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Registration No. 333-173457

TITAN PHARMACEUTICALS, INC.

6,000,000 shares of common stock

This prospectus relates to the resale of up to 6,000,000 of our shares of common stock, par value $0.001 per share, for sale by the selling stockholders set forth herein. The shares are issuable upon the exercise of outstanding warrants (the "Warrants") held by the selling stockholders.

The selling stockholders or their pledgees, donees, transferees or other successors-in-interest, may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. We will not receive any proceeds from the sale of the shares. To the extent the Warrants are exercised for cash, if at all, we will receive the exercise price for the Warrants. The selling stockholders will sell the shares in accordance with the "Plan of Distribution" set forth in this prospectus. The selling stockholders will bear all commissions and discounts, if any, attributable to the sales of shares. We will bear all costs, expenses and fees in connection with the registration of the shares.

Our common stock is traded on the OTC Bulletin Board under the symbol "TTNP:OB." On May 9, 2011, the closing price of our common stock was $1.70.

The selling stockholders and any broker-dealer executing sell orders on behalf of the Selling Stockholders, may be deemed to be "underwriters" within the meaning of the Securities Act of 1933, as amended (the "Securities Act"). Commissions received by any broker-dealer may be deemed to be underwriting commissions under the Securities Act. See "Plan of Distribution."

Investing in our common stock involves significant risks. You should invest in our common stock only if you can afford to lose your entire investment. For a discussion of some of the risks involved, see "Risk Factors" beginning on page 3 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus May 10, 2011

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PROSPECTUS SUMMARY

Unless otherwise mentioned or unless the context requires otherwise, when used in this prospectus, the terms "Titan," "Company," "we," "us," and "our" refer to Titan Pharmaceuticals, Inc.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. You may request a copy of these filings, excluding the exhibits to such filings which we have not specifically incorporated by reference in such filings, at no cost, by writing us at the following address: 400 Oyster Point Blvd., Suite 505, South San Francisco, California 94080, and our telephone number is (650) 244-4990.

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:

- Fanapt® (iloperidone): 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, which it launched in the U.S. in the first quarter of 2010, and also further develop and potentially commercialize an injectable form of the drug, known as a depot formulation. We are entitled to a royalty of 8-10% of net sales based on intellectual property claiming iloperidone that we licensed from Sanofi-Aventis. In the U.S. the license covers all formulations of iloperidone through November 2016 (inclusive of a patent extension under the Patent Restoration Act), with a possible additional six month extension upon approval of pediatric indication. 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. Because patent coverage on the compound has now expired in most significant markets outside the U.S. and no patent term extensions are possible since the product was not approved in these countries prior to patent expiration, our royalties on any future sales in such markets will generally be limited. We will review the potential of any royalty revenue on a country by country basis at the time of application for approval of the product. Following is a list of the remaining countries where the Sanofi-Aventis patents claiming the compound iloperidone still provide patent protection:

Portugal	September 2011
Lichtenstein	November 2012
Georgia	November 2012
Korea	July 2013
Philippines	May 2014

- Probuphine: A slow release implant formulation of buprenorphine in Phase 3 clinical development for the treatment of opioid addiction that is capable of maintaining around the clock stable blood level of the drug in patients for six months following a single treatment. We have previously announced positive safety and efficacy results of this product in Phase 3 studies including a placebo-controlled Phase 3 study. In October 2009, we were awarded a $7.6 million grant from the National Institutes of Health ("NIH") that covers approximately half of the expenses of the second Phase 3 controlled safety and efficacy study currently in progress. The confirmatory Phase 3 study is being conducted at 20 U.S. sites and completed patient enrollment in September 2010, almost three months ahead of schedule. The study results are expected in late second quarter 2011. Following availability of results we will review all the efficacy and safety data with the FDA during the third quarter 2011 and discuss the FDA requirements and NDA submission plans.

The ProNeura long-term drug delivery technology underlying Probuphine has the potential to be used in developing products for the treatment of other chronic conditions where maintaining stable, round the clock blood levels of a drug can benefit the patient and improve medical outcomes. In August 2010, we were awarded a $0.5 million grant by the NIH under the Small Business Innovation Research ("SBIR") program to conduct non-clinical studies in a model of Parkinson's disease using previously approved dopamine agonists and the ProNeura drug delivery technology. The non-clinical studies are in progress and results are expected by year end 2011. We have also licensed certain rights from the University of Iowa to potentially use gallium maltolate for the treatment of chronic bacterial infections.

