

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act 1934

Date of Report: April 9, 2012

Titan Pharmaceuticals, Inc.

(Exact name of registrant as specified in charter)

Delaware

(State or other jurisdiction of incorporation)

0-27436
(Commission
File Number)

94-3171940
(IRS Employer
Identification No.)

400 Oyster Point Blvd., Suite 505, South San Francisco, CA
(Address of principal executive offices)

94080
(Zip Code)

Registrant's telephone number, including area code: 650-244-4990

(Former Name or Former Address, is Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12(b) under the Exchange Act (17 CFR 240.14a-12(b))
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement.

On April 9, 2012, we entered into subscription agreements with certain institutional investors for the purchase and sale of (i) 6,517,648 shares of our common stock (the "Shares"), (ii) six-year warrants to purchase 6,517,648 shares of common stock (the "Series A Warrants") and (iii) six-month warrants to purchase 6,517,648 shares of common stock (the "Series B Warrants" and together with the Series A Warrants, the "Warrants") for gross proceeds of \$5,540,000 (the "Offering"). We currently anticipate that closing of the sale of the Shares and Warrants will take place on April 13, 2012, subject to the satisfaction of customary closing conditions. Rodman and Renshaw, LLP is serving as placement agent for the registered direct offering.

The Shares and Warrants will be issued pursuant to a prospectus supplement to be filed with the Securities and Exchange Commission pursuant to Rule 424(b)(5) of the Securities Act of 1933, as amended, to our effective shelf registration statement on Form S-3 (File No. 333-178656) which became effective on January 5, 2012.

The net proceeds of the offering will be used to fund the preparation of the New Drug Application for Probuphine and for working capital and general corporate purposes.

A copy of the placement agent agreement is filed herewith as Exhibit 1.1 and incorporated herein by reference. Copies of the forms of Series A Warrant, Series B Warrant and the subscription agreement are filed herewith as Exhibits 4.1, 4.2 and 10.1, respectively, and incorporated herein by reference. A copy of the press release dated April 10, 2012 announcing the transaction is filed herewith as Exhibit 99.1 and incorporated herein by reference.

Item 3.03 Material Modification to Rights of Security Holders.

On April 9, 2012, we executed Amendment No. 2 to the Rights Agreement dated December 20, 2011 (the "Amendment") to provide that the provisions of the Rights Agreement will not apply to any person who becomes the beneficial owner of 15% or more of our common stock as a result of purchasing securities in the Offering. A copy of the Amendment is attached as Exhibit 4.3 hereto and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

| <u>Exhibit No.</u> | <u>Description</u> |
|------------------------|---|
| 1.1 | Placement Agent Agreement by and between Titan Pharmaceuticals, Inc. and Rodman & Renshaw, LLC, as Representative, dated April 9, 2012. |
| 4.1 | Form of Series A Warrant. |
| 4.2 | Form of Series B Warrant. |
| 4.3 | Amendment No. 2 to Rights Agreement |
| 10.1 | Form of Subscription Agreement, dated April 9, 2012. |
| 10.2 | Corporate Presentation dated March 2012. |
| 99.1 | Press Release issued April 10, 2012. |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

TITAN PHARMACEUTICALS, INC.

By: /s/ Sunil Bhonsle

Sunil Bhonsle, President

Dated: April 10, 2012

EXHIBIT INDEX

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April 9, 2012

CONFIDENTIAL

Titan Pharmaceuticals, Inc.
400 Oyster Point Blvd., Suite 505
South San Francisco, CA 94080
Attn: Sunil Bhonsle, President

Dear Mr. Bhonsle:

This letter (the "Agreement") constitutes the agreement between Rodman & Renshaw, LLC ("Rodman" or the "Placement Agent") and Titan Pharmaceuticals, Inc. (the "Company"), that Rodman shall serve as the exclusive placement agent for the Company, on a reasonable best efforts basis, in connection with the proposed placement (the "Placement") of registered securities (the "Securities") of the Company, including, but not limited to, shares (the "Shares") of the Company's common stock, \$0.001 par value (the "Common Stock") and warrants to purchase shares of Common Stock. The terms of such Placement and the Securities shall be mutually agreed upon by the Company and the purchasers (each, a "Purchaser" and, collectively, the "Purchasers") and nothing herein constitutes that Rodman would have the power or authority to bind the Company or any Purchaser or an obligation for the Company to issue any Securities or complete the Placement. This Agreement and the documents executed and delivered by the Company and the Purchasers in connection with the Placement shall be collectively referred to herein as the "Transaction Documents." The date of the closing of the Placement shall be referred to herein as the "Closing Date." The Company expressly acknowledges and agrees that Rodman's obligations hereunder are on a reasonable best efforts basis only and that the execution of this Agreement does not constitute a commitment by Rodman to purchase the Securities and does not ensure the successful placement of the Securities or any portion thereof or the success of Rodman with respect to securing any other financing on behalf of the Company.

SECTION 1. COMPENSATION AND OTHER FEES.

As compensation for the services provided by Rodman hereunder, the Company agrees to pay to Rodman:

(A) The fees set forth below with respect to the Placement:

1. A cash fee payable immediately upon the closing of the Placement and equal to 8% of the aggregate gross proceeds raised in the Placement. After deduction of \$75,000 of expenses, of which \$50,000 shall be paid to RBC Capital Markets, the Company's financial advisor ("RBC") and \$25,000 shall be paid to Rodman, one-half of such fee shall be paid by Rodman at the direction of the Company to RBC Capital Markets, the Company's financial advisor.

Rodman & Renshaw, LLC □ 1251 Avenue of the Americas, 20th Floor, New York, NY 10020

Tel: 212 356 0500 □ **Fax: 212 581 5690** □ www.rodman.com □ **Member: FINRA, SIPC**

SECTION 2. REGISTRATION STATEMENT.

The Company represents and warrants to, and agrees with, the Placement Agent that:

(A) The Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-3 (Registration File No. 333-178656) under the Securities Act of 1933, as amended (the "Securities Act"), which became effective on January 5, 2012, for the registration under the Securities Act of the Shares. At the time of such filing, the Company met the requirements of Form S-3 under the Securities Act. Such registration statement meets the requirements set forth in Rule 415(a)(1)(x) under the Securities Act and complies with said Rule. The Company will file with the Commission pursuant to Rule 424(b) under the Securities Act, and the rules and regulations (the "Rules and Regulations") of the Commission promulgated thereunder, a supplement to the form of prospectus included in such registration statement relating to the placement of the Shares and the plan of distribution thereof and has advised the Placement Agent of all further information (financial and other) with respect to the Company required to be set forth therein. Such registration statement, including the exhibits thereto, as amended at the date of this Agreement, is hereinafter called the "Registration Statement"; such prospectus in the form in which it appears in the Registration Statement is hereinafter called the "Base Prospectus"; and the supplemented form of prospectus, in the form in which it will be filed with the Commission pursuant to Rule 424(b) (including the Base Prospectus as so supplemented) is hereinafter called the "Prospectus Supplement." Any reference in this Agreement to the Registration Statement, the Base Prospectus or the Prospectus Supplement shall be deemed to refer to and include the documents incorporated by reference therein (the "Incorporated Documents") pursuant to Item 12 of Form S-3 which were filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on or before the date of this Agreement, or the issue date of the Base Prospectus or the Prospectus Supplement, as the case may be; and any reference in this Agreement to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement, the Base Prospectus or the Prospectus Supplement shall be deemed to refer to and include the filing of any document under the Exchange Act after the date of this Agreement, or the issue date of the Base Prospectus or the Prospectus Supplement, as the case may be, deemed to be incorporated therein by reference. All references in this Agreement to financial statements and schedules and other information that is "contained," "included," "described," "referenced," "set forth" or "stated" in the Registration Statement, the Base Prospectus or the Prospectus Supplement (and all other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information that is or is deemed to be incorporated by reference in the Registration Statement, the Base Prospectus or the Prospectus Supplement, as the case may be. No stop order suspending the effectiveness of the Registration Statement or the use of the Base Prospectus or the Prospectus Supplement has been issued, and no proceeding for any such purpose is pending or has been initiated or, to the Company's knowledge, is threatened by the Commission. For purposes of this Agreement, "free writing prospectus" has the meaning set forth in Rule 405 under the Securities Act and the "Time of Sale Prospectus" means the preliminary prospectus, if any, together with the free writing prospectuses, if any, used in connection with the Placement, including any documents incorporated by reference therein.

(B) The Registration Statement (and any further documents to be filed with the Commission) contains all exhibits and schedules as required by the Securities Act. Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the Securities Act and the Exchange Act and the applicable Rules and Regulations and did not and, as amended or supplemented, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Base Prospectus, the Time of Sale Prospectus, if any, and the Prospectus Supplement, each as of its respective date, comply in all material respects with the Securities Act and the Exchange Act and the applicable Rules and Regulations. Each of the Base Prospectus, the Time of Sale Prospectus, if any, and the Prospectus Supplement, as amended or supplemented, did not and will not contain as of the date thereof any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The Incorporated Documents, when they were filed with the Commission, conformed in all material respects to the requirements of the Exchange Act and the applicable Rules and

Regulations, and none of such documents, when they were filed with the Commission, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein (with respect to Incorporated Documents incorporated by reference in the Base Prospectus or Prospectus Supplement), in light of the circumstances under which they were made not misleading; and any further documents so filed and incorporated by reference in the Base Prospectus, the Time of Sale Prospectus, if any, or Prospectus Supplement, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and the applicable Rules and Regulations, as applicable, and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. No post-effective amendment to the Registration Statement reflecting any facts or events arising after the date thereof which represent, individually or in the aggregate, a fundamental change in the information set forth therein is required to be filed with the Commission. There are no documents required to be filed with the Commission in connection with the transaction contemplated hereby that (x) have not been filed as required pursuant to the Securities Act or (y) will not be filed within the requisite time period. There are no contracts or other documents required to be described in the Base Prospectus, the Time of Sale Prospectus, if any, or Prospectus Supplement, or to be filed as exhibits or schedules to the Registration Statement, that have not been described or filed as required.

(C) The Company is eligible to use free writing prospectuses in connection with the Placement pursuant to Rules 164 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or behalf of or used by the Company complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. The Company will not, without the prior consent of the Placement Agent, prepare, use or refer to, any free writing prospectus.

(D) The Company has delivered, or will as promptly as practicable deliver, to the Placement Agent complete conformed copies of the Registration Statement and of each consent and certificate of experts, as applicable, filed as a part thereof, and conformed copies of the Registration Statement (without exhibits), the Base Prospectus, the Time of Sale Prospectus, if any, and the Prospectus Supplement, as amended or supplemented, in such quantities and at such places as the Placement Agent reasonably requests. Neither the Company nor any of its directors and officers has distributed and none of them will distribute, prior to the Closing Date, any offering material in connection with the offering and sale of the Shares other than the Base Prospectus, the Time of Sale Prospectus, if any, the Prospectus Supplement, the Registration Statement, copies of the documents incorporated by reference therein and any other materials permitted by the Securities Act.

SECTION 3. REPRESENTATIONS AND WARRANTIES. Except as set forth under the corresponding section of the Disclosure Schedules, the Registration Statement, the Prospectus Supplement or the SEC Reports (as defined below), all of which shall be deemed a part hereof and shall qualify any representation or warranty otherwise made herein, the Company hereby makes the representations and warranties set forth below to the Placement Agent:

(A) **Organization and Qualification.** The Company is an entity duly incorporated, validly existing and in good standing under the laws of the jurisdiction of its incorporation, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. The Company is not in violation or default of any of the provisions of its certificate of incorporation, bylaws or other organizational or charter documents. The Company is duly qualified to conduct business and is in good

standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect") and no "Proceeding" (which for purposes of this Agreement shall mean any action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened) has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(B) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by each of the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of each of the Transaction Documents by the Company and the consummation by it of the transactions contemplated thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, its board of directors or its stockholders in connection therewith other than in connection with the "Required Approvals" (as defined in subsection 3(D) below). Each Transaction Document has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(C) No Conflicts. The execution, delivery and performance of the Transaction Documents by the Company, the issuance and sale of the Securities and the consummation by the Company of the other transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's certificate of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company debt or otherwise) or other understanding to which the Company is a party or by which any property or asset of the Company is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not reasonably be expected to result in a Material Adverse Effect.

