TITAN PHARMACEUTICALS INC
Form S-1/A
May 05, 2010
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As filed with the Securities and Exchange Commission on May 5, 2010

Registration No. 333-166351

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

TITAN PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	94-3171940	2836
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)	(Primary Standard Industrial Classification Code Number)

400 Oyster Point Blvd., Suite 505, South San Francisco, California 650-244-4990

(Address, including zip code, and Telephone Number, including area code, of Registrant s Principal Executive Offices)

Sunil Bhonsle, President

Titan Pharmaceuticals, Inc.

400 Oyster Point Blvd., Suite 505, South San Francisco, California

650-244-4990

(Name, Address, including zip code, and Telephone Number, including area code, of Agent for Service)

With a copy to:

Fran Stoller, Esq.

Loeb & Loeb LLP

345 Park Avenue

New York, New York 10154

Tel: (212) 407-4935

Fax: (212) 407-4990

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

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

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

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

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

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

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

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount of shares to be registered (1)	Proposed Maximum offering price per share (2)	Proposed maximum aggregate offering price	Amount of registration fee
common stock, par value $0.001 per share	3,515,000	$1.735	$6,098,525	$434.82
common stock, par value $0.00 per share	6,191,250	$1.735	$10,741,818.75	$765.89
Total (3)	9,706,250		$16,840,343.75	$1,200.71*

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the Securities Act), this registration statement includes an indeterminate number of shares as may become necessary to adjust the number of shares issued by the Registrant to the selling stockholders resulting from stock splits, stock dividends or similar transactions involving our common stock.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act based on the average of the high and low prices of our common stock reported on the OTC Pink Sheets on April 23, 2010.

(3) Pursuant to Rule 429 of the Securities Act, includes 9,406,250 shares previously included in the Registrant s registration statement on Form S-3 (file number 333-148757) declared effective by the Securities and Exchange Commission on February 1, 2008.

* Previously paid

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 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said section 8(a), may determine.

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THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING STOCKHOLDERS MAY NOT SELL THESE SECURITIES PUBLICLY 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.

Subject to Completion, Dated May 5, 2010

Prospectus

TITAN PHARMACEUTICALS, INC.

9,706,250 Shares of Common Stock

This prospectus relates to the resale of 9,706,250 shares of our common stock, par value $.001 per share, being offered by the selling stockholders identified in this prospectus. The shares of common stock offered under this prospectus include 6,191,250 shares issuable upon exercise of outstanding warrants (the Warrants).

We will not receive any of the proceeds from the sale of the shares by the selling stockholders. To the extent the Warrants are exercised for cash, if at all, we will receive the exercise price for the Warrants. The selling stockholders may sell the shares as set forth herein under Plan of Distribution.

We have agreed to pay certain expenses in connection with the registration of the shares.

Our common stock is traded on the OTC Pink Sheets under the symbol TTNP.PK . The closing price for our common stock on May 4, 2010 was $1.22 per share. We are seeking to have our common stock listed on the OTC Bulletin Board.

Investing in our common stock involves risk. You should carefully consider the risk factors beginning on page 4 of this prospectus before purchasing shares of our common stock.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES, OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is May , 2010

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SUMMARY

This summary highlights material information about us that is described more fully elsewhere in this prospectus. It may not contain all of the information that you find important. You should carefully read this entire document, including the Risk Factors section beginning on page 4 of this prospectus and the consolidated financial statements and related notes to those statements appearing elsewhere in this prospectus before making a decision to invest in our common stock.

Unless otherwise indicated in this prospectus or the context otherwise requires, all references to we, us, our, the Company and Titan refers to Titan Pharmaceuticals, Inc. and all of its subsidiaries. References to the SEC or Commission refers to the U.S. Securities and Exchange Commission.

Probuphine® , Spheramine® and ProNeura are trademarks of our company. This Form S-1 also includes trade names and trademarks of companies other than Titan.

OUR COMPANY

We are a biopharmaceutical company developing proprietary therapeutics primarily for the treatment of central nervous system (CNS) disorders. We currently have two key assets as described below:

Iloperidone (Fanapt): An atypical antipsychotic approved by the U.S. Food and Drug Administration (FDA) for the treatment of schizophrenia. Novartis Pharma AG (Novartis) has acquired the U.S. and Canadian rights to further develop and commercialize the approved oral formulation, and also further develop and potentially commercialize an injectible form of the drug, known as a depot formulation, that will provide medication over a prolonged period of several weeks following a single treatment. Vanda Pharmaceuticals, Inc. (Vanda) has the development and commercialization rights to the oral and depot formulations of this product for the rest of the world. We are entitled to a royalty of 8-10% on worldwide net sales for several years based on the remaining life of certain patents (through September 2016 for the oral formulation in the U.S. including a patent extension requested under the Hatch Waxman Act), and we anticipate commencement of royalty revenues from sales in the United States during the first half of 2010.

Probuphine: An implant formulation of buprenorphine in Phase 3 clinical development for the treatment of opioid addiction that is capable of maintaining a stable blood level of the drug in patients for six months following a single treatment. We announced positive safety and efficacy results of this product in a placebo controlled Phase 3 study during 2008 and we have now completed approximately half of the overall clinical development program required for registration and potential approval of Probuphine. Recently we have been awarded a $7.6 million grant from the National Institutes of Health (NIH) that will partially fund the second Phase 3 controlled safety and efficacy study required by the FDA for product registration.

We have been publicly-traded since our company s initial public offering in January 1996. In December 2008, as part of our efforts to conserve cash, we announced our decision to voluntarily delist from the NYSE Amex (formerly the American Stock Exchange) and terminate our obligation to file reports under the Securities Exchange Act of 1934 (the Exchange Act). In light of recent favorable developments, in particular the U.S. Food and Drug Administration s approval of Fanapt and our receipt of a grant from the National Institutes for Health for our Probuphine program, our board of directors made a determination to file a registration statement on Form 10 to re-register under the Exchange Act. On March 15, 2010, our reporting obligations under the Exchange Act resumed. On April 26, 2010, we were informed that the SEC has completed its review of the Form 10. Our executive offices are located 400 Oyster Point Blvd., Suite 505, South San Francisco, California. Our telephone number is 650-244-4990. Our website address is www.titanpharm.com.

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NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements in this Form S-1 or in the documents incorporated by reference herein that are not descriptions of historical facts are forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Reference is made in particular to the description of our plans and objectives for future operations, assumptions underlying such plans and objectives and other forward-looking terminology such as may, expects, believes, anticipates, intends, expects, projects, or similar terms, variations of such the negative of such terms. Forward-looking statements are based on management s current expectations. Actual results could differ materially from those currently anticipated due to a number of factors, including those set forth under Risk Factors including, in particular, risks relating to:

- sales of Fanapt;
- the results of ongoing research and development activities;
- uncertainties relating to preclinical and clinical testing, financing and strategic agreements and relationships;
- the early stage of products under development;
- government regulation;
- patent matters; and
- competition.

We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based.

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THE OFFERING

This prospectus relates to the resale of 9,706,250 shares of our common stock, par value $.001 per share being offered by the selling stockholders identified in this prospectus.

Common stock being offered by selling stockholders	9,706,250 shares
Common stock outstanding	59,247,742 shares as of the date of this Prospectus
Common stock outstanding after the offering (assuming full exercise of the Warrants)	65,438,992 shares
Use of Proceeds	We will not receive any proceeds from the sale of the shares by the selling stockholders. However, to the extent that the Warrants are exercised for cash, we will receive proceeds from any exercise of the Warrants up to an aggregate of approximately $12.4 million. We intend to use any proceeds received from the exercise of the Warrants for working capital and other general corporate purposes.
Trading	Our common stock is listed on the OTC Pink Sheets under the symbol TTNP.PK.
Risk Factors	The securities offered by this prospectus are speculative and involve a high degree of risk and investors purchasing securities should not purchase the securities unless they can afford the loss of their entire investment. See Risk Factors beginning on page 4.

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RISK FACTORS

An investment in our common stock is speculative and involves a high degree of risk and uncertainty. You should carefully consider the risks described below, together with the other information contained in this prospectus, including the consolidated financial statements and notes thereto, before deciding to invest in our common stock. Additional risks not presently known to us or that we presently consider immaterial may also adversely affect our company. If any of the following risks occur, our business, financial condition and results of operations and the value of our common stock could be materially and adversely affected.

The timing and amount of royalty revenues from iloperidone (Fanapt) will be wholly dependent on the efforts of third parties.

We do not have any role in the marketing, manufacture or commercialization of iloperidone (Fanapt). The timing and amount of royalty revenues we receive from the sale of this product will be wholly dependent upon the ability of Novartis to successfully launch and commercialize this product in the United States and Canada and on the ability of Vanda or others to sell this product in other countries. Similarly, our ability to realize any royalty revenue relating to the depot formulation of the product will depend on the ability of Novartis to successfully complete the development and regulatory approval process and implement the marketing program necessary to commercialize this product. While Novartis has announced that it launched commercial sales of Fanapt in January 2010, which would result in royalty payments to us during the following quarter, Novartis may experience unanticipated problems that delay, perhaps materially, product sales and our receipt of revenues.

Our available capital is sufficient to fund our operations only through September 2010 and we do not have the funds needed to continue the Probuphine program.

At December 31, 2009, we had cash and cash equivalents of $3.3 million, which we believe is sufficient, together with the $7.6 million NIH grant, to sustain our planned operations through September 2010, at which time we expect to be generating revenues from royalties on the sale of Fanapt. We do not currently have sufficient capital to fully fund the Probuphine program, external costs of which are currently estimated at approximately $18.5 million exclusive of any additional clinical trials the FDA may require, and we cannot be certain that the requisite funds will be available, from royalty revenues or otherwise, to continue that program.

Probuphine is in the development stage and may not be successfully developed or commercialized.

Probuphine, which is in Phase 3 clinical development, will require significant further capital expenditures, development, testing, and regulatory clearances prior to commercialization. Even if we are able to obtain the requisite funding to continue this program, the results of preclinical and clinical studies to date are not necessarily indicative of whether a product will demonstrate safety and efficacy in large patient populations to the satisfaction of the regulatory authorities in the U.S. and elsewhere. Of the large number of drugs in development, only a small percentage successfully complete the FDA regulatory approval process and are commercialized.

To date, we have experienced setbacks in some of our other product development efforts. For example, the results of a study evaluating the EKG profile of patients taking iloperidone led to a significant delay in the development of that product, a vaccine product formerly under development failed to meet the study s primary endpoint, and a study of one of our products in a combination treatment was discontinued as a result of an interim safety analysis. We may continue to experience unanticipated problems relating to product development, testing, regulatory compliance, manufacturing, marketing and competition, and our costs and expenses could exceed current estimates. We cannot predict whether we will successfully develop and commercialize Probuphine or any other product.

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We must comply with extensive government regulations.

The research, development, manufacture and marketing of pharmaceutical products are subject to an extensive regulatory approval process by the FDA and other regulatory agencies in the U.S. and other countries. The process of obtaining required regulatory approvals for drugs, including conducting preclinical and clinical testing to determine safety and efficacy, is lengthy, expensive and uncertain. Even after such time and expenditures, we may not obtain necessary regulatory approvals for clinical testing or for the manufacturing or marketing of any products. We have limited experience in obtaining FDA approval. Regulatory approval may entail limitations on the indicated usage of a drug, which may reduce the drug s market potential. Even if regulatory clearance is obtained, post-market evaluation of the products, if required, could result in restrictions on a product s marketing or withdrawal of the product from the market, as well as possible civil and criminal sanctions. Our business will be seriously harmed if our regulatory submissions are delayed or we cancel plans to make submissions for proposed products for any of the following reasons:

unanticipated preclinical testing or clinical trial reports;

failure to reach agreement with the FDA regarding study protocols or endpoints;

changes in regulations or the adoption of new regulations;

unanticipated enforcement of existing regulations;

unexpected technological developments; and

developments by our competitors.

We face risks associated with third parties conducting preclinical studies and clinical trials of our products as well as our dependence on third parties to manufacture any products that we may successfully develop.

We depend on third-party laboratories and medical institutions to conduct preclinical studies and clinical trials for our products and other third-party organizations to perform data collection and analysis, all of which must maintain both good laboratory and good clinical practices. We will also depend upon third party manufacturers for the production of any products we may successfully develop to comply with current Good Manufacturing Practices of the FDA, which are similarly outside our direct control. If third party laboratories and medical institutions conducting studies of our products fail to maintain both good laboratory and clinical practices, the studies could be delayed or have to be repeated. Similarly, if the manufacturers of any products we develop in the future fail to comply with current Good Manufacturing Practices of the FDA, we may be forced to cease manufacturing such product until we have found another third party to manufacture the product.

We face risks associated with clinical trial liability claims in the event that the use or misuse of our product candidates results in personal injury or death.

We face an inherent risk of clinical trial liability claims in the event that the use or misuse of our product candidates results in personal injury or death. Our clinical liability insurance coverage may not be sufficient to cover claims that may be made against us. Any claims against us, regardless of their merit, could severely harm our financial condition, strain our management and other resources or destroy the prospects for commercialization of the product which is the subject of any such claim.