We were incorporated in Delaware in February 1992. Our principal executive offices are located at 400 Oyster Point Blvd., Suite 505, South San Francisco, California 94080, and our telephone number is (650) 244-4990.

THE OFFERING

Common stock offered by selling stockholders:	6,000,000 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):	65,247,742 shares
Use of proceeds:	We will not receive any of the 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 $9.42 million. We intend to use any proceeds received from the exercise of the Warrants for working capital and other general corporate purposes.
OTCBB symbol:	TTNP:OB
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 3 of this prospectus.

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.

Risks Related To Our Business

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

We do not have any role in the marketing, manufacture or commercialization of 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 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 launched commercial sales of Fanapt in the U.S. in January 2010, Novartis may experience unanticipated problems that delay, perhaps materially, product sales and our receipt of revenues in the future.

Our available capital is sufficient to fund our operations only through January 2012.

At December 31, 2010, we had cash and cash equivalents of $3.2 million, which we believe is sufficient, together with the revenues from royalties on the sale of Fanapt and the $20.0 million of debt financing received in April 2011, to sustain our planned operations through January 2012. We plan to meet with the FDA in the summer of 2011 to review all the data available on Probuphine in a pre-NDA meeting and confirm the path to filing an NDA. The FDA could request additional clinical trials, and we cannot be certain that the requisite funds will be available, from royalty revenues or otherwise, to continue the Probuphine program.

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

Probuphine, which is in Phase 3 clinical development, may 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.

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.

Our clinical liability insurance coverage may not be sufficient to cover claims that may be made against us in the event that the use or misuse of our product candidates results in personal injury or death. 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 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.

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 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 Securities Exchange Act of 1934, as amended (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-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.

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, 2010, we had federal net operating loss and tax credit carryforwards of $226.4 million and $7.0 million, respectively, and state net operating loss and tax credit carryforwards of $138.8 million and $6.6 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.

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

Statements in this Form S-3 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 terms or 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:

- 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.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares by the selling stockholders. The selling stockholders are not obligated to exercise their warrants and we cannot predict whether holders will choose to exercise all or any of their Warrants or if they will do so for cash or on a cashless basis. In the event that all of the Warrants are exercised for cash, we will receive gross proceeds of $9.42 million. We expect to use the proceeds received from the exercise of the Warrants, if any, for general working capital purposes.

SELLING STOCKHOLDERS

We are registering for resale shares of our common stock that are issuable upon exercise of outstanding Warrants 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."

On March 15, 2011, we entered into several agreements with entities affiliated with Deerfield Management, a healthcare investment fund (collectively, "Deerfield"), pursuant to which Deerfield agreed to provide $20.0 million in funding to the Company. Deerfield funded the transaction on April 5, 2011. In connection with the funding transaction, we issued Deerfield six-year warrants to purchase 6,000,000 shares of common stock at an exercise price of $1.57 per share. Pursuant to a registration rights agreement with Deerfield, we agreed to file a registration statement covering the resale of the shares underlying the Warrant with the SEC on or prior to April 14, 2011. We are required to keep the registration statement continuously effective under the Securities Act until the earlier of (i) the date when all of the shares covered by the registration statement have been sold and (ii) the date on which such securities may be sold without any restriction pursuant to Rule 144.

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,
- the maximum number of shares of our common stock that may be offered for resale for the account of the selling stockholders under this prospectus, and
- the number and percentage of shares of our common stock to be beneficially owned by the selling stockholders after the offering of the shares (assuming all of the offered shares are sold by the selling stockholders).

None of the selling stockholders has been an officer or director of our company or any of its predecessors or affiliates within the last three years, nor has any selling stockholder had a material relationship with us.