(D) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other "Person" (defined as an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind, including, without limitation, any Trading Market) in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than such filings as are required to be made under applicable Federal and state securities laws (collectively, the "Required Approvals").

(E) Issuance of the Securities; Registration. The Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents. The Company has reserved from its duly authorized capital stock the maximum number of shares of Common Stock issuable pursuant to the Transaction Documents. The issuance by the Company of the Securities has been registered under the Securities Act and all of the Securities are freely transferable and tradable by the Purchasers without restriction (other than any restrictions arising solely from an act or omission of a Purchaser). The Securities are being issued pursuant to the Registration Statement and the issuance of the Securities has been registered by the Company under the Securities Act. The Registration Statement is effective and available for the issuance of the Securities thereunder and the Company has not received any notice that the Commission has issued or intends to issue a stop-order with respect to the Registration Statement or that the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, or intends or has threatened in writing to do so. The “Plan of Distribution” section under the Registration Statement permits the issuance and sale of the Securities hereunder. Upon receipt of the Securities, the Purchasers will have good and marketable title to such Securities and the Securities will be freely tradable on the OTC Bulletin Board (the “Trading Market”).

(F) Capitalization. The capitalization of the Company is as set forth in the SEC Reports and Prospectus Supplement. The Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company’s stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company’s employee stock purchase plan and pursuant to the conversion or exercise of securities exercisable, exchangeable or convertible into Common Stock (“Common Stock Equivalents”). No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Except as a result of the purchase and sale of the Securities, there are no outstanding options, warrants, script rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents. The issuance and sale of the Securities will not obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under such securities. All of the outstanding shares of capital stock of the Company are validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. Except for the Required Approvals, No further approval or authorization of any stockholder, the Board of Directors of the Company or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company’s capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company’s stockholders.

(G) SEC Reports; Financial Statements. The Company has complied in all material respects with requirements to file all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act and the rules and regulations of the Commission promulgated thereunder, and none of the SEC Reports, when filed, contained any untrue statement of a

material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(H) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in the SEC Reports, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company’s financial statements pursuant to GAAP or required to be disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or “Affiliate” (defined as any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 144 under the Securities Act), except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement or as set forth in the SEC Reports, no event, liability or development has occurred or exists with respect to the Company or its business, properties, operations or financial condition, that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made that has not been publicly disclosed one trading day prior to the date that this representation is made.

(I) Litigation. There is no action, suit, inquiry, notice of violation, Proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any of its properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an “Action”) which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company, nor any of its directors or officers, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the Exchange Act or the Securities Act. None of the Company’s employees is a member of a union that relates to such employee’s relationship with the Company, and the Company is not a party to a collective bargaining agreement, and the Company believes that its relationships with its employees are good. No executive officer, to the knowledge of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject the Company to any liability with respect to any of the foregoing matters. The Company is in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and

employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(J) Labor Relations. No material labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company which could reasonably be expected to result in a Material Adverse Effect.

(K) Compliance. The Company (i) is not in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company under), nor has the Company received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is not in violation of any order of any court, arbitrator or governmental body, or (iii) is not and has not been in violation of any statute, rule or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws applicable to its business and all such laws that affect the environment, except in each case as could not have a Material Adverse Effect.

(L) Regulatory Permits. The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct its business as described in the SEC Reports, except where the failure to possess such permits could not have or reasonably be expected to result in a Material Adverse Effect ("Material Permits"), and the Company has not received any notice of proceedings relating to the revocation or modification of any Material Permit.

(M) Title to Assets. The Company has good and marketable title in fee simple to all real property owned by them that is material to the business of the Company and good and marketable title in all personal property owned by them that is material to the business of the Company, in each case free and clear of all Liens, except for Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and Liens for the payment of federal, state or other taxes, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company is held by it under valid, subsisting and enforceable leases with which the Company is in material compliance.

(N) Patents and Trademarks. The Company has, or has rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other similar intellectual property rights necessary or material for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the "Intellectual Property Rights"). The Company has not received notice (written or otherwise) that the Intellectual Property Rights used by the Company violates or infringes upon the rights of any third party. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights of others. The Company has taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(O) Insurance. The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company is engaged, including, but not limited to, directors and officers insurance coverage at least equal to the aggregate subscription amount under the Transaction Documents. To the best knowledge of the Company, such insurance contracts and policies are accurate and complete. The Company does not have any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(P) Transactions With Affiliates and Employees. Except as set forth in the SEC Reports, none of the officers or directors of the Company and, to the knowledge of the Company, none of its employees are presently a party to any transaction with the Company (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner, other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement of expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(Q) Sarbanes-Oxley. The Company is in material compliance with all provisions of the Sarbanes-Oxley Act of 2002 which are applicable to it as of the date hereof and of the closing date of the Placement.

(R) Certain Fees. Except as otherwise provided in this Agreement, no brokerage or finder's fees or commissions are or will be payable by the Company to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(S) Trading Market Rules. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Trading Market.

(T) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become subject to the Investment Company Act.

(U) Registration Rights. No Person has any right to cause the Company to effect the registration under the Securities Act of any securities of the Company.

(V) Listing and Maintenance Requirements. The Company's Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. The Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements.

(W) Application of Takeover Protections. The Company and its Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's Certificate of Incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Purchasers as a result of the Purchasers and the Company fulfilling their obligations or exercising their rights under the Transaction Documents, including without limitation as a result of the Company's issuance of the Securities and the Purchasers' ownership of the Securities.

(X) Solvency. Based on the financial condition of the Company as of the Closing Date after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature; (ii) the Company's assets do not constitute unreasonably small capital to carry on its business for the current fiscal year as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, and projected capital requirements and capital availability thereof; and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its debt when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. The SEC Reports set forth as of the dates thereof all outstanding secured and unsecured Indebtedness of the Company, or for which the Company has commitments. For the purposes of this Agreement, "Indebtedness" shall mean (a) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (b) all guaranties, endorsements and other contingent obligations in respect of Indebtedness of others, whether or not the same are or should be reflected in the Company's balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (c) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP. The Company is not in default with respect to any Indebtedness.

(Y) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company has filed all necessary federal, state and foreign income and franchise tax returns and has paid or accrued all taxes shown as due thereon, and the Company has no knowledge of a tax deficiency which has been asserted or threatened against the Company.

(Z) Foreign Corrupt Practices. Neither the Company, nor to the knowledge of the Company, any agent or other person acting on behalf of the Company, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company (or made by any person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.

(AA) Accountants. The Company's accountants are named in the Prospectus Supplement. To the knowledge of the Company, such accountants, who the Company expects will express their opinion with respect to the financial statements to be included in the Company's next Annual Report on Form 10-K, are a registered public accounting firm as required by the Securities Act.

(BB) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Securities (other than for the Placement Agent's placement of the Securities), or (iii) paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.

(CC) Approvals. The issuance and listing on the Trading Market of the Shares requires no further approvals, including but not limited to, the approval of shareholders.

(DD) FINRA Affiliations. There are no affiliations with any FINRA member firm among the Company's officers, directors or, to the knowledge of the Company, any five percent (5%) or greater stockholder of the Company, except as set forth in the Base Prospectus.

SECTION 4. ENGAGEMENT TERM. Rodman's engagement hereunder will be for the period of 10 days. The engagement may be terminated by either the Company or Rodman at any time upon 10 days' written notice. Notwithstanding anything to the contrary contained herein, the provisions in this Agreement concerning confidentiality, indemnification and contribution will survive any expiration or termination of this Agreement. Upon any termination of this Agreement, the Company's obligation to pay Rodman any fees actually earned on closing of the Offering and otherwise payable under Section 1(A), shall survive any expiration or termination of this Agreement, as permitted by FINRA Rule 5110(f)(2)(d).

SECTION 5. RODMAN INFORMATION. The Company agrees that any information or advice rendered by Rodman in connection with this engagement is for the confidential use of the Company only in their evaluation of the Placement and, except as otherwise required by law, the Company will not disclose or otherwise refer to the advice or information in any manner without Rodman's prior written consent.

SECTION 6. NO FIDUCIARY RELATIONSHIP. This Agreement does not create, and shall not be construed as creating rights enforceable by any person or entity not a party hereto, except those entitled hereto by virtue of the indemnification provisions hereof. The Company acknowledges and agrees that Rodman is not and shall not be construed as a fiduciary of the Company and shall have no duties or liabilities to the equity holders or the creditors of the Company or any other person by virtue of this Agreement or the retention of Rodman hereunder, all of which are hereby expressly waived.

SECTION 7. CLOSING. The obligations of the Placement Agent and the Purchasers, and the closing of the sale of the Securities hereunder are subject to the accuracy, when made and on the Closing Date, of the representations and warranties on the part of the Company contained herein, to the accuracy of the statements of the Company made in any certificates pursuant to the provisions hereof, to the performance by the Company of their obligations hereunder, and to each of the following additional terms and conditions:

(A) No stop order suspending the effectiveness of the Registration Statement shall have been issued and no proceedings for that purpose shall have been initiated or threatened by the Commission, and any request for additional information on the part of the Commission (to be included in the Registration Statement, the Base Prospectus or the Prospectus Supplement or otherwise) shall have been complied with to the reasonable satisfaction of the Placement Agent.

(B) The Placement Agent shall not have discovered and disclosed to the Company on or prior to the Closing Date that the Registration Statement, the Base Prospectus or the Prospectus Supplement or any amendment or supplement thereto contains an untrue statement of a fact which, in the opinion of counsel for the Placement Agent, is material or omits to state any fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(C) All corporate proceedings and other legal matters incident to the authorization, form, execution, delivery and validity of each of this Agreement, the Securities, the Registration Statement, the Base Prospectus and the Prospectus Supplement and all other legal matters relating to this Agreement and the transactions contemplated hereby shall be reasonably satisfactory in all material respects to counsel for the Placement Agent, and the Company shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.

(D) The Company and the Placement Agent shall have entered into an escrow agreement with a commercial bank or trust company reasonably satisfactory to both parties pursuant to which the Purchasers shall deposit their subscription funds in an escrow account and the Company and the Placement Agent shall jointly authorize the disbursement of the funds from the escrow account. The Company shall pay the reasonable fees of the escrow agent.

(E) The Placement Agent shall have received from outside counsel to the Company such counsel's written opinion, addressed to the Placement Agent and the Purchasers dated as of the Closing Date, in form and substance reasonably satisfactory to the Placement Agent, which opinion shall include a "10b-5" representation from such counsel.

(F) The Company shall not have sustained since the date of the latest audited financial statements included or incorporated by reference in the Base Prospectus, any loss or interference with its business from fire, explosion, flood, terrorist act or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth in or contemplated by the Base Prospectus and (ii) since such date there shall not have been any change in the capital stock or long-term debt of the Company or any change, or any development involving a prospective change, in or affecting the business, general affairs, management, financial position, stockholders' equity, results of operations or prospects of the Company, otherwise than as set forth in or contemplated by the Base Prospectus, the effect of which, in any such case described in clause (i) or (ii), is, in the judgment of the Placement Agent, so material and adverse as to make it impracticable or inadvisable to proceed with the sale or delivery of the Securities on the terms and in the manner contemplated by the Base Prospectus, the Time of Sale Prospectus, if any, and the Prospectus Supplement.