We may be unable to protect our patents and proprietary rights.

Our future success will depend to a significant extent on our ability to:

obtain and keep patent protection for our products and technologies on an international basis;

enforce our patents to prevent others from using our inventions;

maintain and prevent others from using our trade secrets; and

operate and commercialize products without infringing on the patents or proprietary rights of others.

We cannot assure you that our patent rights will afford any competitive advantages, and these rights may be challenged or circumvented by third parties. Further, patents may not be issued on any of our pending patent applications in the U.S. or abroad. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that before a potential product can be commercialized, any related patent

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may expire or remain in existence for only a short period following commercialization, reducing or eliminating any advantage of the patent. For example, the two U.S. patents licensed by Titan under the MIT license have already expired, and we must rely on the method of use patent application for Probuphine to get patent protection and market exclusivity. If we sue others for infringing our patents, a court may determine that such patents are invalid or unenforceable. Even if the validity of our patent rights is upheld by a court, a court may not prevent the alleged infringement of our patent rights on the grounds that such activity is not covered by our patent claims.

In addition, third parties may sue us for infringing their patents. In the event of a successful claim of infringement against us, we may be required to:

- pay substantial damages;
- stop using our technologies and methods;
- stop certain research and development efforts;
- develop non-infringing products or methods; and
- obtain one or more licenses from third parties.

If required, we cannot assure you that we will be able to obtain such licenses on acceptable terms, or at all. If we are sued for infringement, we could encounter substantial delays in development, manufacture and commercialization of our product candidates. Any litigation, whether to enforce our patent rights or to defend against allegations that we infringe third party rights, will be costly, time consuming, and may distract management from other important tasks.

We also rely in our business on trade secrets, know-how and other proprietary information. We seek to protect this information, in part, through the use of confidentiality agreements with employees, consultants, advisors and others. Nonetheless, we cannot assure you that those agreements will provide adequate protection for our trade secrets, know-how or other proprietary information and prevent their unauthorized use or disclosure. To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to our proposed products, disputes may arise as to the proprietary rights to such information, which may not be resolved in our favor.

We face intense competition.

Competition in the pharmaceutical and biotechnology industries is intense. We face, and will continue to face, competition from numerous companies that currently market, or are developing, products for the treatment of the diseases and disorders we have targeted. Many of these entities have significantly greater research and development capabilities, experience in obtaining regulatory approvals and manufacturing, marketing, financial and managerial resources than we have. We also compete with universities and other research institutions in the development of products, technologies and processes, as well as the recruitment of highly qualified personnel. Our competitors may succeed in developing technologies or products that are more effective than the ones we have under development or that render our proposed products or technologies noncompetitive or obsolete. In addition, our competitors may achieve product commercialization or patent protection earlier than we will.

Healthcare reform and restrictions on reimbursements may limit our financial returns.

Our ability or the ability of our collaborators to commercialize drug products, if any, may depend in part on the extent to which government health administration authorities, private health insurers and other organizations will reimburse consumers for the cost of these products. These third parties are increasingly challenging both the need for and the price of new drug products. Significant uncertainty exists as to the reimbursement status of newly approved therapeutics. Adequate third party reimbursement may not be available for our own or our collaborator s drug products to enable us or them to maintain price levels sufficient to realize an appropriate return on their and our investments in research and product development.

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We may not be able to retain our key management and scientific personnel.

As a company with a limited number of personnel, we are highly dependent on the services of our executive management and scientific staff, in particular Sunil Bhonsle and Marc Rubin, our President and Executive Chairman, respectively, and our Senior Vice President Clinical Development and Medical Affairs, all of whom are parties to employment agreements with us. The loss of one or more of such individuals could substantially impair ongoing research and development programs and could hinder our ability to obtain corporate partners. Our success depends in large part upon our ability to attract and retain highly qualified personnel. We compete in our hiring efforts with other pharmaceutical and biotechnology companies, as well as universities and nonprofit research organizations, and we may not be successful in our efforts to attract and retain personnel.

Our shares are currently quoted on the OTC Pink Sheets and we cannot predict whether our shares will ever trade on the OTC Bulletin Board or any national securities exchange.

Our shares are currently quoted on the OTC Pink Sheets. Many institutional investors have investment policies which prohibit them from trading in stocks on the OTC Pink Sheets. As a result, shares quoted on the OTC Pink Sheets generally have limited trading volume and exhibit a wide spread between the bid/ask quotations than stock traded on national exchanges. A registered broker-dealer has filed a Form 211 with the Financial Industry Regulatory Authority that would permit our common stock to be quoted for trading on the OTC Bulletin Board, but we cannot be sure that such an effort would be successful. As a result, an investment in our common stock may be illiquid and investors may not be able to liquidate their investment readily or at all when they desire to sell.

Our stock price has been and will likely continue to be volatile.

Our stock price has experienced substantial fluctuations and could continue to fluctuate significantly due to a number of factors, including:

- variations in our anticipated or actual operating results;
- sales of substantial amounts of our common stock;
- announcements about us or about our competitors, including introductions of new products;
- litigation and other developments relating to our patents or other proprietary rights or those of our competitors;
- conditions in the pharmaceutical or biotechnology industries;
- governmental regulation and legislation; and
- change in securities analysts estimates of our performance, or our failure to meet analysts expectations.

Our common stock is deemed to be a penny stock, which may make it more difficult for investors to sell their shares due to suitability requirements.

Our common stock is subject to Rule 15g-1 through 15g-9 under the Exchange Act, which imposes certain sales practice requirements on broker-dealers which sell our common stock to persons other than established customers and accredited investors (generally, individuals with a net worth in excess of $1,000,000 or annual incomes exceeding $200,000 (or $300,000 together with their spouses)). For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser s written consent to the transaction prior to the sale. This rule adversely affects the ability of broker-dealers to sell our common stock and the ability of our stockholders to sell their shares of common stock.

Additionally, our common stock is subject to the SEC regulations for penny stock. Penny stock includes any equity security that is not listed on a national exchange and has a market price of less than $5.00 per share, subject to certain exceptions. The regulations require that prior to any non-exempt buy/sell transaction in a penny stock, a disclosure schedule set forth by the SEC relating to the penny stock market must be delivered to the purchaser of such penny stock. This disclosure must include the amount of commissions payable to both the broker-

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dealer and the registered representative and current price quotations for the common stock. The regulations also require that monthly statements be sent to holders of penny stock that disclose recent price information for the penny stock and information of the limited market for penny stocks. These requirements adversely affect the market liquidity of our common stock.

As a result of the de-registration of our securities, we are currently ineligible to use Form S-3 to register securities, which may adversely affect our cost of future capital.

We are currently ineligible to use Form S-3 to register securities for sale by us or for resale by other security holders and will not be eligible until we have timely filed all periodic reports under the Exchange Act for at least 12 calendar months. In the meantime, we would need to use Form S-1 to register securities with the SEC for capital raising transactions or issue such securities in private placements, in either case, increasing the costs of raising capital during this period.

Our net operating losses and research and development tax credits may not be available to reduce future federal and state income tax payments.

At December 31, 2009, we had federal net operating loss and tax credit carryforwards of $227.8 million and $7.0 million, respectively, and state net operating loss and tax credit carryforwards of $123.4 million and $6.5 million, respectively. Current federal and state tax laws include substantial restrictions on the utilization of net operating loss and tax credits in the event of an ownership change. We have not performed a change of ownership analysis since 1999 and, accordingly, some or all of our net operating loss and tax credit carryforwards may not be available to offset future taxable income, if any. Even if the carryforwards are available, they may be subject to annual limitations, lack of future taxable income, or future ownership changes that could result in the expiration of the carryforwards before they are utilized.

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USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the Shares being offered by the selling stockholders. However, to the extent that the Warrants are exercised for cash, we will receive proceeds from any exercise of the Warrant up to an aggregate of approximately $12.4 million. We intend to use any proceeds received from the exercise of the Warrants for working capital and other general corporate purposes.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected historical financial information should be read in conjunction with our financial statements and related notes included as part of this prospectus as well as and the information contained in the section of this prospectus captioned Management s Discussion and Analysis of Financial Condition and Results of Operations. The selected consolidated statement of income data for the fiscal years ended December 31, 2007, 2008 and 2009 and the consolidated balance sheet data as of December 31, 2008 and 2009 have been derived from our audited consolidated financial statements of included elsewhere in this prospectus. The results of operations for past accounting periods are not necessarily indicative of the results to be expected for any future periods.

	Years Ended December 31,		
	2009	2008	2007
	(in thousands, except per share data)		
Statement of Operations Data:			
Total revenue	$ 79	$ 73	$ 24
Operating expenses:			
Research and development	2,456	16,235	12,244
General and administrative	3,438	9,756	6,213
Other income (expense), net	(71)	484	786
Net loss	$ (5,886)	$ (25,434)	$ (17,647)
Basic and diluted net loss per share	$ (0.10)	$ (0.44)	$ (0.41)
Shares used in computing:			
Basic and diluted net loss per share	58,473	58,285	42,998

	As of December 31,		
	2009	2008	2007
	(in thousands)		
Balance Sheet Data:			
Cash, cash equivalents, and marketable securities	$ 3,300	$ 4,672	$ 30,016
Working capital	2,069	2,759	26,200
Total assets	3,726	5,668	30,844
Total stockholders equity (deficit)	(1,448)	1,793	25,347

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MANAGEMENT S DISCUSSION AND ANALYSIS OF

FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Statements in the following discussion and throughout this report that are not historical in nature are forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. You can identify forward-looking statements by the use of words such as expect, anticipate, estimate, may, will, should, intend, believe, and similar expressions. Although we believe the exp reflected in these forward-looking statements are reasonable, such statements are inherently subject to risk and we can give no assurances that our expectations will prove to be correct. Actual results could differ from those described in this report because of numerous factors, many of which are beyond our control. These factors include, without limitation, those described under Item 1A Risk Factors. We undertake no obligation to update these forward-looking statements to reflect events or circumstances after the date of this report or to reflect actual outcomes. Please see Note Regarding Forward Looking Statements at the beginning of this Form S-1.

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes thereto and other financial information appearing elsewhere in this Form S-1.

Overview

We are a biopharmaceutical company engaged in the development of proprietary therapeutics primarily for the treatment of CNS disorders. We commenced operations in 1992 and completed an initial public offering in January 1996. At the end of 2007, we had three late stage product development programs: (i) iloperidone-NDA filed with the FDA by Vanda seeking U.S. marketing approval for treatment of schizophrenia, (ii) Probuphine-controlled Phase 3 study being conducted by Titan to evaluate safety and efficacy for the treatment of opioid addiction, and (iii) Spheramine-controlled Phase 2b study being conducted by Bayer Schering Pharma for the treatment of advanced Parkinsons disease. In July 2008, we learned that Vanda, the licensee of iloperidone, had received a non-approval letter from the FDA. In July 2008, we announced positive results in the Phase 3 study of Probuphine for the treatment of opioid addiction. In September 2008, we were advised by the licensee of Spheramine that it was ending its development program and terminating its license agreement with us. After further review and analysis of the information on which such licensee s decision was based, we also decided to discontinue any further activities associated with this product candidate. As a result of these adverse events with respect to two of our three principal product candidates, we were forced to undertake substantial cost cutting measures that included an almost complete reduction in our workforce and a phased suspension of all of our development activities, and focus our efforts on maximizing value for our stockholders either through the sale of assets or the establishment of a corporate partnering arrangement for Probuphine.

In May 2009, the FDA, after reviewing additional material provided by Vanda, reconsidered its decision and granted approval for iloperidone (Fanapt). Later that month, we announced that we had re-engaged three of our prior executives, including our two current executive officers. In October 2009, we received a $7.6 million grant from the NIH for the clinical development of Probuphine and later that month Vanda and Novartis announced their agreement regarding the marketing and commercialization of Fanapt . Our board of directors is currently in the process of evaluating all of the strategic alternatives available to us to maximize shareholder value, including possible monetization of the Fanapt royalty stream, continuation of the Probuphine program, a merger or other business combination, among others.

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Critical Accounting Policies and the Use of Estimates

The preparation of our financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Actual results could differ materially from those estimates. We believe the following accounting policies for the years ended December 31, 2009 and 2008 to be applicable:

Share-Based Payments

Effective January 1, 2006, we adopted the fair value recognition provisions of ASC 718, Compensation-Stock Compensation (formerly SFAS No. 123(R)), using the modified-prospective transition method. Under the fair value recognition provisions of ASC 718, share-based compensation cost is estimated at the grant date based on the fair value of the award and is recognized as expense, net of estimated pre-vesting forfeitures, ratably over the vesting period of the award. We selected the Black-Scholes option pricing model as the most appropriate fair value method for our awards. Calculating share-based compensation expense requires the input of highly subjective assumptions, including the expected term of the share-based awards, stock price volatility, and pre-vesting forfeitures. We estimated the expected term of stock options granted for the years ended December 31, 2009 and 2008 based on the historical experience of similar awards, giving consideration to the contractual terms of the share-based awards, vesting schedules and the expectations of future employee behavior. We estimated the expected term of stock options granted for the year ended December 31, 2007 based on the simplified method provided in Staff Accounting Bulletin No. 107, Share-Based Payment. We estimated the volatility of our common stock at the date of grant based on the historical volatility of our common stock. The assumptions used in calculating the fair value of share-based awards represent our best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our share-based compensation expense could be materially different in the future. In addition, we are required to estimate the expected pre-vesting forfeiture rate and only recognize expense for those shares expected to vest. We estimate the pre-vesting forfeiture rate based on historical experience. If our actual forfeiture rate is materially different from our estimate, our share-based compensation expense could be significantly different from what we have recorded in the current period.

