for late stage colorectal cancer patients. As part of the Phase III trial, we plan to open the study to conduct a pharmacokinetic (PK) analysis of approximately 60 patients, which may allow us to file an NDA for DAVANAT® as an adjuvant when administered with 5-FU. Adjuvants are pharmacological or immunological agents that modify the effect of other agents, such as drugs or vaccines. We also plan to file a Special Protocol Assessment, or SPA, for the Phase III trial. The benefit of a successful SPA is that the FDA agrees that an uncompleted Phase III trial s design, clinical endpoints and statistical analyses are acceptable for FDA approval. As noted above, using the 505(b)(2) regulatory pathway, which allows us to rely on previous FDA findings, is important to our near-term product development strategy because it enables us to lower the clinical development costs and accelerate the approval and commercialization of DAVANAT®.

On October 31, 2008, our board of directors authorized Medi-Pharmaceuticals, Inc., 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. This deployment was accomplished by: (i) a merger of FOD Enterprises, Inc., a Nevada corporation, with and into Medi-Pharmaceuticals on November 25, 2008, following which Medi-Pharmaceuticals became the surviving corporation and we became the owner of 10% of the outstanding capital stock of Medi-Pharmaceuticals; and (ii) our entering into a license agreement with Medi-Pharmaceuticals dated November 25, 2008, and clarified by an amendment dated December 15, 2008. Pursuant to the license agreement, we granted Medi-Pharmaceuticals an exclusive, 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 must advance \$1.0 million in cash to us by May 30, 2009 or we will have the ability to terminate the license agreement.

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

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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 DAVANA® in clinical trials at this time. Clinical program expenses comprise

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

	Nine Mor	ths Ended
	Septen	nber 30,
	2008	2007
	(in tho	usands)
Direct external expenses		
Clinical programs	\$ 201	\$ 674
Pre-clinical activities	594	282
All other research and development expenses	709	712
	\$ 1,504	\$ 1,668

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 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 I Decem	
	2007	2006
	(in thou	ısands)
Direct external expenses		
Clinical programs	\$ 809	\$ 1,504
Pre-clinical activities	357	589
All other research and development expenses	887	926
	\$ 2,053	\$ 3,019

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.

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 1	Ended
	Decem	ber 31,
	2006	2005
	(in thou	usands)
Direct external expenses		
Clinical programs	\$ 1,504	\$ 1,557
Pre-clinical activities	589	959
All other research and development expenses	926	524
	\$ 3,019	\$ 3,040

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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® manufacturing costs. All other research and development costs increased due to the addition of our former 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