(G) The Common Stock is registered under the Exchange Act and, as of the Closing Date, the Shares shall be listed and admitted and authorized for trading on the Trading Market, and satisfactory evidence of such actions shall have been provided to the Placement Agent. The Company shall have taken no action designed to, or likely to have the effect of terminating the registration of the Common Stock under the Exchange Act or delisting or suspending from trading the Common Stock from the Trading Market, nor has the Company received any information suggesting that the Commission or the Trading Market is contemplating terminating such registration or listing.

(H) Subsequent to the execution and delivery of this Agreement, there shall not have occurred any of the following: (i) trading in securities generally on the New York Stock Exchange, the Nasdaq National Market or the NYSE Amex or in the over-the-counter market, or trading in any securities of the Company on any exchange or in the over-the-counter market, shall have been suspended or minimum or maximum prices or maximum ranges for prices shall have been established on any such exchange or such market by the Commission, by such exchange or by any other regulatory body or governmental authority having jurisdiction, (ii) a banking moratorium shall have been declared by federal or state authorities or a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, (iii) the United States shall have become engaged in hostilities in which it is not currently engaged, the subject of an act of terrorism, there shall have been an escalation in hostilities involving the United States, or there shall have been a declaration of a national emergency or war by the United States, or (iv) there shall have occurred any other calamity or crisis or any change in general

economic, political or financial conditions in the United States or elsewhere, if the effect of any such event in clause (iii) or (iv) makes it, in the sole judgment of the Placement Agent, impracticable or inadvisable to proceed with the sale or delivery of the Securities on the terms and in the manner contemplated by the Base Prospectus and the Prospectus Supplement.

(I) No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any governmental agency or body which would, as of the Closing Date, prevent the issuance or sale of the Securities or materially and adversely affect or potentially and adversely affect the business or operations of the Company; and no injunction, restraining order or order of any other nature by any federal or state court of competent jurisdiction shall have been issued as of the Closing Date which would prevent the issuance or sale of the Securities or materially and adversely affect or potentially and adversely affect the business or operations of the Company.

(J) The Company shall have prepared and filed with the Commission a Current Report on Form 8-K with respect to the Placement, including as an exhibit thereto this Agreement.

(K) The Company shall have entered into subscription agreements with each of the Purchasers and such agreements shall be in full force and effect and shall contain representations and warranties of the Company as agreed between the Company and the Purchasers.

(L) FINRA shall have raised no objection to the fairness and reasonableness of the terms and arrangements of this Agreement. In addition, the Company shall, if requested by the Placement Agent, make or authorize Placement Agent's counsel to make on the Company's behalf, an Issuer Filing with FINRA pursuant to FINRA Rule 5110 with respect to the Registration Statement and pay all filing fees required in connection therewith.

(M) Prior to the Closing Date, the Company shall have furnished to the Placement Agent such further information, certificates and documents as the Placement Agent may reasonably request.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Placement Agent.

SECTION 8. INDEMNIFICATION. (A) To the extent permitted by law, the Company will indemnify Rodman and its affiliates, stockholders, directors, officers, employees and controlling persons (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) against all losses, claims, damages, expenses and liabilities, as the same are incurred (including the reasonable fees and expenses of counsel), relating to or arising out of its activities hereunder or pursuant to this engagement letter, except to the extent that any losses, claims, damages, expenses or liabilities (or actions in respect thereof) are found in a final judgment (not subject to appeal) by a court of law to have resulted primarily and directly from Rodman's willful misconduct or gross negligence in performing the services described herein.

(B) Promptly after receipt by Rodman of notice of any claim or the commencement of any action or proceeding with respect to which Rodman is entitled to indemnity hereunder, Rodman will notify the Company in writing of such claim or of the commencement of such action or proceeding, but failure to so notify the Company shall not relieve the Company from any obligation it may have hereunder, except and only to the extent such failure results in the forfeiture by the Company of substantial rights and defenses. If the Company so elects or is requested by Rodman, the Company will assume the defense of such action or proceeding and will employ counsel reasonably satisfactory to Rodman and will pay the fees and expenses of such counsel. Notwithstanding the preceding sentence, Rodman will be entitled to employ counsel separate from counsel for the Company and from any other

party in such action if counsel for Rodman reasonably determines that it would be inappropriate under the applicable rules of professional responsibility for the same counsel to represent both the Company and Rodman. In such event, the reasonable fees and disbursements of no more than one such separate counsel will be paid by the Company, in addition to local counsel. The Company will have the exclusive right to settle the claim or proceeding provided that the Company will not settle any such claim, action or proceeding without the prior written consent of Rodman, which will not be unreasonably withheld.

(C) The Company agrees to notify Rodman promptly of the assertion against it or any other person of any claim or the commencement of any action or proceeding relating to a transaction contemplated by this engagement letter.

(D) If for any reason the foregoing indemnity is unavailable to Rodman or insufficient to hold Rodman harmless, then the Company shall contribute to the amount paid or payable by Rodman as a result of such losses, claims, damages or liabilities in such proportion as is appropriate to reflect not only the relative benefits received by the Company on the one hand and Rodman on the other, but also the relative fault of the Company on the one hand and Rodman on the other that resulted in such losses, claims, damages or liabilities, as well as any relevant equitable considerations. The amounts paid or payable by a party in respect of losses, claims, damages and liabilities referred to above shall be deemed to include any legal or other fees and expenses incurred in defending any litigation, proceeding or other action or claim. Notwithstanding the provisions hereof, Rodman's share of the liability hereunder shall not be in excess of the amount of fees actually received, or to be received, by Rodman under this engagement letter (excluding any amounts received as reimbursement of expenses incurred by Rodman).

(E) These indemnification provisions shall remain in full force and effect whether or not the transaction contemplated by this engagement letter is completed and shall survive the termination of this engagement letter, and shall be in addition to any liability that the Company might otherwise have to any indemnified party under this engagement letter or otherwise.

SECTION 9. GOVERNING LAW. This Agreement will be governed by, and construed in accordance with, the laws of the State of New York applicable to agreements made and to be performed entirely in such State. This Agreement may not be assigned by either party without the prior written consent of the other party. This Agreement shall be binding upon and inure to the benefit of the parties hereto, and their respective successors and permitted assigns. Any right to trial by jury with respect to any dispute arising under this Agreement or any transaction or conduct in connection herewith is waived. Any dispute arising under this Agreement may be brought into the courts of the State of New York or into the Federal Court located in New York, New York and, by execution and delivery of this Agreement, the Company hereby accepts for itself and in respect of its property, generally and unconditionally, the jurisdiction of aforesaid courts. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by delivering a copy thereof via overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If either party shall commence an action or proceeding to enforce any provisions of a Transaction Document, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

SECTION 10. ENTIRE AGREEMENT/MISC. This Agreement embodies the entire agreement and understanding between the parties hereto, and supersedes all prior agreements and understandings, relating to the subject matter hereof. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, such determination will not affect such provision in any other respect or any other provision of this Agreement, which will remain in full force and effect. This Agreement may not be

amended or otherwise modified or waived except by an instrument in writing signed by both Rodman and the Company. The representations, warranties, agreements and covenants contained herein shall survive the closing of the Placement and delivery and/or exercise of the Securities, as applicable. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or a .pdf format file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or .pdf signature page were an original thereof.

SECTION 11. NOTICES. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified on the signature pages attached hereto prior to 6:30 p.m. (New York City time) on a business day, (b) the next business day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number on the signature pages attached hereto on a day that is not a business day or later than 6:30 p.m. (New York City time) on any business day, (c) the business day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages hereto.

Please confirm that the foregoing correctly sets forth our agreement by signing and returning to Rodman a copy of this Agreement.

Very truly yours,

RODMAN & RENSHAW, LLC

By: /s/ Edward Rubin

Name: Edward Rubin

Title: Chief Executive Officer

Address for notice:

1251 Avenue of the Americas, 20th Floor

New York, NY, 10020

Fax (646) 841-1640

Attention: General Counsel

Accepted and Agreed to as of
the date first written above:

TITAN PHARMACEUTICALS, INC.

By: /s/ Sunil Bhonsle

Name: Sunil Bhonsle

Title: President

Address for notice:

400 Oyster Point Blvd., Suite 505

South San Francisco, CA 94080

Attention: President

TITAN PHARMACEUTICALS, INC.

SERIES A WARRANT

dated as of April [], 2012 (the “*Date of Issuance*”)

THIS CERTIFIES THAT, for value received, [] or its successors or permitted assigns (such Person and such successors and assigns each being the “*Warrant Holder*” with respect to the Series A Warrant (as herein defined) held by it), at any time and from time to time on or after the six-month anniversary of the date of this Warrant (the “*Commencement Date*”) and on or prior to the Expiration Date (as herein defined), is entitled (a) to subscribe for the purchase from Titan Pharmaceuticals, Inc., a Delaware corporation (the “*Company*”), [] Shares (as herein defined) at a price per Share equal to the Exercise Price (as herein defined), and (b) to the other rights set forth herein; *provided* that the number of Shares issuable upon any exercise of this Warrant and the Exercise Price shall be adjusted and readjusted from time to time in accordance with Section 4. By accepting delivery hereof, the Warrant Holder agrees to be bound by the provisions hereof.

This Series A Warrant (the “*Series A Warrant*”) is issued as part of a series of similar Series A Warrants (collectively, the “*Series A Warrants*”) issued pursuant to that certain Subscription Agreement, dated as of April 9, 2012, by and among the Company and the other parties identified therein.

IN FURTHERANCE THEREOF, the Company irrevocably undertakes and agrees for the benefit of Warrant Holder as follows:

Section 1: Definitions and Construction.

(a) Certain Definitions. As used herein (the following definitions being applicable in both singular and plural forms):

“*Affiliate*” means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with such Person.

“*Appraised Value*” means at any time the fair market value thereof determined in good faith by the Board of Directors of the Company as of a date which is within ten (10) days of the date as of which the determination is to be made, subject to the rights of the Requisite Holders pursuant to Section 4(j).

“*Black Scholes Value*” means the value of this Series A Warrant based on the Black and Scholes Option Pricing Model obtained from the “OV” function on Bloomberg using (i) a price per share of Common Stock equal to the Weighted Average Price of the Common Stock for the trading day immediately preceding the date of consummation of the applicable Fundamental Transaction, (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Series A Warrant as of the date of consummation of the applicable Fundamental Transaction and (iii) an expected volatility equal to the greater of 100% and the 100-day volatility obtained from the HVT function on Bloomberg determined as of the trading day next following the date of the public announcement of the applicable Fundamental Transaction.

“*Bloomberg*” means Bloomberg Financial Markets.

“*Business Day*” means any day except a Saturday, Sunday or other day on which commercial banks in New York City are authorized by law to close.

“Change of Control” means any Fundamental Transaction other than (A) any reorganization, recapitalization or reclassification of the Common Stock, in which holders of the Company’s voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, the voting power of the surviving entity or entities necessary to elect a majority of the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities, or (B) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company.

“Closing Price” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the principal securities exchange on which the security is listed (the **“Principal Market”**), as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the foregoing does not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the "pink sheets" by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

“Commission” means the Securities and Exchange Commission or any other Federal agency administering the Securities Act at the time.

“Eligible Market” means the Principal Market, The New York Stock Exchange, Inc., The NYSE Amex, The NASDAQ Global Select Market or The NASDAQ Capital Market.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, or any successor Federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

“Exercise Amount” means for any number of Warrant Shares as to which this Series A Warrant is being exercised the product of (i) such number of Warrant Shares times (ii) the Exercise Price.

“Exercise Price” means \$1.15 per Warrant Share, as adjusted from time to time pursuant to Section 4.

“Expiration Date” means April [], 2018¹.