Income Taxes

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expense for tax and financial statement purposes. As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves us estimating our current tax exposure under the most recent tax laws and assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. We assess the likelihood that we will be able to recover our deferred tax assets. We consider all available evidence, both positive and negative, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. If it is not more likely than not that we will recover our deferred tax assets, we will increase our provision for taxes by recording a valuation allowance against the deferred tax assets that we estimate will not ultimately be recoverable.

Clinical Trial Accrual

We also record accruals for estimated ongoing clinical trial costs. Clinical trial costs represent costs incurred by clinical research organizations, (CROs), and clinical sites. These costs are recorded as a component of research and development expenses. Under our agreements, progress payments are typically made to investigators, clinical sites and CROs. We analyze the progress of the clinical trials, including levels of patient enrollment, invoices received and contracted costs when evaluating the adequacy of accrued liabilities. Significant judgments and estimates must be made and used in determining the accrued balance in any accounting period. Actual results could differ from those estimates under different assumptions. Revisions are charged to expense in the period in which the facts that give rise to the revision become known. The actual clinical trial costs for the Probuphine studies conducted in the past three years have not differed materially from the estimated projection of expenses.

Liquidity and Capital Resources

We have funded our operations since inception primarily through sales of our securities, as well as with proceeds from warrant and option exercises, corporate licensing and collaborative agreements, and government-sponsored research grants. At December 31, 2009, we had approximately $3.3 million of cash and cash equivalents compared to approximately $4.7 million at December 31, 2008. Our operating activities used approximately $5.5 million during the year ended December 31, 2009. This consisted primarily of the net loss for the period of

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approximately $5.9 million and $1.3 million related to net changes in operating assets and liabilities. This was offset in part by non-cash charges of approximately $0.2 million related to depreciation, and approximately $1.5 million related to share-based compensation expenses. Uses of cash in operating activities were primarily to fund product development programs and administrative expenses. The license agreements with Sanofi-Aventis and MIT require us to pay royalties on future product sales, if any. In addition, in order to maintain license and other rights while products are under development, we must comply with customary licensee obligations, including the payment of patent-related costs, annual minimum license fees, meeting project-funding milestones and diligent efforts in product development. The aggregate commitments we have under these agreements, including minimum license payments, for the next 12 months is approximately $100,000.

Net cash provided by investing activities of approximately $2,000 during the year ended December 31, 2009 consisted of purchases of furniture and equipment of approximately $7,000, offset in part by net proceeds from the sale of an investment of approximately $9,000.

Net cash provided by financing activities during the year ended December 31, 2009 was approximately $4.0 million, which consisted primarily of proceeds from the following: In September and October 2009, our directors exercised options to purchase our common stock providing net proceeds of approximately $555,000. In December 2009, we completed the sale of 300,000 shares of common stock for aggregate net proceeds of approximately $478,000. Also in December 2009, we entered into a financing agreement with Oxford Capital Financing (Oxford) pursuant to which we received a three-year term loan in the principal amount of $3.0 million that bears interest at the rate of 13% per annum. We paid Oxford an initial facility fee of $60,000 and are obligated to make a final payment fee of $180,000. The loan is secured by our assets and has a provision for pre-payment. Oxford received five-year warrants to purchase 42,254 shares of our common stock at an exercise price of $2.13 per share.

We expect to continue to incur substantial additional operating losses from costs related to the continuation of product and technology development, clinical trials, and administrative activities. We believe that our working capital at December 31, 2009, together with proceeds from the NIH grant, is sufficient to sustain our planned operations through September 2010, at which time we expect to be generating royalty revenues from sales of Fanapt that we believe will enable us to fund our operations at least through December 2010. First quarter sales of Fanapt were reported by Novartis to be $21 million, and under the terms of our sublicense agreement with Novartis we expect to receive a royalty payment of approximately $1.6 million by May 15, 2010.

The following table sets forth the aggregate contractual cash obligations as of December 31, 2009 (in thousands):

Contractual obligations	Total	< 1 year	1	3 years	3	5 years	5 years +
Operating leases	$ 289	$ 274	$	15	$		$
License agreements	78	61		7		5	5
Debt obligation	$ 3,905	$ 901	$	3,004	$	0	$
Total contractual cash obligations	$ 4,272	$ 1,236	$	3,026	$	5	$ 5

Results of Operations

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

Revenues in 2009 were approximately $79,000 compared to approximately $73,000 in 2008, an increase of approximately $6,000. Our revenues during 2009 and 2008 were derived from fees received under various licensing agreements.

Research and development expenses for 2009 were approximately $2.5 million compared to approximately $16.2 million in 2008, a decrease of approximately $13.7 million, or 85%. The decrease in research and development costs was primarily associated with the phased suspension of activities associated with clinical trials related to our Probuphine product, resulting in reductions in employee-related costs of approximately $3.8 million, internal research and development expenses of approximately $1.1 million and external research and development expenses of approximately $8.6 million. External research and development expenses include direct expenses such as clinical research organization charges, investigator and review board fees, patient expense reimbursements and

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contract manufacturing expenses. During 2009, our external research and development expenses relating to our Probuphine product development program were approximately $0.7 million compared to approximately $9.3 million for 2008. Other research and development expenses include internal operating costs such as clinical research and development personnel-related expenses, clinical trials-related travel expenses, and allocation of facility and corporate costs. As a result of the risks and uncertainties inherently associated with pharmaceutical research and development activities described elsewhere in this report, we are unable to estimate the specific timing and future costs of our clinical development programs or the timing of material cash inflows, if any, from our products or product candidates.

General and administrative expenses for 2009 were approximately $3.4 million, compared to approximately $9.8 million in 2008, a decrease of approximately $6.4 million, or 65%. The decrease in general and administrative expenses was primarily related to reductions in employee-related costs of approximately $3.9 million, non-cash stock compensation costs of approximately $0.3 million, marketing and product positioning costs of approximately $1.0 million, legal fees of approximately $0.3 million, travel-related expenses of approximately $0.3 million, consulting and professional fees of approximately $0.2 million, Board of Directors fees of approximately $0.2 million, and other general and administrative costs of approximately $0.1 million.

Net other expense for 2009 was approximately $71,000 compared to net other income of approximately $484,000 in 2008. Net other expense in 2009, consisted primarily of financing related expenses of approximately $60,000, interest expense of approximately $9,000 and tax-related expenses of approximately $10,000 offset by interest income of approximately $2,000 and net gain of approximately $6,000 resulting from the sale of certain assets. Net other income during 2008, consisted primarily of interest income on investments of approximately $0.5 million and gains of approximately $0.1 million resulting from the sale of certain investments offset by other expenses of approximately $0.1 million.

As a result of the foregoing, we had a net loss of approximately $5.9 million in 2009 compared to a net loss of approximately $25.4 million in 2008.

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

Revenues in 2008 were $73,000 compared to $24,000 for 2007, an increase of $49,000. Our revenues during 2008 and 2007 were derived from fees received under various licensing agreements.

Research and development expenses for 2008 were $16.2 million compared to $12.2 million for 2007, an increase of $4.0 million. The increase in research and development expense was primarily associated with the initiation of certain clinical study-related activities in 2007. Of our 2008 research and development expenses, approximately 57%, or $9.3 million, were attributable to external research and development expenses related to our Probuphine project. External research and development expenses include direct expenses such as clinical research organization charges, investigator and review board fees, patient expense reimbursements, preclinical activities and contract manufacturing expenses. Remaining research and development expenses were attributable to internal operating costs, which include clinical research and development personnel salaries and employee-related expenses, clinical trials related travel expenses, and allocation of facility and corporate costs.

General and administrative expenses for 2008 were $9.8 million compared to $6.2 million for 2007, an increase of $3.6 million. The increase in general and administrative expenses was primarily related to increases in employee-related costs of approximately $1.9 million, non-cash stock compensation costs of approximately $0.5 million, marketing and product positioning costs of approximately $0.6 million, legal fees of approximately $0.2 million, travel-related expenses of approximately $0.1 million, and other general and administrative costs of approximately $0.3 million. This was offset by a decrease in consulting and professional fees of approximately $0.1 million.

Other income, net, for 2008 was $484,000 compared to $786,000 for 2007, a decrease of $302,000. The decrease in other income, net, consisted primarily of a decrease in interest income on investments of approximately $0.2 million and a decrease in gains on the sale of investments of approximately $0.2 million. This was offset by a decrease in other expense of approximately $0.1 million.

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As a result of the foregoing, we had a net loss of $25.4 million in 2008 compared to a net loss of $17.7 million in 2007.

Off Balance Sheet Arrangements

We have never entered into any off-balance sheet financing arrangements and we have never established any special purpose entities. We have not guaranteed any debt or commitments of other entities or entered into any options on non-financial assets.

Quantitative and Qualitative Disclosures About Market Risk

We held no marketable securities at December 31, 2008 or 2009.

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DESCRIPTION OF THE BUSINESS

Overview

We are a biopharmaceutical company developing proprietary therapeutics primarily for the treatment of central nervous system (CNS) disorders. We currently have two key assets as described below:

Iloperidone (Fanapt): An atypical antipsychotic approved by the U.S. Food and Drug Administration (FDA) for the treatment of schizophrenia. Novartis Pharma AG (Novartis) has acquired the U.S. and Canadian rights to further develop and commercialize the approved oral formulation, and also further develop and potentially commercialize an injectible form of the drug, known as a depot formulation, that will provide medication over a prolonged period of several weeks following a single treatment. Vanda Pharmaceuticals, Inc. (Vanda) has the development and commercialization rights to the oral and depot formulations of this product for the rest of the world. We are entitled to a royalty of 8-10% on worldwide net sales for several years based on the remaining life of certain patents (through September 2016 for the oral formulation in the U.S. including a patent extension requested under the Hatch Waxman Act), and we anticipate commencement of royalty revenues from sales in the United States during the first half of 2010.

Probuphine: An implant formulation of buprenorphine in Phase 3 clinical development for the treatment of opioid addiction that is capable of maintaining a stable blood level of the drug in patients for six months following a single treatment. We announced positive safety and efficacy results of this product in a placebo controlled Phase 3 study during 2008 and we have now completed approximately half of the overall clinical development program required for registration and potential approval of Probuphine. Recently we have been awarded a $7.6 million grant from the National Institutes of Health (NIH) that will partially fund the second Phase 3 controlled safety and efficacy study required by the FDA for product registration.

In September 2008, we were notified by Bayer Schering Pharma of the termination of the license agreement for the development and commercialization of Spheramine®, our proprietary cell therapy product in development for treating Parkinson s disease. Bayer Schering Pharma returned all rights for this product to us and, after further review and analysis of the information, we also decided to discontinue any further activities associated with this product candidate. Subsequently, we terminated our Spheramine license agreement with New York University (NYU) and returned all rights previously granted to us by NYU. Thereafter, to further conserve capital, we also terminated the license agreements for DITPA and gallium maltolate and returned all development and commercialization rights to the respective licensors, except for certain rights from the University of Iowa to potentially use gallium maltolate for the treatment of chronic bacterial infections.

Our Products

The following table provides a summary status of our products:

Product	Potential Indication(s)	Phase of Development	Marketing Rights
Iloperidone (Fanapt)	Schizophrenia, psychosis	Approved in U.S. for schizophrenia	Novartis U.S. and Canada Vanda Rest of the world
Probuphine	Opioid addiction	Phase 3	Titan

Iloperidone (Fanapt) was approved by the FDA in May 2009 for the treatment of schizophrenia and Novartis has acquired the rights to commercialize it in the U.S. and Canada. Novartis announced that it commenced commercial launch of Fanapt in January 2010.

Probuphine is currently in Phase 3 clinical development and although it has demonstrated efficacy in one controlled Phase 3 study, additional development is necessary prior to registration and it may still not be successfully developed or commercialized. We have been awarded a $7.6 million grant by the NIH in partial support of the second controlled Phase 3 study, the total external cost of which is estimated at approximately $14.6 million. We will also require significant further capital, currently estimated at approximately $3.9 million, to support third party expenses related to manufacturing development, testing, and regulatory clearance activities prior to

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commercialization without giving effect to the cost of additional clinical studies, if any, that may be required by the FDA. We may experience unanticipated problems relating to product development and cannot predict whether we will successfully develop and commercialize any products.