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering(1)	Maximum Number of Shares to be Sold	Shares of Common Stock Beneficially Owned After Offering	Percentage Ownership After Offering
Deerfield Private Design Fund II, L.P. (2)	2,236,800	2,236,800	—	—
Deerfield Private Design International II, L.P. (2)	2,563,200	2,563,200	—	—
Deerfield Special Situations Fund, L.P. (2)	468,000	468,000	—	—
Deerfield Special Situations Fund International Limited (2)	732,000	732,000	—	—
Total	6,000,000	6,000,000	—	—

(1) Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, securities that are currently convertible or exercisable into shares of our common stock, or convertible or exercisable into shares of our common stock within 60 days of the date hereof are deemed outstanding. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person. Except as indicated in the footnotes to the following table, each stockholder named in the table has sole voting and investment power with respect to the shares set forth opposite such stockholder's name.

(2) The number of shares beneficially owned prior to the offering represents shares of common stock that may be issued upon exercise of warrants issued in the March 15, 2011 transaction with Deerfield. James E. Flynn, has voting and disposition power over these securities.

PLAN OF DISTRIBUTION

We are registering 6,000,000 shares of our common stock on behalf of the Selling Stockholders. We are required to pay certain fees and expenses that we incur incident to the registration of the shares of the common stock. As used in this prospectus, "selling stockholders" includes the selling stockholders named in the table above and pledgees, donees, transferees or other successors-in-interest selling shares received from a named selling stockholder as a gift, partnership distribution or other non-sale-related transfer after the date of this prospectus. The selling stockholders may, from time to time, sell any or all of their shares of common stock on the OTC Bulletin Board or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. A selling stockholder may use any one or more of the following methods when selling shares:

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

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

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

The selling stockholders and any broker dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed the us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common stock. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8.0%).

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

The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

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

We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

LEGAL MATTERS

Certain legal matters governed by the laws of the State of Delaware with respect to the validity of the offered securities will be passed upon for us by Loeb & Loeb LLP, New York, New York.

EXPERTS

The audited financial statements as of and for the years ended December 31, 2010 and December 31, 2009 have been incorporated by reference in this prospectus in reliance upon the report of Odenberg, Ullakko, Muranishi & Co. LLP, an independent registered public accounting firm and their authority as experts in accounting and auditing.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents filed by us with the Securities and Exchange Commission are incorporated by reference in this prospectus:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2010, filed on March 25, 2011;
- Current Report on Form 8-K, filed on March 16, 2011;
- Current Report on Form 8-K, filed on February 4, 2011; and
- The description of our common stock set forth in our Registration Statement on Form 10 (Registration No. 000-27436) filed with the SEC on January 14, 2010, including any amendments thereto or reports filed for the purpose of updating such description.

We also incorporate by reference all documents we file under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (a) after the initial filing date of the registration statement of which this prospectus is a part and before the effectiveness of the registration statement and (b) after the effectiveness of the registration statement and before the filing of a post-effective amendment that indicates that the securities offered by this prospectus have been sold or that deregisters the securities covered by this prospectus then remaining unsold. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be

modified or superseded for purposes hereof to the extent that a statement in any other subsequently filed document which is also incorporated or deemed to be incorporated herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

WHERE YOU CAN FIND ADDITIONAL INFORMATION ABOUT US

We have filed a registration statement on Form S-3 with the SEC for the securities we are offering by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. We will provide this information upon oral or written request, free of charge. Any requests for this information should be made by calling or sending a letter to the Secretary of the Company, c/o Titan Pharmaceuticals, Inc., at our office located at 400 Oyster Point Blvd., Suite 505, South San Francisco, California 94080.

We are required to file annual and quarterly reports, current reports, proxy statements, and other information with the SEC. We make these documents publicly available, free of charge, on our website at www.titanpharm.com as soon as reasonably practicable after filing such documents with the SEC. You can read our SEC filings, including the registration statement, on the SEC's website at http://www.sec.gov. You also may read and copy any document we file with the SEC at its public reference facility at:

Public Reference Room
100 F Street N.E.
Washington, DC 20549.

Please call the SEC at 1-800-732-0330 for further information on the operation of the public reference facilities.

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6,000,000 shares of common stock

TITAN PHARMACEUTICALS, INC.

PROSPECTUS

May 10, 2011

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in or incorporated by reference into this prospectus. You must not rely on any unauthorized information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not offer to sell any shares in any jurisdiction where it is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall create any implication that the information in this prospectus is correct after the date hereof.