“Fundamental Transaction” means (A) a consolidation, merger, exchange of shares, recapitalization, reorganization, business combination or other similar event, (1) following which the holders of Common Stock immediately preceding such consolidation, merger, exchange, recapitalization, reorganization, combination or event either (a) no longer hold a majority of the shares of Common Stock

¹ 6 years from the Closing Date

or (b) no longer have the ability to elect a majority of the board of directors of the Company or (2) as a result of which shares of Common Stock shall be changed into (or the shares of Common Stock become entitled to receive) the same or a different number of shares of the same or another class or classes of stock or securities of the Company or another; (B) a sale or transfer of more than 50% of the Company's assets or a sale or transfer of any assets or proprietary rights relating to Probuphine or that are material to the operations and business of the Company; provided, however, that except for a sale of all or substantially all of the Company's assets, a collaborative arrangement, licensing agreement, joint venture or partnership or similar business arrangement providing for the development or commercial exploitation or, or right to develop or commercially exploit, the technology, intellectual property or products of the Company (including arrangements that involve the assignment or licensing of any existing or newly developed intellectual property under such arrangements) whereby income or profits are to be shared (including by lump sum royalty or running royalty) with any other entity shall not constitute a Major Transaction; (C) a purchase, tender or exchange offer made to the holders of outstanding shares of Common Stock, such that following such purchase, tender or exchange offer a Change of Control Transaction shall have occurred; or (D) the liquidation, bankruptcy, insolvency, dissolution or winding-up (or the occurrence of any analogous proceeding) affecting the Company.

"Initial Holder" means [].

"Parent Entity" of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

"Person" means an individual, a corporation, a partnership, an association, a trust or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

"Requisite Holders" means at any time holders of Warrant Shares and Series A Warrants representing at least two-thirds of the Warrant Shares outstanding or issuable upon the exercise of all the outstanding Series A Warrants.

"Securities Act" means the Securities Act of 1933, as amended, or any successor Federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Shares" means shares of the Company's currently authorized common stock, \$0.001 par value, and stock of any other class or other consideration into which such currently authorized common stock may hereafter have been changed into.

"Successor Entity" means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

"Trading Market" means the following markets or exchanges on which the Shares is listed or quoted for trading on the date in question: the Nasdaq Capital Market, the NYSE Amex, the New York Stock Exchange, the Nasdaq Global Market, the Nasdaq Global Select Market or the OTC Bulletin Board.

“**VWAP**” means for any date, the price determined by the first of the following clauses that applies: (a) if the Shares are then listed or quoted on a Trading Market, the daily volume weighted average price per Share for such date (or the nearest preceding date) on the Trading Market on which the Shares are then listed or quoted as reported by Bloomberg Financial L.P. (based on a Trading Day from 9:35 a.m. Eastern Time to 3:58 p.m. Eastern Time); (b) if the Shares are not then listed or quoted on a Trading Market and if prices for the Shares are then quoted on the OTC Bulletin Board, the volume weighted average price per share of the Shares for such date (or the nearest preceding date) on the OTC Bulletin Board; (c) if the Shares are not then listed or quoted on the OTC Bulletin Board and if prices for the Shares are then reported in the “Pink Sheets” published by the Pink OTC Markets Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Shares so reported; or (d) in all other cases, the fair market value of a share of Shares as determined by an independent appraiser selected in good faith by the Warrant Holder and reasonably acceptable to the Company.

“**Warrant Shares**” means the number of Shares issued or issuable upon exercise of this Series A Warrant as set forth in the introduction hereto, as adjusted from time to time pursuant to Section 4, or in the case of other Series A Warrants, issuable upon exercise of those Series A Warrants.

(b) Accounting Terms and Determinations. Unless otherwise specified herein, all accounting terms used herein shall be interpreted, all accounting determinations hereunder shall be made, and all financial statements required to be delivered hereunder shall be prepared, in accordance with generally accepted accounting principles. When used herein, the term “financial statements” shall include the notes and schedules thereto. References to fiscal periods are to fiscal periods of the Company.

(c) Computation of Time Periods. With respect to the computation of periods of time from a specified date to a later specified date, the word “from” means “from and including” and the words “to” and “until” each mean “to but excluding.” Periods of days shall be counted in calendar days unless otherwise stated.

(d) Construction. Unless the context requires otherwise, references to the plural include the singular and to the singular include the plural, references to any gender include any other gender, the part includes the whole, the term “including” is not limiting, and the term “or” has, except where otherwise indicated, the inclusive meaning represented by the phrase “and/or.” The words “hereof,” “herein,” “hereby,” “hereunder,” and similar terms in this Series A Warrant refer to this Series A Warrant as a whole and not to any particular provision of this Series A Warrant. Section, subsection, clause, exhibit, appendix and schedule references are to this Series A Warrant, unless otherwise specified. Any reference to this Series A Warrant includes any and all permitted alterations, amendments, changes, extensions, modifications, renewals, or supplements thereto or thereof, as applicable.

(e) Exhibits and Schedules. All of the exhibits, appendices and schedules attached hereto shall be deemed incorporated herein by reference.

(f) No Presumption Against Any Party. Neither this Series A Warrant nor any uncertainty or ambiguity herein or therein shall be construed or resolved using any presumption against any party hereto or thereto, whether under any rule of construction or otherwise. On the contrary, this Series A Warrant has been reviewed by each of the parties and their counsel and, in the case of any ambiguity or uncertainty, shall be construed and interpreted according to the ordinary meaning of the words used so as to fairly accomplish the purposes and intentions of all parties hereto.

Section 2: Exercise of Series A Warrant.

(a) **Exercise and Payment.** (i) The Warrant Holder may exercise this Warrant in whole or in part, at any time or from time to time on any Business Day on or after the Commencement Date and on or prior to the Expiration Date, by delivering to the Company a duly executed notice (a “**Notice of Exercise**”) in the form of Exhibit A (which notice may be sent by electronic mail to: bcrowley@titanpharm.com) and by payment to the Company of the Exercise Amount, at the election of the Warrant Holder, by wire transfer of immediately available funds to the account of the Company in an amount equal to the Exercise Amount not later than three Business Days after the Company receives the Notice of Exercise. (ii) If at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of, the Warrant Shares to the Warrant Holder, then, in lieu of making the cash payment otherwise contemplated in subsection (i) herein to be made to the Company upon such exercise in payment of the Exercise Amount, the Warrant Holder may elect instead to receive upon such exercise the number of Warrant Shares determined according to the following formula by means of a “cashless exercise”:

$$X = Y (A-B)/A$$

where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock for which this Series A Warrant is being exercised.

A = the Market Price of one (1) share of Common Stock (for purposes of this Section 2(a)(ii), where “Market Price,” as of any date, means the VWAP (as defined herein) of the Company’s Common Stock during the five (5) consecutive trading day period immediately prior to the date the Series A Warrant is exercised.

B = the Exercise Price.

The Company acknowledges that the provisions of subsection (ii) herein are intended, in part, to ensure that a full or partial exchange of this Warrant pursuant to such subsection (ii) will qualify as a conversion, within the meaning of paragraph (d)(3)(ii) of Rule 144 under the Securities Act. In the event that the Warrant Holder provides for payment of the Exercise Amount pursuant to subsection (i), the Warrant Holder shall be deemed to own the Warrant Shares on the date on which the Exercise Amount is received by the Company. In the event that the Warrant Holder provides for payment of the Exercise Amount pursuant to subsection (ii), the Warrant Holder shall be deemed to own the Warrant Shares on the date that the Exercise Notice is received by the Company. At the request of the Holder, the Company will accept reasonable modifications to the exchange procedures provided for in this Section 2 in order to accomplish such intent. For all purposes of this Warrant (other than this Section 2(a)), any reference herein to the exercise of this Warrant shall be deemed to include a reference to the exchange of this Warrant into Shares in accordance with the terms of subsection (ii).

(b) **Effectiveness and Delivery.** The Company shall confirm receipt of any Notice of Exercise delivered pursuant to Section 2(a) within one Business Day of the receipt thereof. As soon as practicable but not later than three Business Days after the Company shall have received such Notice of Exercise, and provided that payment of the Exercise Amount has been received by the Company, the Company shall execute and deliver or cause to be executed and delivered, in accordance with such Notice of Exercise, a certificate or certificates representing the number of Shares specified in such Notice of

Exercise, issued in the name of the Warrant Holder or in such other name or names of any Person or Persons designated in such Notice of Exercise (provided that, if a registration statement is not effective and the Warrant Holder directs the Company to deliver a certificate for the Warrant Shares in a name other than that of the Warrant Holder or an Affiliate of the Warrant Holder, it shall deliver to the Company on the Exercise Date an opinion of counsel reasonably satisfactory to the Company to the effect that the issuance of such Warrant Shares in such other name may be made pursuant to an available exemption from the registration requirements of the Securities Act and all applicable state securities or blue sky laws), (i) a certificate for the Warrant Shares issuable upon such exercise, free of restrictive legends, or (ii) an electronic delivery of the Warrant Shares to the Warrant Holder's account at the Depository Trust Company ("**DTC**") or a similar organization, unless in the case of clause (i) and (ii) a registration statement covering the resale of the Warrant Shares and naming the Warrant Holder as a selling stockholder thereunder is not then effective or the Warrant Shares are not freely transferable without volume restrictions pursuant to Rule 144(b) under the Securities Act, in which case such Warrant Holder shall receive a certificate for the Warrant Shares issuable upon such exercise with appropriate restrictive legends. Without prejudice to the holding periods determined under Rule 144 under the Securities Act, this Series A Warrant shall be deemed to have been exercised and such Share certificate or certificates shall be deemed to have been issued, and the Warrant Holder or other Person or Persons designated in such Notice of Exercise shall be deemed for all purposes to have become a holder of record of Shares, all as of the date that such Notice of Exercise and, if applicable, the Exercise Amount, shall have been received by the Company.

(c) Failure to Deliver Shares. If by the close of the third Business Day after delivery of a properly completed Notice of Exercise and payment of the Exercise Amount, if applicable, the Company fails to deliver to the Warrant Holder the required number of Warrant Shares in the manner required pursuant to Section 2(b), and if after such third Business Day and prior to the receipt of such Warrant Shares, the Warrant Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Warrant Holder of the Warrant Shares which the Warrant Holder anticipated receiving upon such exercise (a "**Buy-In**"), then the Company shall, within three (3) Business Days after the Warrant Holder's request and in the Warrant Holder's sole discretion, either (1) pay in cash to the Warrant Holder an amount equal to the Warrant Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to issue such Warrant Shares) shall terminate or (2) promptly honor its obligation to deliver to the Warrant Holder Warrant Shares and pay cash to the Warrant Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Warrant Shares, times (B) the closing bid price of a share of Common Stock on the date of receipt of a properly completed Notice of Exercise and, if applicable, Exercise Amount.

(d) Surrender of Series A Warrant. In the event of a partial exercise of the Series A Warrant, the Warrant Holder may surrender this Series A Warrant to the Company, in which event the Company shall execute and deliver to the Warrant Holder, at the time the Company delivers the Share certificate or certificates issued pursuant to such Notice of Exercise, a new Series A Warrant for the unexercised portion of the Series A Warrant, but in all other respects identical to this Series A Warrant. The Warrant Holder shall surrender this Series A Warrant to the Company within five Business Days after it delivers its final Notice of Exercise.

(e) Fractional Shares. The Company shall not be required to issue fractions of Shares upon an exercise of the Series A Warrant. If any fraction of a Share would, but for this restriction, be issuable upon an exercise of the Series A Warrant, in lieu of delivering such fractional Share, the Company shall

pay to the Warrant Holder, in cash, an amount equal to the same fraction times the Closing Price on the trading day immediately prior to the date of such exercise (or if there is no such Closing Price, then based on the Appraised Value as of such day).

(f) **Expenses and Taxes.** The Company shall pay all expenses, taxes and owner charges payable in connection with the preparation, issuance and delivery of certificates for the Warrant Shares and any new Series A Warrants, except that if the certificates for the Warrant Shares or the new Series A Warrants are to be registered in a name or names other than the name of the Warrant Holder, funds sufficient to pay all transfer taxes payable as a result of such transfer shall be paid by the Warrant Holder at the time of its delivery of the Notice of Exercise or promptly upon receipt of a written request by the Company for payment.