Iloperidone (Fanapt)

Iloperidone (Fanapt) is our novel, proprietary product approved in the U.S. on May 6, 2009 for the treatment of adult patients with schizophrenia. The Phase 3 clinical development was conducted initially by our sub-licensee, Novartis, and completed by Novartis sub-licensee, Vanda. In July 2008, Vanda received a non-approval letter from the FDA requesting additional information about the product. Vanda addressed the questions asked by the FDA and provided additional clarification following which the FDA granted marketing approval as noted above. The approval was supported by two placebo-controlled Phase 3 clinical studies comparing Fanapt to placebo and active control in patients with schizophrenia, as well as safety data from more than 3,000 patients. Fanapt , a mixed dopamine D2 / serotonin 5HT2A receptor antagonist belonging to the class of atypical antipsychotics, will be commercialized in the U.S. and Canada by Novartis and the development of a depot formulation will also be pursued by Novartis. Vanda has commercialization rights for the rest of the world for the oral formulation and the depot formulations, although Novartis has the first option to negotiate an agreement to co-market both these products in the rest of the world. Based on the terms of our sub-license agreement with Novartis we are entitled to royalty revenue of 8% of annual worldwide net sales up to $200 million and 10% of annual worldwide net sales above $200 million. We do not incur any expenses associated with this product.

Probuphine

We are developing Probuphine for the treatment of opioid addiction. Probuphine is the first product to utilize our novel, proprietary, long-term drug delivery technology. See Continuous Drug Delivery Technology below. Probuphine is designed to provide continuous, long-term therapeutic levels of the drug buprenorphine, an approved agent for the treatment of opioid addiction. Probuphine has been shown to be effective with an acceptable safety profile in the three Phase 3 studies that have been completed to date, specifically:

- A six-month, double-blind, placebo-controlled safety and efficacy trial;
- A six-month, open-label re-treatment safety trial; and
- A pharmacokinetic safety study.

The goal of any therapy for an addictive disorder is to reduce the use of the illicit substance over time and to engage the patient in treatment long enough for therapeutic gains to be consolidated. The effectiveness of a treatment for opioid addiction is evaluated by testing a patient s urine samples for the presence of illicit opioids over the treatment period. Retention in treatment is also considered a strong prognostic indicator. In the placebo controlled Phase 3 study of Probuphine, every participant was required to provide urine samples three times a week, essentially on alternate days. Any missed sample was considered a positive result (i.e. urine testing positive for illicit opioid). In the study, the primary effectiveness of the treatment with Probuphine (i.e. the primary endpoint) was established by comparing the negative urine results (i.e. urine testing negative for illicit opioid) between the Probuphine and placebo arms using a statistical technique, specifically the cumulative distribution function of negative urines , which basically performs a comparative analysis on the relative proportions of negative urines between treatment groups over the time period of treatment. The patients in the Probuphine arm showed clinically meaningful and a statistically significant difference in the negative urines as compared to the placebo arm, i.e. the Probuphine patients had statistically more negative results than the placebo arm, demonstrating that the treatment with Probuphine was successful in reducing their usage of illicit opioids as compared to the treatment with placebo. These favorable results for Probuphine were also confirmed by a significant difference over the placebo arm in other secondary measures such as retention in treatment, withdrawal symptoms and craving for opioids, both of which are monitored by clinicians to see if a treatment is providing clinically meaningful benefit to the patients. The following quantifies, in terms of p value, the amount by which the Probuphine arm exceeded (was > than) the placebo arm in the primary endpoint and the secondary measures of effectiveness. P-value is a statistical calculation that relates to the probability that a difference between groups happened by chance, with a p-value of less than 0.05 often used as the threshold to indicate statistical significance.

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Cumulative distribution function of % negative urines:

weeks 1-16: Probuphine>placebo; p= 0.0361 (primary endpoint)

weeks 17-24: Probuphine>placebo; p= 0.0004

weeks 1-24: Probuphine>placebo; p= 0.0117

Difference in average percentage of negative urines:

weeks 1-16: Probuphine>placebo; p= 0.0253

weeks 17-24: Probuphine>placebo; p= 0.0006

Treatment retention (i.e. the number of patients remaining in the study) over 24 weeks: Probuphine>placebo; p< 0.0001

Patient self-assessment of opioid withdrawal symptoms over 24 weeks: Probuphine>placebo; p= 0.0005

Physician assessment of opioid withdrawal symptoms over 24 weeks: Probuphine>placebo; p= 0.0008

Opioid craving 24 weeks: Probuphine>placebo; p= 0.0006

Overall severity of opioid addiction:

Patient assessment: Probuphine>placebo; p=0.0021

Physician assessment: Probuphine>placebo; p=0.0086

Results for the first double-blind, placebo-controlled safety and efficacy study were initially released in July 2008. Treatment with Probuphine was well tolerated in this clinical study.

Patients who completed the first controlled study were eligible for enrollment in the six month re-treatment study, which provided data on one full year of treatment. The pharmacokinetic safety study has provided important data on the level of buprenorphine in the blood during the treatment period and gives a good profile of the safety of Probuphine. Data from all of these studies have been presented at the International Society of Addiction Medicine 2008 Annual Meeting in November 2008, and the American Society of Addiction Medicine 2009 Annual Meeting in May 2009.

These studies are part of a registration directed program intended to obtain marketing approval of Probuphine for the treatment of opioid addiction in Europe and the U.S. The Phase 3 program includes additional clinical studies, including a second controlled Phase 3 study which has received a $7.6 million award from the NIH. This NIH grant will support approximately half of the expenses associated with this study and

we will need additional funding to complete this clinical study and the overall development program. This confirmatory Phase 3 study will be conducted at approximately 23 sites in the U.S. and about one-third of those sites have been initiated and are currently in the process of recruiting patients. Completion of patient enrollment is targeted for the end of 2010 with study completion and results available in the third quarter of 2011. We continue to have discussions with the FDA relating to finalizing the Probuphine clinical development program and the chemistry and manufacturing controls (CMC) which is necessary prior to any product registration.

In June 2004, we announced final results from a pilot clinical study that evaluated the safety, pharmacokinetics and preliminary efficacy of Probuphine in the treatment of opioid-addicted patients. The results were presented at the Annual Meeting of the International Society of Addiction Medicine in Helsinki, and demonstrated that all 12 patients switched from daily sublingual buprenorphine therapy to Probuphine, had maintenance of therapeutic benefit for a period of six months following a single treatment of Probuphine. Treatment with Probuphine was well tolerated in this clinical study, with no significant adverse events.

Continuous Drug Delivery Technology

Our continuous drug delivery system consists of a small, solid rod made from a mixture of ethylene-vinyl acetate (EVA) and a drug substance. The resulting product is a solid matrix that is placed subcutaneously, normally in the upper arm in a simple office procedure, and is removed in a similar manner at the end of the treatment period. The drug substance is released slowly, at continuous levels, through the process of diffusion. This results in a constant rate of release similar to intravenous administration. We believe that such long-term, linear release characteristics are desirable by avoiding peak and trough level dosing that poses problems for many CNS and other therapeutic agents.

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Our continuous drug delivery technology was developed to address the need for a simple, practical method to achieve continuous long-term drug delivery, and potentially can provide controlled drug release on an outpatient basis over extended periods of up to 6 12 months. In addition to Probuphine, which is our first product in clinical testing to utilize our proprietary continuous drug delivery technology, we continue to seek opportunities to develop this drug delivery technology for other potential treatment applications in which conventional treatment is limited by variability in blood drug levels and poor patient compliance.

License Agreements

We are a party to several agreements with companies and universities for the performance of research and development activities and for the acquisition of licenses relating to such activities. Expenses under these agreements totaled approximately $ 86,000, $239,000 and $378,000 in the years ended December 31, 2009, 2008 and 2007, respectively.

In January 1997, we acquired an exclusive worldwide license under U.S. and foreign patents and patent applications relating to the use of iloperidone for the treatment of psychiatric and psychotic disorders and analgesia from Sanofi-Aventis SA (Sanofi-Aventis) (formerly Hoechst Marion Roussel, Inc.). The Sanofi-Aventis agreement provides for the payment of royalties on future net sales and requires us to satisfy certain other terms and conditions, specifically continued diligent product development and commercialization efforts standard for these types of agreements, in order to retain our rights, all of which have been met to date.

In November 1997, we granted a worldwide sublicense, except Japan, to Novartis under which Novartis continued, at its expense, all further development of iloperidone. In April 2001, that sublicense was extended to include Japan. Novartis will make our milestone and royalty payments to Sanofi-Aventis during the life of the Novartis agreement, and will also pay Titan a royalty on future net sales of the product.

In June 2004, Vanda acquired from Novartis the worldwide rights to develop and commercialize iloperidone. Under its agreement with Novartis, Vanda proceeded with and funded the iloperidone Phase III development program. All of our rights and economic interests in iloperidone, including royalties on sales of iloperidone, remained essentially unchanged under the agreement.

In October 2009, Vanda and Novartis amended and restated their sub-license agreement whereby Novartis acquired the U.S. and Canadian rights to commercialize Fanapt, the oral formulation of iIloperidone approved in the U.S. Novartis also acquired the U.S. and Canadian development and commercialization rights to the depot formulation previously under development by Vanda and agreed to fund and continue the development of this formulation. Further, Novartis has also retained the right of first negotiation to co-market Fanapt and the depot formulation in the rest of the world. Our royalty interest in iloperidone remains unchanged, and Titan is entitled to royalty revenue of 8% of annual worldwide net sales up to $200 million and 10% of annual worldwide net sales above $200 million for several years based on the remaining life of certain patents. We anticipate commencement of royalty revenues from U.S. sales during the first half of 2010.

In October 1995, we acquired from the Massachusetts Institute of Technology (MIT) an exclusive worldwide license to certain U.S. and foreign patents relating to our continuous drug delivery system. The exclusive nature of the MIT license is subject to our continued diligent product development activities. The agreement provides for the payment of a 2% royalty based on sales of products and processes incorporating the licensed technology, as well as 25% of other income (excluding research expense reimbursement) derived from sublicenses of the licensed technology.

In August 2000, through the acquisition of GeoMed, Inc., we acquired an exclusive worldwide license to make, use and sell products developed under the patent rights to the compositions and application of gallium complexes. We subsequently acquired additional rights to gallium; however, between December 2008 and March 2009, as part of our ongoing efforts to conserve cash, we terminated all of the license agreements with the exception

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of an agreement we entered into in July 2005 with the University of Iowa Research Foundation. Under this agreement, we received an exclusive worldwide license to patent rights held by the University of Iowa Research Foundation covering the methods of treating biofilm formation, pseudomoras aeruginosa growth, human deficiency virus, and intracellular pathogens and pathogens causing chronic pulmonary infection using gallium maltolate. Under this agreement, we are required to pay a license issuance fee and certain minimum annual royalty payments. In addition, we are required to pay royalties based on net sales of products and processes incorporating the licensed technology.

Patents and Proprietary Rights

We hold a license from Sanofi-Aventis under certain issued U.S. patents and certain issued foreign patents relating to iloperidone and its methods of use. Our license is exclusive for use in the treatment of psychiatric disorders, psychotic disorders and analgesia. The term of the U.S. patent that covers certain aspects of our iloperidone product expires in 2011, however it is anticipated that based on provisions of the Hatch-Waxman Act pertaining to the approval by the FDA of new molecules for medical treatment, the market exclusivity period for Fanapt will be extended by five years to 2016. The method of use patent in the U.S. covering the depot formulation will expire in 2020 assuming no further extensions. The issued foreign patents cover major countries in Europe, Asia, North and South America and Africa with expiration dates ranging from 2010 to 2015 (does not include any market exclusivity periods or patent extension periods that may be available in these countries). Prosecution of various divisional and continuation applications and their foreign counterparts continues satisfactorily, although it is uncertain whether additional patents will be granted.

We are the exclusive licensee under the MIT license to two U.S. patents and their European counterparts relating to a long-term drug delivery system. The U.S. patent terms have already expired and European patent terms will expire in 2010. These dates do not include possible term extensions. Four additional patent applications have been filed which incorporate the use of specific compounds with the continuous delivery technology, including two applications related to Probuphine for the potential treatment of opioid addiction and chronic pain. Patents have issued in Australia, India, Mexico and New Zealand and we have received a Notice of Allowance from the United States Patent and Trademark Office (PTO) for certain claims regarding the use of Probuphine for the treatment of opioid addiction. Further prosecution of these applications is currently proceeding at the PTO and corresponding agencies in Europe, Canada, Japan, India and Hong Kong. The U.S. patent related to the use of Probuphine for the treatment of opioid addiction, if issued, will provide market exclusivity up to 2023.

We are the licensee from the University of Iowa Research Foundation (UIRF) of two issued U.S. patents (expiring 2016) relating to methods of use of gallium compounds to inhibit the growth of P. aeruginosa, and the treatment of infections by pathogens causing chronic pulmonary infection. We are also the licensee from UIRF of certain rights to patent applications covering the use of gallium complexes in preventing and also treating bacterial biofilm-based infections, for which patents have issued in South Africa and Mexico and prosecution in the U.S., Canada, Europe, Australia, New Zealand and some Asian countries continues.