Section 3: Validity of Series A Warrant and Issuance of Shares.

(a) The Company represents and warrants that this Series A Warrant has been duly authorized, is validly issued, and constitutes the valid and binding obligation of the Company and is enforceable against the Company in accordance with its terms.

(b) The Company further represents and warrants that on the date hereof it is duly authorized and reserved, and the Company hereby agrees that it will at all times until the Expiration Date have duly authorized and reserved, such number of Shares as will be sufficient to permit the exercise in full of the Series A Warrant, and that all such Shares are and will be duly authorized and, when issued upon exercise of the Series A Warrant, will be validly issued, fully paid and non-assessable, and free and clear of all security interests, claims, liens, equities and other encumbrances.

Section 4: Adjustment Provisions. The Exercise Price in effect at any time, and the number of Warrant Shares that may be purchased upon any exercise of the Series A Warrant, shall be subject to change or adjustment as follows:

(a) **Share Reorganization.** If the Company shall subdivide its outstanding Shares into a greater number of Shares, by way of a stock split, stock dividend or otherwise, or consolidate its outstanding Shares into a smaller number of Shares (any such event being herein called a “**Share Reorganization**”), then (i) the Exercise Price shall be adjusted, effective immediately after the effective date of such Share Reorganization, to a price determined by multiplying the Exercise Price in effect immediately prior to such effective date by a fraction, the numerator of which shall be the number of Shares outstanding on such effective date before giving effect to such Share Reorganization and the denominator of which shall be the number of Shares outstanding after giving effect to such Share Reorganization, and (ii) the number of Shares subject to purchase upon exercise of this Series A Warrant shall be adjusted, effective at such time, to a number determined by multiplying the number of Shares subject to purchase immediately before such Share Reorganization by a fraction, the numerator of which shall be the number of Shares outstanding after giving effect to such Share Reorganization and the denominator of which shall be the number of Shares outstanding immediately before giving effect to such Share Reorganization.

(b) **Special Distributions.** If the Company shall issue or distribute to any holder or holders of Shares evidences of indebtedness, any other securities of the Company or any cash, property or other assets (excluding a Share Reorganization), whether or not accompanied by a purchase, redemption or other acquisition of Shares (any such non-excluded event being herein called a “**Special Distribution**”), then the Warrant Holder shall be entitled to a pro-rata share of such Special Distribution as though the

Warrant Holder had fully exercised this Series A Warrant immediately prior to the record date for such Special Distribution, and the Company shall pay or distribute such pro-rata share to Warrant Holder when paid or distributed to the holders of the Shares. A reclassification of the Shares (other than a change in par value, or from par value to no par value or from no par value to par value) into shares of any other class of stock shall be deemed to be a distribution by the Company to the holders of its Shares of such class of stock and, if the outstanding Shares shall be changed into a larger or smaller number of Shares as part of such reclassification, a Share Reorganization.

(c) Fundamental Transactions. Upon the occurrence of any Fundamental Transaction, any Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Series A Warrant referring to the "Company" shall refer instead to any Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Series A Warrant with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of the Fundamental Transaction, any Successor Entity shall deliver to the Warrant Holder confirmation that there shall be issued upon exercise of this Series A Warrant at any time after the consummation of the Fundamental Transaction, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property purchasable upon the exercise of the Series A Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), if any, that the Warrant Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Series A Warrant been exercised immediately prior to such Fundamental Transaction, as adjusted in accordance with the provisions of this Series A Warrant. In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which Warrant Holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a "*Corporate Event*"), the Company shall make appropriate provision to insure that the Warrant Holder will thereafter have the right to receive upon an exercise of this Series A Warrant within 90 days after the consummation of the Fundamental Transaction but, in any event, prior to the Expiration Date, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of the Series A Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the Warrant Holder would have been entitled to receive upon the happening of such Fundamental Transaction had the Series A Warrant been exercised immediately prior to such Fundamental Transaction. Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Warrant Holder. If Warrant Holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Warrant Holder shall be given the same choice as to the consideration it receives upon any exercise of this Series A Warrant following such Fundamental Transaction. The provisions of this Section shall apply similarly and equally to successive Fundamental Transactions and Corporate Events and shall be applied without regard to any limitations on the exercise of this Series A Warrant. Notwithstanding the foregoing, in the event of a Change of Control, at the request of the Warrant Holder delivered before the 90th day after such Change of Control, the Company (or the Successor Entity) shall purchase this Series A Warrant from the Warrant Holder by paying to the Warrant Holder, within five Business Days after such request (or, if later, on the effective date of the Fundamental Transaction), cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Series A Warrant on the date of such Change of Control.

(d) Adjustment of Exercise Price upon Issuance of Common Stock, Options, Convertible Securities, Etc. If at any time after the Date of Issuance for so long as any Series A Warrants are outstanding, the Company (A) issues or sells any Common Stock, Convertible Securities, warrants, or

Options or (B) directly or indirectly effectively reduces the conversion, exercise or exchange price for any Convertible Securities or Options which are currently outstanding, at or to an effective Per Share Selling Price (as defined below) which is less than the greater of (I) the closing sale price per share of the Common Stock on the Principal Market or any Eligible Market on which the Common Stock is traded on the trading day immediately preceding such issue or sale ("**Fair Market Price**"), or (II) the Exercise Price, then in each such case the Exercise Price in effect immediately prior to such issue or sale date, as applicable, shall be automatically reduced effective concurrently with such issue or sale to an amount determined by multiplying the Exercise Price then in effect by a fraction, (x) the numerator of which shall be the sum of (1) the number of shares of Common Stock outstanding immediately prior to such issue or sale, plus (2) the number of shares of Common Stock which the aggregate consideration received by the Company for such additional shares would purchase at such Fair Market Price or Exercise Price, as the case may be, and (y) the denominator of which shall be the number of shares of Common Stock of the Company outstanding immediately after such issue or sale. Provision (I) of this Section 5(d) shall not apply until such time as the Company has issued in one or a series of transactions after the date of this Series A Warrant, an aggregate number of shares of Common Stock in excess of 20% of the Company's outstanding Common Stock as of the date hereof (subject to any appropriate adjustments of the type referred to in Section 5(a)) (the "**Issuance Threshold**") as of the date hereof, and then such provision shall apply only to the extent of issuances in excess of the Issuance Threshold, and shall not apply to Exempt Issuances. Provision (II) of this Section 5(d) shall apply and be effective from and after the date hereof without regard to the Issuance Threshold and shall not apply to Exempt Issuances covered by the provisions of clauses (a) and (b) of the next succeeding paragraph.

As used herein, "Exempt Issuance" means the issuance of (a) shares of Common Stock or Options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose in the aggregate of 10% of the current outstanding shares of Common Stock, (b) Common Stock, Convertible Securities, warrants, or Options upon the exercise or exchange of or conversion of any securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

For the purposes of the foregoing adjustments, in the case of the issuance of any Convertible Securities or Options, the maximum number of shares of Common Stock issuable upon exercise, exchange or conversion of such Convertible Securities or Options shall be deemed to be outstanding, provided that no further adjustment shall be made upon the actual issuance of Common Stock upon exercise, exchange or conversion of such Convertible Securities or Options, and provided further that to the extent such Convertible Securities or Options expire or terminate unconverted or unexercised, then at such time the Exercise Price shall be readjusted as if such portion of such Convertible Securities or Options had not been issued.

For purposes of this Section 5(d), if an event occurs that triggers more than one of the above adjustment provisions, then only one adjustment shall be made and the calculation method which yields the greatest downward adjustment in the Exercise Price shall be used.

For purposes of determining the adjusted Exercise Price under this Section 5(d), the following shall be applicable:

(i) *Record Date*. If the Company takes a record of the holders of Common Stock for the purpose of entitling them (1) to receive a dividend or other distribution payable in Common Stock, Options or in Convertible Securities or (2) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issue or sale of the Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(ii) *Other Events*. If any event occurs of the type contemplated by the provisions of this Section 5(d) but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company's Board of Directors will make an appropriate adjustment in the Exercise Price so as to protect the rights of the Warrant Holder under this Series A Warrant; provided that no such adjustment will increase the Exercise Price as otherwise determined pursuant to this Section 5(d).

For purposes hereof:

“*Convertible Securities*” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Stock.

“*Options*” means any rights, warrants or options to subscribe for or purchase Common Stock or Convertible Securities.

(e) “**Per Share Selling Price**” shall include the amount actually paid by third parties for each share of Common Stock in a sale or issuance by the Company. In the event a fee is paid by the Company in connection with such transaction directly or indirectly to such third party or its affiliates, any such fee shall be deducted from the selling price pro rata to all shares sold in the transaction to arrive at the Per Share Selling Price. A sale of shares of Common Stock shall include the sale or issuance of Convertible Securities or Options, and in such circumstances the Per Share Selling Price of the Common Stock covered thereby shall also include the exercise, exchange or conversion price thereof (in addition to the consideration received by the Company upon such sale or issuance less the fee amount as provided above). In case of any such security issued in a transaction in which the purchase price or the conversion, exchange or exercise price is directly or indirectly subject to adjustment or reset based on a future date, future trading prices of the Common Stock, specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock, or otherwise (but excluding standard stock split anti-dilution provisions or weighted-average anti-dilution provisions similar to that set forth herein, provided that any actual reduction of such price under any such security pursuant to such weighted-average anti-dilution provision shall be included and cause an adjustment hereunder), the Per Share Selling Price shall be deemed to be the lowest conversion, exchange, exercise or reset price at which such securities are converted, exchanged, exercised or reset or might have been converted, exchanged, exercised or reset, or the lowest adjustment, as the case may be, over the life of such securities. If shares are issued for a consideration other than cash, the Per Share Selling Price shall be the fair value of such consideration as determined in good faith by independent certified public accountants

mutually acceptable to the Company and the Warrant Holder. In the event the Company directly or indirectly effectively reduces the conversion, exercise or exchange price for any Convertible Securities or Options which are currently outstanding, then the Per Share Selling Price shall equal such effectively reduced conversion, exercise or exchange price.

(f) Adjustment Rules.

(i) Any adjustments pursuant to this Section 4 shall be made successively whenever any event referred to herein shall occur, except that, notwithstanding any other provision of this Section 4, no adjustment shall be made to the number of Warrant Shares to be delivered to the Warrant Holder (or to the Exercise Price) if such adjustment represents less than 1% of the number of Warrant Shares previously required to be so delivered, but any lesser adjustment shall be carried forward and shall be made at the time and together with the next subsequent adjustment which together with any adjustments so carried forward shall amount to 1% or more of the number of Warrant Shares to be so delivered.

(ii) No adjustments shall be made pursuant to this Section 4 in respect of the issuance of Warrant Shares upon exercise of the Series A Warrant;

(iii) If the Company shall take a record of the holders of its Shares for any purpose referred to in this Section 4, then (x) such record date shall be deemed to be the date of the issuance, sale, distribution or grant in question and (y) if the Company shall legally abandon such action prior to effecting such action, no adjustment shall be made pursuant to this Section 4 in respect of such action.

(iv) In computing adjustments under this Section 4, (A) fractional interests in Shares shall be taken into account to the nearest one-thousandth of a Share, and (B) calculations of the Exercise Price shall be carried to the nearest one-thousandth of one cent.

(g) Proceedings Prior to Any Action Requiring Adjustment. As a condition precedent to the taking of any action which would require an adjustment pursuant to this Section 4, the Company shall take any action which may be necessary, including obtaining regulatory approvals or exemptions, in order that the Company may thereafter validly and legally issue as fully paid and nonassessable all Shares which the Warrant Holder is entitled to receive upon exercise of the Series A Warrant.

(h) Notice of Adjustment. Not less than 20 days prior to the record date or effective date, as the case may be, of any action which requires or might require an adjustment or readjustment pursuant to this Section 4, the Company shall give notice to the Warrant Holder of such event, describing such event in reasonable detail and specifying the record date or effective date, as the case may be, and, if determinable, the required adjustment and computation thereof. If the required adjustment is not determinable at the time of such notice, the Company shall give notice to the Warrant Holder of such adjustment and computation as soon as reasonably practicable after such adjustment becomes determinable. In connection with any such adjustment or readjustment, at its sole cost and expense, the Company will also cause independent certified public accountants of recognized national standing (which may be the regular auditors of the Company) selected by the Company to verify its computations and confirm that such computations were made in accordance with this Section 4 and, in connection with the preparation of the Company's quarterly financial statements prepare a report setting forth such adjustment or readjustment and showing in reasonable detail the method of calculation thereof and the facts upon which such adjustment or readjustment is based, including a statement of (i) the number of Shares outstanding or deemed to be outstanding, and (ii) the Exercise Price in effect immediately prior to such issue or sale and as adjusted and readjusted (if required by this Section 4) on account thereof.

The Company will forthwith mail a copy of each such report to the Warrant Holder and will, upon the written request at any time of the Warrant Holder, furnish to such holder a like report setting forth the Exercise Price at the time in effect and showing in reasonable detail how it was calculated. The Company will also keep copies of all such reports at its office and will cause the same to be available for inspection at such office during normal business hours by the Warrant Holder or any prospective purchaser of this Series A Warrant designated by the Warrant Holder.

(i) Disputes. Any dispute which arises between the Warrant Holder and the Company with respect to the calculation of the adjusted Exercise Price or Warrant Shares issuable upon exercise shall be determined by the independent auditors of the Company in accordance with the terms of this Series A Warrant, and such determination shall be binding upon the Company and the holders of the Series A Warrants and the Warrant Shares if made in good faith and without manifest error.

(j) Other Actions Affecting Shares.

(i) Equitable Equivalent. In case any event shall occur as to which the provisions of this Section 4 set forth above hereof are not strictly applicable but the failure to make any adjustment would not, or if the application of the provisions of this Section 4 otherwise would not, in the opinion of the Warrant Holder, fairly protect the purchase rights represented by this Series A Warrant in accordance with the essential intent and principles of this Section 4, then, in each such case, at the request of the Warrant Holder, the Company shall appoint a firm of independent investment bankers of recognized national standing (which shall be completely independent of the Company and shall be satisfactory to the Warrant Holder or the Requisite Holders), which shall give their opinion upon the adjustment, if any, on a basis consistent with the essential intent and principles established in this Section 4, necessary to preserve the purchase rights of such Warrant Holder represented by this Series A Warrant. Upon receipt of such opinion, the Company will promptly mail a copy thereof to the holder of this Series A Warrant and shall make the adjustments described therein.

(ii) No Avoidance. The Company shall not, by amendment of its certificate of incorporation or bylaws or through any consolidation, merger, reorganization, transfer of assets, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Series A Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder of this Series A Warrant against dilution or other impairment as if the holder was a stockholder of the Company entitled to the benefit of fiduciary duties afforded to stockholders under Delaware law.

(k) Adjustment of Par Value. If for any reason (including the operation of the adjustment provisions set forth in this Series A Warrant), the Exercise Price on any date of exercise of this Series A Warrant shall not be lawful and adequate consideration for the issuance of the relevant Warrant Shares, then the Company shall take such steps as are necessary (including the amendment of its certificate of incorporation so as to reduce the par value of the Shares) to cause such Exercise Price to be adequate and lawful consideration on the date the payment thereof is due, but if the Company shall fail to take such steps, then the Company acknowledges that the Warrant Holder shall have been damaged by the Company in an amount equal to an amount, that, when added to the total Exercise Price for the relevant Warrant Shares, would equal lawful and adequate consideration for the issuance of such Warrant Shares, and the Company irrevocably agrees that if the Warrant Holder shall then forgive the right to recover such damages from the Company, such forgiveness shall constitute, and Company shall accept such forgiveness as, additional lawful consideration for the issuance of the relevant Warrant Shares.

(l) Appraisal.

(i) If the Requisite Holders shall, for any reason whatsoever, disagree with the Company's determination of the Appraised Value of a Share, then such holders shall by notice to the Company (an "**Appraisal Notice**") given within sixty (60) days after the Company notifies the holders of such determination, elect to dispute such determination, and such dispute shall be resolved as set forth in clause (ii) of this Section.

(ii) The Company shall within ten (10) days after an Appraisal Notice has been given, engage an independent investment bank of national repute (the "**Appraiser**") selected by the Requisite Holders and retained pursuant to an engagement letter between the Company and the Appraiser with respect to such valuation in form and substance reasonably acceptable to Requisite Holders, to make an independent determination of the Appraised Value of a Share; such value shall be determined without deduction for (a) liquidity considerations, (b) minority stockholder status, or (c) any liquidation or other preference or any right of redemption in favor of any other equity securities of the Company. The costs of engagement of such investment bank for any such determination of Appraised Value shall be paid by the Company.

Section 5: Restrictions on Exercise. The Company shall provide to the Warrant Holder prompt written notice of any time that the Company is unable to issue the Warrant Shares via DTC transfer (or otherwise without restrictive legend), because (A) the Commission has issued a stop order with respect to the Registration Statement on Form S-3 (File No. 333-178656) (the "**Registration Statement**"), (B) the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, (C) the Company has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, or (D) the Registration Statement is otherwise not then effective (each a "**Restrictive Legend Event**"). To the extent that a Restrictive Legend Event occurs after the Warrant Holder has exercised this Series A Warrant but prior to the delivery of the Warrant Shares, the Company shall (i) if the VWAP over the last five consecutive trading days is greater than the Exercise Price, provide written notice to the Warrant Holder that the Company will deliver that number of Warrant Shares to the Warrant Holder as should be delivered in a cashless exercise in accordance with subsection (ii) of Section 2(a), and return to the Warrant Holder all consideration paid to the Company in connection with the Warrant Holder's attempted exercise of this Series A Warrant (a "**Company-Elected Conversion**"), or (ii) at the election of the Warrant Holder to be given within five (5) days of receipt of notice of a Company-Elected Conversion, the Warrant Holder shall be entitled to rescind the previously submitted Notice of Exercise and the Company shall return all consideration paid by Warrant Holder for such shares upon such rescission. The Company shall provide to the Warrant Holder prompt written notice of the termination of the Restrictive Legend Event. If a Restrictive Legend Event is occurring as of the Expiration Date, the term of this Series A Warrant shall be extended until the fifth (5th) business day after the termination of such Restrictive Legend Event. For purposes of clarity, notwithstanding a Restrictive Legend Event, the Warrant Holder has the right to exercise this Series A Warrant in accordance with subsection (ii) of Section 2(a).

The Warrant Holder understands that if the Company does not file reports pursuant to either Section 13(a) or Section 15(d) of the Exchange Act, or if a registration statement covering this Series A Warrant or the Warrant Shares, as applicable, is not in effect when it desires to sell (i) the rights to purchase Shares pursuant to this Series A Warrant or (ii) the Shares issuable upon exercise of the right to purchase, the Warrant Holder may be required to hold such securities for an indefinite period. The Warrant Holder also understands that any sale of (A) its rights hereunder to purchase Shares or (B) Shares issued or issuable hereunder that might be made by it in reliance upon Rule 144 under the Securities Act may be made only

in accordance with the terms and conditions of Rule 144. The Warrant Holder hereby acknowledges and agrees that if a registration statement under the Securities Act covering the Warrant Shares is not effective at the time this Series A Warrant is exercised, the Warrant Holder shall only be permitted to exercise this Series A Warrant by means of a net issuance pursuant to subsection (ii) of Section 2(a).

Section 6: Transfer of Series A Warrant. This Series A Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, subject to applicable securities laws.

Section 7: Identity of Transfer Agent. The Transfer Agent for the Shares is Continental Stock Transfer & Trust Company, LLC. Upon the appointment of any subsequent transfer agent for the Shares, the Company will mail to the Warrant Holder a statement setting forth the name and address of such transfer agent.

Section 8: Lost, Mutilated or Missing Series A Warrants. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of any Series A Warrant, and, in the case of loss, theft or destruction, upon receipt of indemnification satisfactory to the Company (in the case of the Initial Holder its unsecured, unbonded agreement of indemnity or affidavit of loss shall be sufficient) or, in the case of mutilation, upon surrender and cancellation of the mutilated Series A Warrant, the Company shall execute and deliver a new Series A Warrant of like tenor and representing the right to purchase the same aggregate number of Warrant Shares.

Section 9: Limitation on Exercise. Notwithstanding anything to the contrary contained herein, the number of Warrant Shares that may be acquired by the Warrant Holder upon any exercise of this Series A Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to ensure that, following such exercise (or other issuance), the total number of Shares then beneficially owned by the Warrant Holder and any other Persons whose beneficial ownership of Shares would be aggregated with the Warrant Holder's for purposes of Section 13(d) of the Exchange Act, does not exceed 4.99% of the total number of then issued and outstanding Shares (including for such purpose the Shares issuable upon such exercise). For such purposes, beneficial ownership shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Warrant Holder that the Company is not representing to such Warrant Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and such Warrant Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 9 applies, the determination of whether this Series A Warrant is exercisable (in relation to other securities owned by such Warrant Holder) and of which portion of this Series A Warrant is exercisable shall be in the sole discretion of the Warrant Holder, and the submission of a Notice of Exercise shall be deemed to be the Warrant Holder's determination of whether this Series A Warrant is exercisable (in relation to other securities owned by such Warrant Holder) and of which portion of this Series A Warrant is exercisable, in each case subject to such aggregate percentage limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 9, in determining the number of outstanding Shares, the Warrant Holder may rely on the number of outstanding Shares as reflected in (x) the Company's most recent Form 10-Q or Form 10-K, as the case may be, (y) a more recent public announcement by the Company or (z) any other notice by the Company or the Company's transfer agent setting forth the number of Shares outstanding. Upon the written request of the Warrant Holder, the Company shall within three Business Days confirm orally and in writing to such Warrant Holder the number of Shares. This provision shall not restrict the number of Shares which a Warrant Holder may receive or beneficially own in order to determine the amount of securities or other

consideration that such Warrant Holder may receive in the event of a transaction contemplated in Section 4 of this Series A Warrant. By written notice to the Company, which will not be effective until the 61st day after such notice is delivered to the Company, the Warrant Holder may waive the provisions of this Section 9 (but such waiver will not affect any other holder) to change the beneficial ownership limitation to 9.99% of the number of Shares outstanding immediately after giving effect to the issuance of Shares upon exercise of this Series A Warrant, and the provisions of this Section 9 shall continue to apply. Upon such a change by a Warrant Holder of the beneficial ownership limitation from such 4.99% limitation to such 9.99% limitation, the beneficial ownership limitation may not be further waived by such Warrant Holder.

Section 10: Waivers; Amendments. Any provision of this Series A Warrant may be amended or waived with (but only with) the written consent of the Company and the Warrant Holder. No failure or delay of the Company or the Warrant Holder in exercising any power or right hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereon or the exercise of any other right or power. No notice or demand on the Company in any case shall entitle the Company to any other or future notice or demand in similar or other circumstances. The rights and remedies of the Company and the Warrant Holder hereunder are cumulative and not exclusive of any rights or remedies which it would otherwise have.

Section 11: Miscellaneous.

(a) Stockholder Rights. The Series A Warrant shall not entitle any Warrant Holder, prior to the exercise of the Series A Warrant, to any voting rights as a stockholder of the Company.

(b) Expenses. The Company shall pay all reasonable expenses of the Warrant Holder, including reasonable fees and disbursements of counsel, in connection with the preparation of the Series A Warrant, any waiver or consent hereunder or any amendment or modification hereof (regardless of whether the same becomes effective), or the enforcement of the provisions hereof; *provided* that the Company shall not be required to pay any expenses of the Warrant Holder arising solely in connection with a transfer of the Series A Warrant.