Competition

The pharmaceutical and biotechnology industries are characterized by rapidly evolving technology and intense competition. Many companies of all sizes, including major pharmaceutical companies and specialized biotechnology companies, are engaged in the development and commercialization of therapeutic agents designed for the treatment of the same diseases and disorders that we target. Many of our competitors have substantially greater financial and other resources, larger research and development staff and more experience in the regulatory approval process. Moreover, potential competitors have or may have patents or other rights that conflict with patents covering our technologies. For risks we face with respect to competition, see Risk Factors We face intense competition.

With respect to Probuphine, Reckitt & Benckiser, Inc. received FDA approval in 2002 for a sublingual buprenorphine product for the treatment of opioid addiction. This product, to be administered daily, will compete with our six-month implantable product for opioid addiction. The FDA previously approved Orphan Drug designation, expiring in 2009, for Reckitt Benckiser s sublingual buprenorphine for the treatment of opioid addiction. Other forms of buprenorphine are also in development by other companies, including intramuscular injections and intranasally delivered buprenorphine, which also might compete with our product.

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Several products categorized as atypical antipsychotics that will compete with Fanapt are already on the market. These products include Risperdal sold by Janssen Pharmaceuticals, Zyprexa sold by Eli Lilly, Clozaril sold by Novartis, Seroquel sold by AstraZeneca, Geodon sold by Pfizer, and Abilify sold by Bristol-Myers Squibb. Competition among these companies is already intense and iloperidone will face significant competition. The success of Fanapt will depend on how it can be differentiated from products already on the market on the basis of efficacy, side-effect profile, cost, availability of formulations and dose requirements, among other things.

Manufacturing

We utilize contract manufacturing organizations to manufacture our products for pre-clinical studies and clinical trials. While we have not introduced any products on the commercial market to date, at such time as we are ready to do so we will need to allocate additional resources to the manufacture of these products. We do not have the facilities to manufacture these products in-house nor do we intend to establish our own manufacturing operation at this time. We currently plan to pursue collaborative arrangements regarding the manufacture of any products that we may successfully develop.

Government Regulation

In order to obtain FDA approval of a new drug, a company generally must submit proof of purity, potency, safety and efficacy, among other regulatory standards. In most cases, such proof entails extensive clinical and pre-clinical laboratory tests.

The procedure for obtaining FDA approval to market a new drug involves several steps. Initially, the manufacturer must conduct pre-clinical animal testing to demonstrate that the product does not pose an unreasonable risk to human subjects in clinical studies. Upon completion of such animal testing, an Investigational New Drug application, or IND, must be filed with the FDA before clinical studies may begin. An IND application consists of, among other things, information about the proposed clinical trials. Among the conditions for clinical studies and IND approval is the requirement that the prospective manufacturer s quality control and manufacturing procedures conform to current Good Manufacturing Practices (cGMP), which must be followed at all times. Once the IND is approved (or if the FDA does not respond within 30 days), the clinical trials may begin.

The results of the pre-clinical and clinical testing on new drugs, if successful, are submitted to the FDA in the form of a New Drug Application (NDA). The NDA approval process requires substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all. The FDA may refuse to approve an NDA if applicable regulatory requirements are not satisfied. Product approvals, if granted, may be withdrawn if compliance with regulatory standards is not maintained or problems occur following initial marketing.

The FDA may also require post-marketing testing and surveillance of approved products, or place other conditions on their approvals. These requirements could cause it to be more difficult or expensive to sell the products, and could therefore restrict the commercial applications of such products. Product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing. With respect to patented products or technologies, delays imposed by the governmental approval process may materially reduce the period during which we will have the exclusive right to exploit such technologies.

We believe we are in compliance with all material applicable regulatory requirements. However, see Risk Factors We must comply with extensive government regulations for additional risks we face regarding regulatory requirements and compliance.

Foreign Regulatory Issues

Sales of pharmaceutical products outside the United States are subject to foreign regulatory requirements that vary widely from country to country. Whether or not FDA approval has been obtained, approval of a product by a comparable regulatory authority of a foreign country must generally be obtained prior to the commencement of marketing in that country. Although the time required to obtain such approval may be longer or shorter than that required for FDA approval, the requirements for FDA approval are among the most detailed in the world and FDA approval generally takes longer than foreign regulatory approvals.

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Employees

At March 31, 2010, we had seven full-time employees, one part-time employee and several consultants. See Risk Factors We may not be able to retain our key management and scientific personnel.

Properties

We have a five-year operating lease, expiring in June 2010, for approximately 14,017 square feet of office space in South San Francisco, California. We also have an operating lease, expiring in March 2011, for approximately 3,135 square feet of office space in Fort Lee, New Jersey.

Legal Proceedings

Currently we are not a party to any legal proceedings. In March 2005, Dr. Bernard Sabel initiated an appraisal proceeding in the Court of Chancery of the State of Delaware relating to the merger of our subsidiary ProNeura, Inc. into Titan. In March 2009, we settled our dispute with Dr. Sabel and in April 2009, under the terms of the settlement, we paid $600,000 to Dr. Sabel.

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DIRECTORS AND EXECUTIVE OFFICERS

Executive Officers and Directors

Set forth below are the name, age and position and a brief account of the business experience of each of our executive officers and directors:

Name	Age	Office	Director Since
Marc Rubin (1)	55	Executive Chairman of the Board	November 2007
Sunil Bhonsle	60	President and Director	February 2004
Victor J. Bauer (2)	74	Director	November 1997
Eurelio M. Cavalier (1)(3)(4)	77	Director	September 1998
Hubert E. Huckel (1)(2)(3)	78	Director	October 1995
Joachim Friedrich Kapp	67	Director	August 2005
M. David MacFarlane (2)(4)	69	Director	May 2002
Ley S. Smith (1)(2)(4)	75	Director	July 2000

(1) Member of Executive Committee
(2) Member of Audit Committee
(3) Member of Compensation Committee
(4) Member of Nominating Committee

Marc Rubin, M.D. served as our President and Chief Executive from October 2007 until December 2008 and was re-engaged as our Executive Chairman in May 2009. Until February 2007, Dr. Rubin served as Head of Global Research and Development for Bayer Schering Pharma, as well as a member of the Executive Committee of Bayer Healthcare and the Board of Management of Bayer Schering Pharma. Prior to the merger of Bayer Pharmaceuticals and Schering AG in June 2006, Dr. Rubin was a member of the Executive Board of Schering AG since joining such company in October 2003, as well as Chairman of Schering Berlin Inc. and President of Berlex Pharmaceuticals, a division of Schering AG. From 1990 until August 2003, Dr. Rubin was employed by GlaxoSmithKline where he held positions of responsibility in global clinical and commercial development overseeing programs in the United States, Europe, Asia and Latin America. From 2001 through 2003, he was Senior Vice President of Global Clinical Pharmacology & Discovery Medicine. Dr. Rubin holds an M.D. from Cornell University Medical College. Dr. Rubin currently serves on the board of directors of Medarex, Inc.

Sunil Bhonsle served as our Executive Vice President and Chief Operating Officer from September 1995 until December 2008 and was re-engaged as our President in May 2009. Mr. Bhonsle served in various positions, including Vice President and General Manager Plasma Supply and Manager Inventory and Technical Planning, at Bayer Corporation from July 1975 until April 1995. Mr. Bhonsle holds an M.B.A. from the University of California at Berkeley and a B.Tech. in chemical engineering from the Indian Institute of Technology.

Victor J. Bauer, Ph.D. serves as the Executive Vice President of Concordia Pharmaceuticals, Inc., a biopharmaceutical company he co-founded in January 2004. From February 1997 through March 2003, Dr. Bauer was employed by Titan, most recently as our Executive Director of Corporate Development. From April 1996 until its merger into Titan, Dr. Bauer also served as a director and Chairman of Theracell. From December 1992 until February 1997, Dr. Bauer was a self-employed consultant to companies in the pharmaceutical and biotechnology industries. Prior to that time, Dr. Bauer was with Hoechst-Roussel Pharmaceuticals Inc., where he served as President from 1988 through 1992.

Eurelio M. Cavalier was employed in various capacities by Eli Lilly & Co. from 1958 until his retirement in 1994, serving as Vice President Sales from 1976 to 1982 and Group Vice President U.S. Pharmaceutical Business Unit from 1982 to 1993.

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Hubert E. Huckel, M.D. served in various positions with The Hoechst Group from 1964 until his retirement in December 1992. At the time of his retirement, Dr. Huckel was Chairman of the Board of Hoechst-Roussel Pharmaceuticals, Inc., Chairman and President of Hoechst-Roussel Agri-Vet Company and a member of the Executive Committee of Hoechst Celanese Corporation. He currently serves on the board of directors of ThermoGenesis Corp., Catalyst Pharmaceuticals, Inc. and Concordia Pharmaceuticals, Inc. He is a member of the compensation committee of ThermoGenesis Corp.

Joachim Friedrich Kapp, M.D., Ph.D. worked in various capacities for Schering AG from 1975 until his retirement in 2005, including from 1991 on as President of the Global Business Unit, Specialized Therapeutics. Dr. Kapp worked in various capacities with Warner Lambert and its subsidiaries between 1984 and 1990. Since his retirement, Dr. Kapp has provided consulting services to early stage pharmaceutical companies. Dr. Kapp holds an M.D. and a Ph.D. from The University of Essen, Germany.

M. David MacFarlane, Ph.D. served as Vice President and Responsible Head of Regulatory Affairs of Genentech, Inc from 1989 until his retirement in August 1999. Prior to joining Genentech, Inc., he served in various positions with Glaxo Inc., last as Vice President of Regulatory Affairs.

Ley S. Smith served in various positions with The Upjohn Company and Pharmacia & Upjohn from 1958 until his retirement in November 1997. From 1991 to 1993 he served as Vice Chairman of the Board of The Upjohn Company, and from 1993 to 1995 he was President and Chief Operating Officer of The Upjohn Company. At the time of his retirement, Mr. Smith was Executive Vice President of Pharmacia & Upjohn, and President of Pharmacia & Upjohn s U.S. Pharma Product Center.

As indicated above, each of our directors has extensive management and operational experience in one or more facets of the pharmaceutical industry, including research, product development, clinical and regulatory affairs, manufacturing and sales and marketing, providing our company with the leadership needed by a biotechnology company in all stages of its development.

Directors serve until the next annual meeting or until their successors are elected and qualified. Officers serve at the discretion of the board of directors, subject to rights, if any, under contracts of employment. See Compensation Discussion and Analysis-Employment Agreements.

Board Leadership Structure

Currently, our principal executive officer and chairman of the board positions are held separately by Sunil Bhonsle and Marc Rubin, respectively.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics (the Code) that applies to our directors, officers and employees, including our President and Vice President Finance (our principal executive and financial officer and principal accounting officer, respectively). The Code was filed as Exhibit 14 to our annual report on Form 10-K for the year ended December 31, 2003 and has been incorporated by reference into this annual report. A written copy of the Code will be provided upon request at no charge by writing to our Chief Financial Officer, Titan Pharmaceuticals, Inc., 400 Oyster Point Boulevard, Suite 505, South San Francisco, California 94080.

Formation of Audit Committee and Financial Expert

The Audit Committee (which is formed in compliance with Section 3(a)(58)(A) of the Exchange Act) consists of Ley S. Smith, M. David MacFarlane and Hubert E. Huckel, each of whom meets the independence requirements and standards currently established by NYSEAmex and the SEC. In addition, the board has determined that Mr. Ley Smith is an audit committee financial expert and independent as defined under the relevant rules of the SEC and NYSE Amex.

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Compensation Discussion and Analysis

Overview

During the last two years, our company has undergone significant changes to its operations and organizational structure. In late 2007, we had three promising late stage product development programs, iloperidone, Probuphine and Spheramine. Planning for the future, we added to the executive management team with the addition on October 1, 2007 of Marc Rubin as Chief Executive Officer. Simultaneously, Louis Bucalo assumed the role of Executive Chairman. Later, in April 2008, we entered into an agreement with Dr. Bucalo pursuant to which he retired and resigned as an officer and member of our board of directors.

In July 2008, we experienced adverse events in connection with our iloperidone and Spheramine development programs that negatively impacted our financial position and the market price of our common stock. Consequently, upon the recommendation of our Compensation Committee, in October 2008 we implemented an employee retention program in order to bolster our ability to pursue our objective of completing an appropriate transaction for the advancement of the Probuphine development program. The retention program consisted of two components the issuance of restricted shares in lieu of the annual option grants that would otherwise be made in January 2009 and modifications to existing severance provisions. On October 21, 2008, an aggregate of 1,430,000 restricted shares were granted with varying vesting schedules to our employees, of which a total of 900,000 were granted to Marc Rubin, Sunil Bhonsle and Robert Farrell, our three executive officers at that time. As part of the retention program, we made a determination to increase the severance period (which ranged from 1 to 12 months) by 100% for substantially all of our employees in the event that within one year following a change in control the employee s employment were terminated (including constructive termination) other than for cause.

Following a further decline in the market value of the Company and to conserve capital, in December 2008 we effected an approximately 90% reduction in our workforce in order to reduce operations to the minimal level necessary to enable us to continue our efforts to realize the potential value of our assets, particularly the Probuphine program. As part of the reduction plan, Dr. Rubin and Mr. Bhonsle entered into separation agreements pursuant to which they ended their employment relationships with us but agreed to assist us during the next six months, as needed, in connection with the aforementioned efforts. Robert Farrell, our Chief Financial Officer, assumed the role of President pursuant to the terms of a retention agreement. Accordingly, by year end, we had three employees, including Mr. Farrell who served as our sole executive officer. In April 2009, we terminated Mr. Farrell s employment and Mr. Bhonsle, a board member, stepped in as our interim President. As a result of the foregoing, all but 5,000 of the restricted shares issued as part of the October 2008 retention program were cancelled.

In May 2009, the FDA s approval of Fanapt substantially increased our opportunities and our board recommended the rehiring of certain of our former officers, including Dr. Rubin, who agreed to serve as our Executive Chairman, and Sunil Bhonsle, who assumed the role of President. Their compensation packages were structured by our Compensation Committee with minimal or no base salary, payment of which was also deferred to help maximize our limited cash resources, and to return the executives to an equity position comparable to that which existed prior to their termination five months earlier.

This compensation discussion describes the material elements of compensation awarded to, earned by, or paid to each of our executive officers who served as named executive officers during the year ended December 31, 2009, our last completed fiscal year prior to the filing of this Form S-1. This compensation discussion focuses on the information contained in the following tables and related footnotes and narrative for primarily the last completed fiscal year; however, in light of the material changes in our operations and management team described above and elsewhere in this Form S-1, we also describe compensation actions taken before or after the last completed fiscal year to the extent it enhances the understanding of our executive compensation disclosure.

Compensation Program Objectives and Philosophy

Our Compensation Committee currently oversees the design and administration of our executive compensation program. It reviews and approves all elements of compensation for each of our named executive officers taking into consideration recommendations from our principal executive officer (for compensation other than his own), as well as competitive market guidance from the Radford Biotechnology Surveys and, when

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applicable, other independent third-party compensation consultants. We define our competitive markets for executive talent to be the pharmaceutical and biotechnology industries in northern California and New Jersey. To date, we have utilized the Radford Biotechnology Surveys, a third party market specific compensation survey, and, when applicable, other independent third-party compensation consultants to benchmark our executive compensation.

The principal elements of our executive compensation program have historically been base salary, annual cash incentives, long-term equity incentives in the form of stock options, other benefits and perquisites, post-termination severance and acceleration of stock option vesting for certain named executive officers upon termination and/or a change in control. Our other benefits and perquisites have consisted of life, health and disability insurance benefits, and a qualified 401(k) savings plan. Our philosophy has been to position the aggregate of these elements at a level that is competitive within the industry and commensurate with our size and performance. During the last 18 months, our compensation philosophy has evolved to accommodate our changing circumstances, operational needs and limited financial resources during this period.

During 2009, our operations were initially focused on winding down the company while maximizing the value that could be returned to the shareholders. Subsequently, following the approval of iloperidone by the FDA in May 2009, we have focused on efforts to realize maximum shareholder value from both iloperidone and Probuphine, while limiting expenses to stay within the available cash resources. Accordingly, our Compensation Committee implemented a compensation plan which substantially limited the base salary while providing additional potential earnings through stock option awards.

Base Salaries

During 2009, the base salary of the named executives is reflective of the limited availability of funds and the reduced level of operations. Accordingly, Mr. Farrell, President and CFO from January to April 2009 accepted an approximately 25% reduction in base salary from the prior year s base salary. Dr. Rubin and Mr. Bhonsle, whose employment was terminated in December 2008, received lump sum severance payments of approximately $384,000 and $277,000, respectively, in January 2009 and continued to provide services in support of winding down the operations. Dr. Rubin and Mr. Bhonsle have indicated that such services were undertaken in their roles as directors of Titan and that we do not owe them any consulting fees for work performed prior to their re-employment in May 2009, except for the time during which Mr. Bhonsle assumed the role of Acting President during the months of April and May 2009 for which he was paid approximately $12,400. Following the approval of iloperidone by the FDA, both Dr. Rubin and Mr. Bhonsle executed employment agreements pursuant to which, through February 28, 2010, Dr. Rubin was engaged as Executive Chairman with no base salary and Mr. Bhonsle was confirmed as our President with a base salary of $ 200,000 per year, an approximately 33% reduction from the prior year, payment of which has been deferred until our receipt of funds. As a result of amendments to these agreements, effective March 1, 2010, Mr. Bhonsle s base annual salary was increased to $300,000 and Dr. Rubin will continue to serve without cash compensation through June 30, 2010, at which time we expect to have new compensation arrangements in place. In the event new compensation arrangements with Dr. Rubin and Mr. Bhonsle have not been determined prior to June 30, 2010, Dr. Rubin and Mr. Bhonsle will either (i) make a determination to continue their employment at their then existing respective compensation levels or (ii) terminate their employment arrangements with the Company. See Employment Agreements below.

During the next several months, as we evaluate the strategic alternatives available to us and our related human resource requirements, our Compensation Committee will review appropriate base salaries for our executive officers, in particular cash compensation for Dr. Rubin. In making its determination, the Compensation Committee will consider the time commitment necessary and the roles our executives will play in implementing our plans. It is not anticipated that base salaries for the balance of 2010, assuming full time employment for each of Mr. Bhonsle and Dr. Rubin, will be increased materially beyond 2008 levels.

Long-term Equity Incentives

We provide the opportunity for our named executive officers and other executives to earn a long-term equity incentive award. Long-term incentive awards provide employees with the incentive to stay with us for longer periods of time, which in turn, provides us with greater stability. Equity awards also are less costly to us in the short term than cash compensation. We review long-term equity incentives for our named executive officers and other executives annually.

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Historically, for our named executive officers, our stock option grants were of a size and term determined and approved by the Compensation Committee in consideration of the range of grants in the Radford Survey, generally falling within the 50-75% range outlined in the survey. We have traditionally used stock options as our form of equity compensation because stock options provide a relatively straightforward incentive for our executives, result in less immediate dilution of existing shareholders interests and, prior to our adoption of FAS 123(R), resulted in less compensation expense for us relative to other types of equity awards. Generally, all grants of stock options to our employees were granted with exercise prices equal to or greater than the fair market value of our common stock on the respective grant dates. For a discussion of the determination of the fair market value of these grants, see Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and the Use of Estimates.

We do not time stock option grants to executives in coordination with the release of material non-public information. Our stock option grants have a 10-year contractual exercise term. In general, the option grants are also subject to the following post-termination and change in control provisions:

Event	Award Vesting	Exercise Term
Termination by us for Reason Other than Cause, Disability or Death	Forfeit Unvested Options	Earlier of: (1) 90 days or (2) Remaining Option Period
Termination for Disability, Death or Retirement	Forfeit Unvested Options	Earlier of: (1) 2 years or (2) Remaining Option Period
Termination for Cause	Forfeit Vested and Unvested Options	Expire
Other Termination	Forfeit Unvested Options	Earlier of: (1) 90 days or (2) Remaining Option Period
Change in Control	Accelerated*	*

* The Compensation Committee may provide that, in the event of a change in control, any outstanding awards that are unexercisable or otherwise unvested will become fully vested and immediately exercisable. If there is a termination of employment, the applicable termination provisions regarding exercise term will apply.

The vesting of certain of our named executive officers stock options is accelerated pursuant to the terms of their employment agreements in certain change in control or other material events. These terms are more fully described in Employment Agreements and Potential Payments upon Termination or Change in Control.

Upon termination of employment of Dr. Rubin and Mr. Bhonsle in December 2008, all prior stock option grants ceased further vesting and the vested stock options continued to be available for exercise while they remained members of the board of directors. Prior stock option grants awarded to Mr. Farrell, who continued as the President and Chief Financial Officer until April 2009, continued to vest during the term of his employment and the vested stock options subsequently expired unexercised 90 days following termination of his employment.

At the time of re-engagement of Dr. Rubin as Executive Chairman in May 2009, he was awarded a stock option grant of 1,000,000 shares with immediate vesting of 25% of the grant and the remainder to vest monthly over four years. This is the only compensation provided to Dr. Rubin. Similarly, upon the confirmation of Mr. Bhonsle as the President, he was awarded a stock option grant to purchase 700,000 shares of common stock with immediate vesting of 25% and the remainder to vest monthly over four years.

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SUMMARY COMPENSATION TABLE

The following table shows information concerning the annual compensation for services provided to us by our Chief Executive Officer, our Chief Financial Officer and our other executive officers for the periods set forth.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards (2)($)	All Other Compensation ($)	Total Compensation ($)
Marc Rubin, M.D. (3)(4)(5)	2009	$ 384,326		$ 197,139	$	$ 581,465
Executive Chairman	2008	430,639		21,243	36,767	488,649
	2007	103,750		154,691		258,441
Louis R. Bucalo, M.D. (6)(7)	2009	328,125				328,125
Former Executive Chairman	2008	375,169		143,070	2,000	520,239
	2007	493,328		236,160		729,488
Sunil Bhonsle (8)	2009	402,487		160,173	12,400	575,060
President	2008	340,550		66,198		406,748
	2007	297,583		159,082		456,665
Robert E. Farrell, J.D. (9)	2009	216,862				216,862
Former Executive Vice President and	2008	402,099		39,280		441,379
Chief Financial Officer	2007	248,508		124,026		372,534

(1) The positions listed are the most recent held by such individuals.

(2) Amounts shown represent the grant date fair value computed in accordance with FASB ASC 718. The assumptions used by us with respect to the valuation of option grants and stock awards are set forth in Titan Pharmaceuticals, Inc. Consolidated Financial Statements Notes to Financial Statements Note 12 Stock Plans and Titan Pharmaceuticals, Inc. Unaudited Condensed Consolidated Financial Statements Notes to Financial Statements Note 2 Stock Plans.

(3) Dr. Rubin s 2007 salary has been prorated to reflect his October 1, 2007 employment start date.

(4) Dr. Rubin s employment was terminated on December 15, 2008. His 2008 salary includes $26,374 in compensation related to accrued vacation and his 2009 salary includes a one time severance payment of $384,326 made in January 2009.

(5) Dr. Rubin s 2008 other compensation consists of housing and transportation costs of $36,767.

(6) Dr. Bucalo s 2007 salary includes $106,812 in compensation related to accrued vacation.

(7) Dr. Bucalo s employment was terminated in April 2008 and he will receive salary continuation payments until April 2010. During 2009 and 2008, Dr. Bucalo received salary continuation payments of $328,125 and $250,018, respectively, and reimbursement of legal expenses of $2,000 in 2008. Dr. Bucalo s outstanding options will continue to vest under the terms of his severance agreement through April 2010.

(8) Mr. Bhonsle s employment was terminated on December 15, 2008. His 2008 salary includes $46,319 related to accrued vacation and his 2009 salary includes a one time severance payment of $277,487 made in January 2009 and $125,000 related to compensation deferred to 2010.

(9) Mr. Farrell s employment was terminated in April 2009. His 2008 salary includes $40,768 related to accrued vacation and $100,000 of severance related to his December 2008 retention agreement. Mr. Farrell s 2009 salary includes a payment of $161,824 related to the remaining balance of his severance.

For a description of the material terms of employment agreements with our current and former named executive officers, see Employment Agreements.

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GRANTS OF PLAN-BASED AWARDS(1)

Name	Grant Date	Approval Date(2)	Number of Shares of Common Stock Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards($)(3)
Marc Rubin, M.D.	05/17/2009	05/17/2009	385,000 (5)	$ 0.79	$ 287,557
	05/17/2009	05/17/2009	615,000 (7)	0.79	459,344
	05/17/2009	05/17/2009	10,000 (4)	0.79	7,469
	05/17/2009	05/17/2009	5,000 (4)	0.79	3,735
	05/17/2009	05/17/2009	100,000 (6)	0.79	74,690
Sunil Bhonsle	05/17/2009	05/17/2009	390,000 (8)	0.79	291,291
	05/17/2009	05/17/2009	310,000 (7)	0.79	231,539
	05/17/2009	05/17/2009	100,000 (6)	0.79	74,690
	05/17/2009	05/17/2009	10,000 (4)	0.79	7,469

(1) A portion of each award was granted outside the 2002 Plan in light of the annual 500,000 share grant limitation on individual recipients.
(2) All grants were approved by the Compensation Committee on the dates indicated to be granted on the indicated grant date.
(3) Valuation assumptions are found under Titan Pharmaceuticals, Inc. Unaudited Condensed Consolidated Financial Statements Notes to Financial Statements Note 2 Stock Plans.
(4) These options vest in 12 equal monthly installments beginning on the grant date.
(5) 250,000 options were fully vested on the grant date with the balance of the options vesting in 48 equal monthly installments beginning on the grant date.
(6) Reflects grants to such individuals in their capacity as directors, which vested in full on the grant date. See Director Compensation.
(7) These options were granted outside the 2002 Plan and vest in 48 equal monthly installments beginning on the grant date.
(8) 175,000 options were fully vested on the grant date with the balance of the options vesting in 48 equal monthly installments beginning on the grant date with the vesting of 100,000 shares contingent upon the sale or partnering of the Probuphine program.