(c) Successors and Assigns. All the provisions of this Series A Warrant by or for the benefit of the Company or the Warrant Holder shall bind and inure to the benefit of their respective successors and assigns.

(d) Severability. In case any one or more of the provisions contained in this Series A Warrant shall be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby. The parties shall endeavor in good faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

(e) Notices. Any notice or other communication hereunder shall be in writing and shall be sufficient if sent by facsimile or first-class mail or courier, postage prepaid, and addressed as follows: (a) if to the Company, addressed to the Company at its address for notices as set forth below its signature hereon or any other address as the Company may hereafter notify to the Warrant Holder and (b) if to the Warrant Holder, addressed to such address as the Warrant Holder may hereafter from time to time notify to the Company for the purposes of notice hereunder.

(f) Equitable Remedies. Without limiting the rights of the Company and the Warrant Holder to pursue all other legal and equitable rights available to such party for the other parties' failure to perform its obligations hereunder, the Company and the Warrant Holder each hereto acknowledge and agree that the remedy at law for any failure to perform any obligations hereunder would be inadequate and that each shall be entitled to specific performance, injunctive relief or other equitable remedies in the event of any such failure.

(g) Continued Effect. Rights and benefits conferred on the holders of Warrant Shares pursuant to the provisions hereof shall continue to inure to the benefit of, and shall be enforceable by, such holders, notwithstanding the surrender of the Series A Warrant to, and its cancellation by, the Company upon the full or partial exercise or repurchase hereof.

(h) Confidentiality. The Warrant Holder agrees to keep confidential any proprietary information relating to the Company delivered by the Company hereunder; *provided* that nothing herein shall prevent the Warrant Holder from disclosing such information: (i) to any holder of Series A Warrants or Warrant Shares, (ii) to any Affiliate of any holder of Series A Warrants or Warrant Shares or any actual or potential transferee of the rights or obligations hereunder that agrees to be bound by this Section 11(h), (iii) upon order, subpoena, or other process of any court or administrative agency or otherwise required by law, (iv) upon the request or demand of any regulatory agency or authority having jurisdiction over such party, (v) which has been publicly disclosed, (vi) which has been obtained from any Person that is not a party hereto or an affiliate of any such party, (vii) in connection with the exercise of any remedy, or the resolution of any dispute hereunder, (viii) to the legal counsel or certified public accountants for any holder of Series A Warrants or Warrant Shares, or (ix) as otherwise expressly contemplated by this Series A Warrant. Notwithstanding the foregoing, the Company shall not provide material, non-public information to the Warrant Holder without such Warrant Holder's written consent.

(i) Governing Law. THIS SERIES A WARRANT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK, EXCEPT AS OTHERWISE REQUIRED BY MANDATORY PROVISIONS OF LAW.

(j) Section Headings. The section headings used herein are for convenience of reference only and shall not be construed in any way to affect the interpretation of any provisions of the Series A Warrant.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Company has caused this Series A Warrant to be duly executed by its authorized signatory as of the day and year first above written.

TITAN PHARMACEUTICALS, INC., a Delaware corporation

By: _____

Name: _____

Title: _____

Address for Notices: 400 Oyster Point Blvd., Suite 505
South San Francisco, California 94080
Facsimile: (650) 244-4956

EXHIBIT A TO SERIES A WARRANT

Form of Notice of Exercise

_____, 20____

To: Titan Pharmaceuticals, Inc.

Reference is made to the Series A Warrant dated _____, 2012. Terms defined therein are used herein as therein defined.

The undersigned, pursuant to the provisions set forth in the Series A Warrant, hereby irrevocably elects and agrees to purchase _____ Shares, and makes payment herewith in full therefor at the Exercise Price of \$_____ in the following form:

_____.

[If the number of Shares as to which the Series A Warrant is being exercised is less than all of the Shares purchasable thereunder, the undersigned hereby requests that a new Series A Warrant representing the remaining balance of the Shares be registered in the name of _____, whose address is:

_____.]

The undersigned hereby represents that it is exercising the Series A Warrant for its own account or the account of an Affiliate and not with the view to any sale or distribution and that the Warrant Holder will not offer, sell or otherwise dispose of the Series A Warrant or any underlying Warrant Shares in violation of applicable securities laws.

[NAME OF WARRANT HOLDER]

By: _____

Name: _____

Title: _____

[ADDRESS OF WARRANT HOLDER]

TITAN PHARMACEUTICALS, INC.

SERIES B WARRANT

dated as of April [], 2012 (the “*Date of Issuance*”)

THIS CERTIFIES THAT, for value received, [] or its successors or permitted assigns (such Person and such successors and assigns each being the “*Warrant Holder*” with respect to the Series B Warrant (as herein defined) held by it), at any time and from time to time on or after the date of this Warrant (the “*Commencement Date*”) and on or prior to the Expiration Date (as herein defined), is entitled (a) to subscribe for the purchase from Titan Pharmaceuticals, Inc., a Delaware corporation (the “*Company*”), [] Shares (as herein defined) at a price per Share equal to the Exercise Price (as herein defined), and (b) to the other rights set forth herein; *provided* that the number of Shares issuable upon any exercise of this Warrant and the Exercise Price shall be adjusted and readjusted from time to time in accordance with Section 4. By accepting delivery hereof, the Warrant Holder agrees to be bound by the provisions hereof.

This Series B Warrant (the “*Series B Warrant*”) is issued as part of a series of similar Series B Warrants (collectively, the “*Series B Warrants*”) issued pursuant to that certain Subscription Agreement, dated as of April 9, 2012, by and among the Company and the other parties identified therein.

IN FURTHERANCE THEREOF, the Company irrevocably undertakes and agrees for the benefit of Warrant Holder as follows:

Section 1: Definitions and Construction.

(a) Certain Definitions. As used herein (the following definitions being applicable in both singular and plural forms):

“*Affiliate*” means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with such Person.

“*Appraised Value*” means at any time the fair market value thereof determined in good faith by the Board of Directors of the Company as of a date which is within ten (10) days of the date as of which the determination is to be made, subject to the rights of the Requisite Holders pursuant to Section 4(j).

“*Black Scholes Value*” means the value of this Series B Warrant based on the Black and Scholes Option Pricing Model obtained from the “OV” function on Bloomberg using (i) a price per share of Common Stock equal to the Weighted Average Price of the Common Stock for the trading day immediately preceding the date of consummation of the applicable Fundamental Transaction, (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Series B Warrant as of the date of consummation of the applicable Fundamental Transaction and (iii) an expected volatility equal to the greater of 100% and the 100-day volatility obtained from the HVT function on Bloomberg determined as of the trading day next following the date of the public announcement of the applicable Fundamental Transaction.

“*Bloomberg*” means Bloomberg Financial Markets.

“*Business Day*” means any day except a Saturday, Sunday or other day on which commercial banks in New York City are authorized by law to close.

“Change of Control” means any Fundamental Transaction other than (A) any reorganization, recapitalization or reclassification of the Common Stock, in which holders of the Company’s voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, the voting power of the surviving entity or entities necessary to elect a majority of the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities, or (B) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company.

“Closing Price” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the principal securities exchange on which the security is listed (the **“Principal Market”**), as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the foregoing does not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

“Commission” means the Securities and Exchange Commission or any other Federal agency administering the Securities Act at the time.

“Eligible Market” means the Principal Market, The New York Stock Exchange, Inc., The NYSE Amex, The NASDAQ Global Select Market or The NASDAQ Capital Market.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, or any successor Federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

“Exercise Amount” means for any number of Warrant Shares as to which this Series B Warrant is being exercised the product of (i) such number of Warrant Shares times (ii) the Exercise Price.

“Exercise Price” means \$0.85 per Warrant Share, as adjusted from time to time pursuant to Section 4.

“Expiration Date” means October [], 2012¹.

“Fundamental Transaction” means (A) a consolidation, merger, exchange of shares, recapitalization, reorganization, business combination or other similar event, (1) following which the holders of Common Stock immediately preceding such consolidation, merger, exchange, recapitalization, reorganization, combination or event either (a) no longer hold a majority of the shares of Common Stock

¹ 6 months from the Closing Date

or (b) no longer have the ability to elect a majority of the board of directors of the Company or (2) as a result of which shares of Common Stock shall be changed into (or the shares of Common Stock become entitled to receive) the same or a different number of shares of the same or another class or classes of stock or securities of the Company or another; (B) a sale or transfer of more than 50% of the Company's assets or a sale or transfer of any assets or proprietary rights relating to Probuphine or that are material to the operations and business of the Company; provided, however, that except for a sale of all or substantially all of the Company's assets, a collaborative arrangement, licensing agreement, joint venture or partnership or similar business arrangement providing for the development or commercial exploitation or, or right to develop or commercially exploit, the technology, intellectual property or products of the Company (including arrangements that involve the assignment or licensing of any existing or newly developed intellectual property under such arrangements) whereby income or profits are to be shared (including by lump sum royalty or running royalty) with any other entity shall not constitute a Major Transaction; (C) a purchase, tender or exchange offer made to the holders of outstanding shares of Common Stock, such that following such purchase, tender or exchange offer a Change of Control Transaction shall have occurred; or (D) the liquidation, bankruptcy, insolvency, dissolution or winding-up (or the occurrence of any analogous proceeding) affecting the Company.

"Initial Holder" means [].

"Parent Entity" of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

"Person" means an individual, a corporation, a partnership, an association, a trust or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

"Requisite Holders" means at any time holders of Warrant Shares and Series B Warrants representing at least two-thirds of the Warrant Shares outstanding or issuable upon the exercise of all the outstanding Series B Warrants.

"Securities Act" means the Securities Act of 1933, as amended, or any successor Federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Shares" means shares of the Company's currently authorized common stock, \$0.001 par value, and stock of any other class or other consideration into which such currently authorized common stock may hereafter have been changed into.

"Successor Entity" means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

"Trading Market" means the following markets or exchanges on which the Shares is listed or quoted for trading on the date in question: the Nasdaq Capital Market, the NYSE Amex, the New York Stock Exchange, the Nasdaq Global Market, the Nasdaq Global Select Market or the OTC Bulletin Board.

“**VWAP**” means for any date, the price determined by the first of the following clauses that applies: (a) if the Shares are then listed or quoted on a Trading Market, the daily volume weighted average price per Share for such date (or the nearest preceding date) on the Trading Market on which the Shares are then listed or quoted as reported by Bloomberg Financial L.P. (based on a Trading Day from 9:35 a.m. Eastern Time to 3:58 p.m. Eastern Time); (b) if the Shares are not then listed or quoted on a Trading Market and if prices for the Shares are then quoted on the OTC Bulletin Board, the volume weighted average price per share of the Shares for such date (or the nearest preceding date) on the OTC Bulletin Board; (c) if the Shares are not then listed or quoted on the OTC Bulletin Board and if prices for the Shares are then reported in the “Pink Sheets” published by the Pink OTC Markets Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Shares so reported; or (d) in all other cases, the fair market value of a share of Shares as determined by an independent appraiser selected in good faith by the Warrant Holder and reasonably acceptable to the Company.

“**Warrant Shares**” means the number of Shares issued or issuable upon exercise of this Series B Warrant as set forth in the introduction hereto, as adjusted from time to time pursuant to Section 4, or in the case of other Series B Warrants, issuable upon exercise of those Series B Warrants.

(b) Accounting Terms and Determinations. Unless otherwise specified herein, all accounting terms used herein shall be interpreted, all accounting determinations hereunder shall be made, and all financial statements required to be delivered hereunder shall be prepared, in accordance with generally accepted accounting principles. When used herein, the term “financial statements” shall include the notes and schedules thereto. References to fiscal periods are to fiscal periods of the Company.