Employee Benefits Plans

The principal purpose of our stock incentive plans is to attract, motivate, reward and retain selected employees, consultants and directors through the granting of stock-based compensation awards. The stock option plans provides for a variety of awards, including non-qualified stock options, incentive stock options (within the meaning of Section 422 of the Code), stock appreciation rights, restricted stock awards, performance-based awards and other stock-based awards.

2002 Stock Incentive Plan

In July 2002, we adopted the 2002 Stock Incentive Plan, or the 2002 Plan. The 2002 Plan assumed the options which remain available for grant under our option plans previously approved by stockholders. Under the 2002 Plan and predecessor plans, a total of approximately 7.4 million shares of our common stock were authorized for issuance to employees, officers, directors, consultants, and advisers. Options granted under the 2002 Plan and predecessor plans may either be incentive stock options within the meaning of Section 422 of the Internal Revenue Code and/or options that do not qualify as incentive stock options; however, only employees are eligible to receive incentive stock options. Options granted under the option plans generally expire no later than ten years from the date of grant, except when the grantee is a 10% shareholder, in which case the maximum term is five years from the date of grant. Options generally vest at the rate of one fourth after one year from the date of grant and the remainder ratably over the subsequent three years, although options with different vesting terms are granted from time-to-time.

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Generally, the exercise price of any options granted under the 2002 Plan must be at least 100% of the fair market value of our common stock on the date of grant, except when the grantee is a 10% shareholder, in which case the exercise price shall be at least 110% of the fair market value of our common stock on the date of grant.

In August 2005, we adopted an amendment to the 2002 Plan to (i) permit the issuance of shares of restricted stock and stock appreciation rights to participants under the 2002 Plan, and (ii) increase the number of shares issuable pursuant to grants under the 2002 Plan from 2,000,000 to 3,000,000.

2001 Stock Option Plan

In August 2001, we adopted the 2001 Employee Non-Qualified Stock Option Plan, or the 2001 NQ Plan, pursuant to which 1,750,000 shares of common stock were authorized for issuance for option grants to employees and consultants who are not officers or directors of Titan. Options granted under the option plans generally expire no later than ten years from the date of grant. Option vesting schedule and exercise price are determined at time of grant by the board of directors. Generally, the exercise prices of options granted under the 2001 NQ Plan were 100% of the fair market value of our common stock on the date of grant.

General

Set forth below is information regarding the 2002 Plan and the 2001 NQ Plan, which we refer to herein collectively as the Stock Option Plans.

Administration. The Stock Option Plans are administered by our Compensation Committee. The Compensation Committee may in certain circumstances delegate certain of its duties to one or more of our officers. The Compensation Committee has the power to interpret the Stock Option Plans and to adopt rules for the administration, interpretation and application of the Stock Option Plans according to their terms.

Grant of Awards; Shares Available for Awards. Certain employees, consultants and directors are eligible to be granted awards under the Stock Option Plans. The Compensation Committee will determine who will receive awards under the plans, as well as the form of the awards, the number of shares underlying the awards, and the terms and conditions of the awards consistent with the terms of the Stock Option Plans.

A total of approximately 9.1 million shares of our common stock are available for issuance or delivery under our existing Stock Option Plans. The number of shares of our common stock issued or reserved pursuant to the Stock Option Plans will be adjusted at the discretion of our Board or the Compensation Committee as a result of stock splits, stock dividends and similar changes in our common stock. In addition, shares subject to grant under our prior option plans (including shares under such plans that expire unexercised or are forfeited, terminated, canceled or withheld for income tax withholding) shall be merged and available for issuance under the 2002 Stock Option Plan, without reducing the aggregate number of shares available for issuance reflected above.

Stock Options. The Stock Option Plans permit the Compensation Committee to grant participants incentive stock options, which qualify for special tax treatment in the United States, as well as non-qualified stock options. The Compensation Committee will establish the duration of each option at the time it is granted, with a maximum ten-year duration for incentive stock options, and may also establish vesting and performance requirements that must be met prior to the exercise of options. Stock option grants (other than incentive stock option grants) also may have exercise prices that are less than, equal to or greater than the fair market value of our common stock on the date of grant. Incentive stock options must have an exercise price that is at least equal to the fair market value of our common stock on the date of grant. Stock option grants may include provisions that permit the option holder to exercise all or part of the holder s vested options, or to satisfy withholding tax liabilities, by tendering shares of our common stock already owned by the option holder for at least six months (or another period consistent with the applicable accounting rules) with a fair market value equal to the exercise price.

Stock Appreciation Rights. The Compensation Committee may also grant stock appreciation rights, which will be exercisable upon the occurrence of certain contingent events. Stock appreciation rights entitle the holder upon exercise to receive an amount in any combination of cash, shares of our common stock (as determined by the Compensation Committee) equal in value to the excess of the fair market value of the shares covered by the stock appreciation right over the exercise price of the right, or other securities or property owned by us.

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Other Equity-Based Awards. In addition to stock options and stock appreciation rights, the Compensation Committee may also grant certain employees, consultants and directors shares of restricted stock, with terms and conditions as the Compensation Committee may, pursuant to the terms of the Stock Option Plan, establish. The Stock Option Plan does not allow awards to be made under terms and conditions which would cause such awards to be treated as deferred compensation subject to the rules of Section 409A of the Code.

Change-in-Control Provisions. In connection with the grant of an award, the Compensation Committee may provide that, in the event of a change in control, any outstanding awards that are unexercisable or otherwise unvested will become fully vested and immediately exercisable.

Amendment and Termination. The Compensation Committee may adopt, amend and rescind rules relating to the administration of the Stock Option Plans, and amend, suspend or terminate the Stock Option Plans, but no amendment will be made that adversely affects in a material manner any rights of the holder of any award without the holder s consent, other than amendments that are necessary to permit the granting of awards in compliance with applicable laws. We have attempted to structure the Stock Option Plans so that remuneration attributable to stock options and other awards will not be subject to a deduction limitation contained in Section 162(m) of the Code.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following tables summarizes the number of securities underlying outstanding plan awards for each named executive officer as of December 31, 2009.

	Option Awards			
Name	**Number of Securities Underlying Unexercised Options (#) Exercisable**	**Number of Securities Underlying Unexercised Options (#) Unexercisable**	**Option Exercise Price ($)**	**Option Expiration Date**
Marc Rubin, M.D.	437,500		$ 2.40	10/01/2017
	2,500		1.52	1/2/2018
	5,000		1.52	5/30/2018
	89,657	525,313(2)	0.79	5/17/2019
	100,000		0.79	5/17/2019
	2,916	2,084(1)	0.79	5/17/2019
	5,833	4,167(1)	0.79	5/17/2019
	169,687	115,313(2)	0.79	5/17/2019
Sunil Bhonsle	42,000		22.98	1/8/2011
	31,500		11.63	8/9/2011
	90,000		8.77	1/16/2012
	50,000		1.50	3/1/2013
	60,000		3.69	2/9/2014
	70,000		2.62	2/7/2015
	80,137		1.40	1/3/2016
	11,250		2.35	8/29/2016
	76,666		3.13	1/3/2017
	5,000		1.52	5/30/2018
	45,208	264,792(3)	0.79	5/17/2019
	100,000		0.79	5/17/2019
	5,833	4,167(1)	0.79	5/17/2019
	206,354	183,646(3)	0.79	5/17/2019

(1) These options vest in 12 equal monthly installments beginning on May 17, 2009.
(2) These options vest in 48 equal monthly installments beginning on May 17, 2009.
(3) These options vest in 48 equal monthly installments beginning on May 17, 2009, with the vesting of 100,000 shares contingent upon the sale or partnering of the Probuphine program.

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The following table summarizes the option exercises by our named executive officers during 2009.

Name	Number of Shares Acquired on Exercise	Value Realized on Exercise (1)
Marc Rubin	100,000	$ 58,500
Sunil Bhonsle	54,863	

(1) Represents the amounts realized based on the difference between the market price of our common stock on the date of exercise and the exercise price.

Pension Benefits

We do not sponsor any qualified or non-qualified defined benefit plans.

Nonqualified Deferred Compensation

We do not maintain any non-qualified defined contribution or deferred compensation plans. The Compensation Committee, which is comprised solely of outside directors as defined for purposes of Section 162(m) of the Code, may elect to provide our officers and other employees with non-qualified defined contribution or deferred compensation benefits if the Compensation Committee determines that doing so is in our best interests. We sponsor a tax qualified defined contribution 401(k) plan in which Dr. Rubin, Dr. Bucalo, Mr. Bhonsle, and Mr. Farrell participated.

Employment Agreements

Marc Rubin

In October 2007, we entered into an employment agreement with Marc Rubin (the First Rubin Agreement) in connection with his joining our company as President and Chief Executive Officer. The First Rubin Agreement provided for an annual salary of $415,000 and an annual discretionary bonus of 0-50% based on the achievement of individual and company performance goals to be established by Dr. Rubin in consultation with senior management and approved by our board of directors. Upon joining Titan, Dr. Rubin received options to acquire 1,500,000 shares of our common stock that were to vest monthly over a four-year period, subject to a requirement of at least 12 months of employment for the vesting of any options. The First Rubin Agreement provided for the termination of employment by either party at any time for any reason by giving written notice to the other party. In the event his employment was terminated by us without Cause or by Dr. Rubin for Good Reason, or in the event of his death or Disability (as such terms are defined in such agreement), Dr. Rubin would be entitled to 12 months severance. The First Rubin Agreement contained customary non-competition and non-solicitation provisions. Dr. Rubin s compensation package was determined based on a review of CEO compensation information provided in the Radford Biotechnology Survey. In addition, we engaged Compensation Resources, a consulting firm, to provide information on current CEO compensation packages for similar companies. In connection with its review of Dr. Rubin s proposed compensation package, our Compensation Committee retained ExeQuity LLP, a consulting firm specializing in executive compensation, which concurred that the proposed compensation was appropriate and within the mid-range for similarly situated executives.

In December 2008, we entered into a separation agreement with Dr. Rubin (the Rubin Severance Agreement) pursuant to which we paid Dr. Rubin a one time severance payment of $384,326, representing the net present value of his base salary for 12 months less an amount he forfeited to enable us to make severance payments to certain other employees. The Rubin Severance Agreement stated that the exercise period of all vested options held by Dr. Rubin would terminate 90 days after he ceases to be a member of our board. Under the Rubin Severance Agreement, Dr. Rubin agreed to provide transition services to us through June 15, 2009 at an hourly rate of $205 to be paid at such time as we receive proceeds from the sale of the company or our assets or royalties from Fanapt .

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Services provided by Dr. Rubin during this interim period were conducted within the scope of his responsibilities as a member of our board of directors and, accordingly, no payments are owed to him for transition services.

In May 2009, in connection with our re-engagement of our executive officers following the FDA s approval of Fanapt , we entered into a new employment agreement with Dr. Rubin to serve as our Executive Chairman (the Third Rubin Agreement). Pursuant to the Third Rubin Agreement, as such agreement was amended effective March 1, 2010, he will receive no cash salary. We granted Dr. Rubin options to purchase 1,000,000 shares of our common stock that vest as follows: 25% immediately and the balance monthly over a four-year period. Notwithstanding the foregoing, all unvested options held by Dr. Rubin automatically will become vested and exercisable immediately prior to the occurrence of a change of control. One half of the options will accelerate in the event we sell or transfer all or substantially all of our rights in iloperidone. In addition, in the event that we declare a dividend or similar distribution following such sale or transfer, we have agreed to retain for Dr. Rubin s benefit an amount equal to the dividend amount for distribution to him only upon the actual vesting and exercise by him of the unvested options. In consideration for entering into the amendment agreement, we agreed to issue Dr. Rubin 36,000 restricted shares that will vest in four monthly installments through the Trigger Date. The Third Rubin Agreement contains non-competition provisions applicable during the term of employment.

Sunil Bhonsle

In December 2007, we amended our employment agreement with Sunil Bhonsle in order to maintain parity with the agreements with Drs. Rubin and Bucalo described herein (the First Bhonsle Agreement). The First Bhonsle Agreement, which was originally entered into in August 1995, provided for a base salary and eligibility to receive an annual performance bonus up to a specified percentage of base salary. The actual amount of the annual bonus was discretionary and determined based upon the executive s performance, our performance and certain performance targets approved by our Compensation Committee. The First Bhonsle Agreement provided that Mr. Bhonsle would be entitled to 12 months severance in the event that his employment was terminated by us without Cause or by him for Good Reason (as such terms are defined in such agreement or six months in the event of their death or disability and provided for the continued vesting of the employee s stock options during the severance period in the event of termination without Cause or for Good Reason. The First Bhonsle Agreement contained customary non-competition and non-solicitation provisions.

In December 2008, we entered into a separation agreement with Mr. Bhonsle (the Bhonsle Severance Agreement) pursuant to which we paid Mr. Bhonsle a one time severance payment of $277,487, representing the net present value of his base salary for 12 months less an amount he forfeited to enable us to make severance payments to certain other employees. The Bhonsle Severance Agreement stated that the exercise period of all vested options held by Mr. Bhonsle would terminate on March 15, 2009 and on such date all of his vested options terminated unexercised. Mr. Bhonsle agreed to provide transition services to us through June 15, 2009 at an hourly rate of $150 to be paid at such time as we receive proceeds from the sale of the company or our assets or royalties from Fanapt . In April 2009, upon our termination of Mr. Farrell, Mr. Bhonsle stepped in to act as our sole executive officer. Services provided by Mr. Bhonsle from January until April 2009 were conducted within the scope of his responsibilities as a member of our board of directors and, accordingly, no payments are owed to him for such transition services. We paid Mr. Bhonsle approximately $12,400 in April 2009.

In May 2009, in connection with our re-engagement of our executive officers following the FDA s approval of Fanapt , we entered into a new employment agreement with Mr. Bhonsle to serve as our President (the Third Bhonsle Agreement). The Third Bhonsle Agreement provides that until February 28, 2010, he is entitled to a cash salary of $200,000 per annum, payment of which will be deferred until we receive royalty payments from Fanapt or other financing that by its terms does not restrict such use, but in no event earlier than January 1, 2010 or later than March 15, 2010. Mr. Bhonsle was granted options to purchase 700,000, shares of our common stock that vest as follows: 25% immediately and the balance monthly over a four-year period; provided, however, that the vesting of 100,000 shares is also contingent upon the sale or partnering of the Probuphine program. Notwithstanding the foregoing, all unvested options held by Mr. Bhonsle automatically will become vested and exercisable immediately prior to the occurrence of a change of control. Effective March 1, 2010, we amended the Third Bhonsle Agreement to provide that from the effective date through June 30, 2010, he will be entitled to a salary of $300,000 per annum. The amendment also provides that one half of the options will accelerate in the event we sell or transfer all or substantially all of our rights in iloperidone. In addition, in the event that we declare a dividend or similar

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distribution following such sale or transfer, we have agreed to retain for Mr. Bhonsle s benefit an amount equal to the dividend amount for distribution to him only upon the actual vesting and exercise by him of the unvested options. The Third Bhonsle Agreement contains non-competition provisions applicable during the term of employment.

Robert Farrell

In December 2007, we amended our employment agreement with Robert Farrell in order to maintain parity with the agreements with Drs. Rubin and Bucalo described herein (the First Farrell Agreement). The First Farrell Agreement, which was originally entered into in 1996, provided for a base salary and eligibility to receive an annual performance bonus up to a specified percentage of base salary. The actual amount of the annual bonus was discretionary and determined based upon the executive s performance, our performance and certain performance targets approved by our Compensation Committee. The First Farrell Agreement provided that Mr. Farrell would be entitled to 12 months severance in the event that his employment was terminated by us without Cause or by him for Good Reason (as such terms are defined in such agreement or six months in the event of their death or disability and provided for the continued vesting of the employee s stock options during the severance period in the event of termination without Cause or for Good Reason. The First Farrell Agreement contained customary non-competition and non-solicitation provisions.

In December 2008, we entered into a one-year retention agreement with Mr. Farrell pursuant to which he assumed the role of President in addition to his role as Chief Financial Officer (the Retention Agreement). Under the Retention Agreement, we paid Mr. Farrell, in lieu of the 12 months cash severance provided for in the First Farrell Agreement, a lump sum equal to $261,824, the net present value of his base salary for a period of 12 months, less required deductions required by law. The Retention Agreement provided for a monthly salary of $16,562.50 during the first six months and $8,281.25 thereafter. In April 2009, we terminated Mr. Farrell s employment. No further payments were made to him and all of his options subsequently expired unexercised.

Louis R. Bucalo

In October 2007, in connection with the restructuring of management, we entered into an agreement with Louis Bucalo pursuant to which he would continue to serve as Executive Chairman for an annual salary of $375,000 during the first two years of the agreement and $187,500 thereafter. Under the agreement, Dr. Bucalo s employment could be terminated by either party at any time for any reason by giving written notice to the other party. In the event of termination by the Company without Cause or by Dr. Bucalo for Good Reason, or in the event of his death or Disability (as such terms are defined in the agreement), Dr. Bucalo was entitled to 24 months severance, the 150,000 options he was granted in January 2008 would vest in full immediately, and all of his other options would continue to vest in accordance with their respective vesting schedules during such 24-month period.

In April 2008, we entered into an agreement with Dr. Bucalo pursuant to which he retired and resigned as Executive Chairman and a member of our board of directors. Under the terms of the agreement, we agreed to pay Dr. Bucalo his base monthly salary at the rates provided for in his employment agreement through May 14, 2010 (the Compensation Period) and the 150,000 options granted to Dr. Bucalo in January 2008 vested in full immediately. All other options held by Dr. Bucalo will continue to vest in accordance with their terms and shall remain exercisable during the Compensation Period.

POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE IN CONTROL

As set forth above under Employment Agreements, as of December 31, 2008, we had terminated our employment arrangements with Drs. Bucalo and Rubin and Mr. Bhonsle and undertaken to make the lump sum or monthly severance payments agreed upon. At such date, we had also restructured our employment arrangement with Mr. Farrell and paid him a lump sum retention bonus in consideration of his agreement to terminate the severance provisions of his agreement. During 2009, we terminated Mr. Farrell s employment agreement and rehired Dr. Rubin and Mr. Bhonsle.

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Pursuant to the Third Rubin Agreement and the Third Bhonsle Agreement, assuming a change of control had taken place as of December 31, 2009, Dr. Rubin and Mr. Bhonsle would have been entitled to accelerated vesting of their outstanding stock options described in the table below:

	Value of Equity Awards: Termination Without Cause or For Good Reason (1)	Value of Equity Awards: In Connection With a Change in Control(1)
Marc Rubin, M.D.	None	Fully Vested. 646,877 options with value of $983,253
Sunil Bhonsle.	None	Fully Vested. 452,605 options with value of $687,960

(1) Value is based on the aggregate difference between the respective exercise prices and the closing sale price of our common stock on December 31, 2009, which was $2.31 per share.

DIRECTOR COMPENSATION

Summary of Director Compensation

Non-employee directors are entitled to receive a fee for each meeting attended and all directors are entitled to receive stock options pursuant to our stockholder-approved stock option plans, including an initial grant of 10,000 options upon becoming a director, an annual grant of 10,000 options thereafter, and an annual grant of 5,000 options for each committee on which they serve. Directors are not precluded from serving us in any other capacity and receiving compensation therefore. Non-employee directors have also historically received an annual retainer fee of $15,000 in addition to the fee received for each meeting attended. In May 2009, in recognition of the large number (almost weekly) telephonic and in-person meetings attended by the members of the board to help manage the company between January and May 2009, each member of the board was awarded a stock option grant to purchase 100,000 shares of common stock with immediate vesting. In July, 2009, each non-employee director was awarded 2,500 shares of restricted stock in lieu of fees earned. The Compensation Committee has determined that commencing September 2009, non-employee directors will receive $500 for each telephonic board meeting attended.

The following table summarizes compensation that our directors earned during 2009 for services as members of our board.

Name	Fees Earned or Paid in Cash($)	Stock Awards ($)	Options Awards($)(1)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Victor J. Bauer, Ph.D.	$ 7,000	$ 2,600	$ 84,348	$	$	$	$ 91,348
Eurelio M. Cavalier	7,000	2,600	88,849				95,849
Hubert E. Huckel, M.D.	7,000	2,600	88,849				95,849
Joachim Friedrich Kapp, M.D., Ph.D.	7,000	2,600	84,226				91,226
M. David MacFarlane, Ph.D.	7,000	2,600	86,537				93,537
Ley S. Smith	6,500	2,600	88,849				95,349

(1) Amounts shown represent the grant date fair value computed in accordance with FASB ASC 718. The assumptions we used with respect to the valuation of option grants are set forth in Titan Pharmaceuticals Inc. Unaudited Consolidated Financial Statements for the year ended December 31, 2009 Notes to Financial Statements Note 2 Stock Plans.

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Compensation Committee Interlocks and Insider Participation

Members of our Compensation Committee of the board of directors were Mr. Eurelio M. Cavalier, Dr. Hubert E. Huckel and Dr. Joachim Friedrich Kapp. No member of our Compensation Committee was, or has been, an officer or employee of Titan or any of our subsidiaries.

No member of the Compensation Committee has a relationship that would constitute an interlocking relationship with executive officers or directors of the Company or another entity.

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of February 28, 2010, certain information concerning the beneficial ownership of our common stock by (i) each stockholder known by us to own beneficially five percent or more of our outstanding common stock; (ii) each director; (iii) each named executive officer; and (iv) all of our executive officers and directors as a group, and their percentage ownership and voting power.

Name and Address of Beneficial Owner(1)	Shares Beneficially Owned(2)	Percent of Shares Beneficially Owned
Marc Rubin, M.D.	1,255,623(3)	2.1%
Victor J. Bauer, Ph.D.	351,976(4)	*
Sunil Bhonsle	1,212,267(5)	2.0%
Eurelio M. Cavalier	423,749(6)	*
Hubert E. Huckel, M.D.	457,938(7)	*
Joachim Friedrich Kapp, M.D., Ph.D.	1,054,583(8)	1.8%
M. David MacFarlane, Ph.D.	259,1650(9)	*
Ley S. Smith	351,249(10)	*
First Eagle Investment Management, LLC	7,986,744(11)	13.1%
All executive officers and directors as a group (8) persons	5,366,570	8.6%

* Less than one percent.

(1) Unless otherwise indicated, the address of such individual is c/o Titan Pharmaceuticals, Inc., 400 Oyster Point Boulevard, Suite 505, South San Francisco, California 94080.

(2) In computing the number of shares beneficially owned by a person and the percentage ownership of a person, shares of our common stock subject to options held by that person that are currently exercisable or exercisable within 60 days of February 28, 2010 are deemed outstanding. Such shares, however, are not deemed outstanding for purposes of computing the percentage ownership of each other person. Except as indicated in the footnotes to this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock.

(3) Includes 880,623 shares issuable upon exercise of outstanding options.

(4) Includes 340,832 shares issuable upon exercise of outstanding options.

(5) Includes (i) 921,030 shares issuable upon exercise of outstanding options and (ii) 225,757 shares held in a family trust for which he serves as trustee.

(6) Includes 241,249 shares issuable upon exercise of outstanding options.

(7) Includes (i) 268,749 shares issuable upon exercise of outstanding options and (ii) 789 shares held by his wife.

(8) Includes 52,083 shares issuable upon exercise of outstanding options.

(9) Includes 136,665 shares issuable upon exercise of outstanding options.

(10) Includes 238,749 shares issuable upon exercise of outstanding options.

(11) Derived from a Schedule 13G filed by First Eagle Investment Management, LLC on February 5, 2010. Includes warrants to purchase 1,562,500 shares of common stock. The holder s address is 1345 Avenue of the Americas, New York, New York 10105.

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Equity Compensation Plan Information

The following table sets forth aggregate information regarding our equity compensation plans in effect as of December 31, 2009:

Plan category	Number of securities to be issued upon exercise of outstanding options and awards (a)	Weighted-average exercise price of outstanding options and awards (b)	Number of securities remaining available for future issuance under equity compensation plans (c)
Equity compensation plans approved by security holders	4,130,404	$ 13.07	1,619,543
Equity compensation plans not approved by security holders(1)(2)(3)(4)	1,959,250	$ 1.40	798,716
Total	6,089,654	$ 11.65	2,418,259

(1) In August 2002, we amended our 2001 Employee Non-Qualified Stock Option Plan. Pursuant to this amendment, a total of 1,750,000 shares of common stock were reserved and authorized for issuance for option grants to employees and consultants who are not officers or directors of Titan.

(2) In November 1999 and in connection with the redemption of warrants, we granted 813,000 non-qualified stock options outside of our stock option plans to our executive officers, at an exercise price of $12.69, vesting equally over 36 months from the date of grant.

(3) In October 2007, we granted 1,500,000 non-qualified stock options outside of our stock option plans to our Chief Executive Officer, at an exercise price of $2.40, vesting equally over 48 months from the date of grant. At December 31, 2009, 437,500 of these non-qualified stock options remained outstanding.

(4) In May 2009, we granted 615,000 and 310,000 non-qualified stock options outside of our stock option plans to our Executive Chairman and President, respectively, at an exercise price of $0.79, vesting equally over 48 months from the date of grant.

Change in Control

There were no arrangements, known to us, including any pledge by any person of our securities the operation of which may at a subsequent date result in a change in control of our company.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

None

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SELLING STOCKHOLDERS

We are registering for resale shares of our common stock that are issued and outstanding held by the selling stockholders identified below. We are registering the shares to permit the selling stockholders and their pledgees, donees, transferees and other successors-in-interest that receive their shares from a selling stockholder as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus to resell the shares when and as they deem appropriate in the manner described in the Plan of Distribution . The following table sets forth:

- the name of the selling stockholders,
- the number of shares of our common stock that the selling stockholders beneficially owned prior to the offering for resale of the shares under this prospectus,