(c) Computation of Time Periods. With respect to the computation of periods of time from a specified date to a later specified date, the word “from” means “from and including” and the words “to” and “until” each mean “to but excluding.” Periods of days shall be counted in calendar days unless otherwise stated.

(d) Construction. Unless the context requires otherwise, references to the plural include the singular and to the singular include the plural, references to any gender include any other gender, the part includes the whole, the term “including” is not limiting, and the term “or” has, except where otherwise indicated, the inclusive meaning represented by the phrase “and/or.” The words “hereof,” “herein,” “hereby,” “hereunder,” and similar terms in this Series B Warrant refer to this Series B Warrant as a whole and not to any particular provision of this Series B Warrant. Section, subsection, clause, exhibit, appendix and schedule references are to this Series B Warrant, unless otherwise specified. Any reference to this Series B Warrant includes any and all permitted alterations, amendments, changes, extensions, modifications, renewals, or supplements thereto or thereof, as applicable.

(e) Exhibits and Schedules. All of the exhibits, appendices and schedules attached hereto shall be deemed incorporated herein by reference.

(f) No Presumption Against Any Party. Neither this Series B Warrant nor any uncertainty or ambiguity herein or therein shall be construed or resolved using any presumption against any party hereto or thereto, whether under any rule of construction or otherwise. On the contrary, this Series B Warrant has been reviewed by each of the parties and their counsel and, in the case of any ambiguity or uncertainty, shall be construed and interpreted according to the ordinary meaning of the words used so as to fairly accomplish the purposes and intentions of all parties hereto.

Section 2: Exercise of Series B Warrant.

(a) **Exercise and Payment.** (i) The Warrant Holder may exercise this Warrant in whole or in part, at any time or from time to time on any Business Day on or after the Commencement Date and on or prior to the Expiration Date, by delivering to the Company a duly executed notice (a “**Notice of Exercise**”) in the form of Exhibit A (which notice may be sent by electronic mail to: bcrowley@titanpharm.com) and by payment to the Company of the Exercise Amount, at the election of the Warrant Holder, by wire transfer of immediately available funds to the account of the Company in an amount equal to the Exercise Amount not later than three Business Days after the Company receives the Notice of Exercise. (ii) If at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of, the Warrant Shares to the Warrant Holder, then, in lieu of making the cash payment otherwise contemplated in subsection (i) herein to be made to the Company upon such exercise in payment of the Exercise Amount, the Warrant Holder may elect instead to receive upon such exercise the number of Warrant Shares determined according to the following formula by means of a “cashless exercise”:

$$X = Y (A-B)/A$$

where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock for which this Series B Warrant is being exercised.

A = the Market Price of one (1) share of Common Stock (for purposes of this Section 2(a)(ii), where “Market Price,” as of any date, means the VWAP (as defined herein) of the Company’s Common Stock during the five (5) consecutive trading day period immediately prior to the date the Series B Warrant is exercised.

B = the Exercise Price.

The Company acknowledges that the provisions of subsection (ii) herein are intended, in part, to ensure that a full or partial exchange of this Warrant pursuant to such subsection (ii) will qualify as a conversion, within the meaning of paragraph (d)(3)(ii) of Rule 144 under the Securities Act. In the event that the Warrant Holder provides for payment of the Exercise Amount pursuant to subsection (i), the Warrant Holder shall be deemed to own the Warrant Shares on the date on which the Exercise Amount is received by the Company. In the event that the Warrant Holder provides for payment of the Exercise Amount pursuant to subsection (ii), the Warrant Holder shall be deemed to own the Warrant Shares on the date that the Exercise Notice is received by the Company. At the request of the Holder, the Company will accept reasonable modifications to the exchange procedures provided for in this Section 2 in order to accomplish such intent. For all purposes of this Warrant (other than this Section 2(a)), any reference herein to the exercise of this Warrant shall be deemed to include a reference to the exchange of this Warrant into Shares in accordance with the terms of subsection (ii).

(b) **Effectiveness and Delivery.** The Company shall confirm receipt of any Notice of Exercise delivered pursuant to Section 2(a) within one Business Day of the receipt thereof. As soon as practicable but not later than three Business Days after the Company shall have received such Notice of Exercise, and provided that payment of the Exercise Amount has been received by the Company, the Company shall execute and deliver or cause to be executed and delivered, in accordance with such Notice of Exercise, a certificate or certificates representing the number of Shares specified in such Notice of

Exercise, issued in the name of the Warrant Holder or in such other name or names of any Person or Persons designated in such Notice of Exercise (provided that, if a registration statement is not effective and the Warrant Holder directs the Company to deliver a certificate for the Warrant Shares in a name other than that of the Warrant Holder or an Affiliate of the Warrant Holder, it shall deliver to the Company on the Exercise Date an opinion of counsel reasonably satisfactory to the Company to the effect that the issuance of such Warrant Shares in such other name may be made pursuant to an available exemption from the registration requirements of the Securities Act and all applicable state securities or blue sky laws), (i) a certificate for the Warrant Shares issuable upon such exercise, free of restrictive legends, or (ii) an electronic delivery of the Warrant Shares to the Warrant Holder's account at the Depository Trust Company ("**DTC**") or a similar organization, unless in the case of clause (i) and (ii) a registration statement covering the resale of the Warrant Shares and naming the Warrant Holder as a selling stockholder thereunder is not then effective or the Warrant Shares are not freely transferable without volume restrictions pursuant to Rule 144(b) under the Securities Act, in which case such Warrant Holder shall receive a certificate for the Warrant Shares issuable upon such exercise with appropriate restrictive legends. Without prejudice to the holding periods determined under Rule 144 under the Securities Act, this Series B Warrant shall be deemed to have been exercised and such Share certificate or certificates shall be deemed to have been issued, and the Warrant Holder or other Person or Persons designated in such Notice of Exercise shall be deemed for all purposes to have become a holder of record of Shares, all as of the date that such Notice of Exercise and, if applicable, the Exercise Amount, shall have been received by the Company.

(c) Failure to Deliver Shares. If by the close of the third Business Day after delivery of a properly completed Notice of Exercise and payment of the Exercise Amount, if applicable, the Company fails to deliver to the Warrant Holder the required number of Warrant Shares in the manner required pursuant to Section 2(b), and if after such third Business Day and prior to the receipt of such Warrant Shares, the Warrant Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Warrant Holder of the Warrant Shares which the Warrant Holder anticipated receiving upon such exercise (a "**Buy-In**"), then the Company shall, within three (3) Business Days after the Warrant Holder's request and in the Warrant Holder's sole discretion, either (1) pay in cash to the Warrant Holder an amount equal to the Warrant Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to issue such Warrant Shares) shall terminate or (2) promptly honor its obligation to deliver to the Warrant Holder Warrant Shares and pay cash to the Warrant Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Warrant Shares, times (B) the closing bid price of a share of Common Stock on the date of receipt of a properly completed Notice of Exercise and, if applicable, Exercise Amount.

(d) Surrender of Series B Warrant. In the event of a partial exercise of the Series B Warrant, the Warrant Holder may surrender this Series B Warrant to the Company, in which event the Company shall execute and deliver to the Warrant Holder, at the time the Company delivers the Share certificate or certificates issued pursuant to such Notice of Exercise, a new Series B Warrant for the unexercised portion of the Series B Warrant, but in all other respects identical to this Series B Warrant. The Warrant Holder shall surrender this Series B Warrant to the Company within five Business Days after it delivers its final Notice of Exercise.

(e) Fractional Shares. The Company shall not be required to issue fractions of Shares upon an exercise of the Series B Warrant. If any fraction of a Share would, but for this restriction, be issuable upon an exercise of the Series B Warrant, in lieu of delivering such fractional Share, the Company shall

pay to the Warrant Holder, in cash, an amount equal to the same fraction times the Closing Price on the trading day immediately prior to the date of such exercise (or if there is no such Closing Price, then based on the Appraised Value as of such day).

(f) **Expenses and Taxes.** The Company shall pay all expenses, taxes and owner charges payable in connection with the preparation, issuance and delivery of certificates for the Warrant Shares and any new Series B Warrants, except that if the certificates for the Warrant Shares or the new Series B Warrants are to be registered in a name or names other than the name of the Warrant Holder, funds sufficient to pay all transfer taxes payable as a result of such transfer shall be paid by the Warrant Holder at the time of its delivery of the Notice of Exercise or promptly upon receipt of a written request by the Company for payment.

Section 3: Validity of Series B Warrant and Issuance of Shares.

(a) The Company represents and warrants that this Series B Warrant has been duly authorized, is validly issued, and constitutes the valid and binding obligation of the Company and is enforceable against the Company in accordance with its terms.

(b) The Company further represents and warrants that on the date hereof it is duly authorized and reserved, and the Company hereby agrees that it will at all times until the Expiration Date have duly authorized and reserved, such number of Shares as will be sufficient to permit the exercise in full of the Series B Warrant, and that all such Shares are and will be duly authorized and, when issued upon exercise of the Series B Warrant, will be validly issued, fully paid and non-assessable, and free and clear of all security interests, claims, liens, equities and other encumbrances.

Section 4: Adjustment Provisions. The Exercise Price in effect at any time, and the number of Warrant Shares that may be purchased upon any exercise of the Series B Warrant, shall be subject to change or adjustment as follows:

(a) **Share Reorganization.** If the Company shall subdivide its outstanding Shares into a greater number of Shares, by way of a stock split, stock dividend or otherwise, or consolidate its outstanding Shares into a smaller number of Shares (any such event being herein called a “**Share Reorganization**”), then (i) the Exercise Price shall be adjusted, effective immediately after the effective date of such Share Reorganization, to a price determined by multiplying the Exercise Price in effect immediately prior to such effective date by a fraction, the numerator of which shall be the number of Shares outstanding on such effective date before giving effect to such Share Reorganization and the denominator of which shall be the number of Shares outstanding after giving effect to such Share Reorganization, and (ii) the number of Shares subject to purchase upon exercise of this Series B Warrant shall be adjusted, effective at such time, to a number determined by multiplying the number of Shares subject to purchase immediately before such Share Reorganization by a fraction, the numerator of which shall be the number of Shares outstanding after giving effect to such Share Reorganization and the denominator of which shall be the number of Shares outstanding immediately before giving effect to such Share Reorganization.

(b) **Special Distributions.** If the Company shall issue or distribute to any holder or holders of Shares evidences of indebtedness, any other securities of the Company or any cash, property or other assets (excluding a Share Reorganization), whether or not accompanied by a purchase, redemption or other acquisition of Shares (any such non-excluded event being herein called a “**Special Distribution**”), then the Warrant Holder shall be entitled to a pro-rata share of such Special Distribution as though the

Warrant Holder had fully exercised this Series B Warrant immediately prior to the record date for such Special Distribution, and the Company shall pay or distribute such pro-rata share to Warrant Holder when paid or distributed to the holders of the Shares. A reclassification of the Shares (other than a change in par value, or from par value to no par value or from no par value to par value) into shares of any other class of stock shall be deemed to be a distribution by the Company to the holders of its Shares of such class of stock and, if the outstanding Shares shall be changed into a larger or smaller number of Shares as part of such reclassification, a Share Reorganization.

(c) Fundamental Transactions. Upon the occurrence of any Fundamental Transaction, any Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Series B Warrant referring to the "Company" shall refer instead to any Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Series B Warrant with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of the Fundamental Transaction, any Successor Entity shall deliver to the Warrant Holder confirmation that there shall be issued upon exercise of this Series B Warrant at any time after the consummation of the Fundamental Transaction, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property purchasable upon the exercise of the Series B Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), if any, that the Warrant Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Series B Warrant been exercised immediately prior to such Fundamental Transaction, as adjusted in accordance with the provisions of this Series B Warrant. In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which Warrant Holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a "*Corporate Event*"), the Company shall make appropriate provision to insure that the Warrant Holder will thereafter have the right to receive upon an exercise of this Series B Warrant within 90 days after the consummation of the Fundamental Transaction but, in any event, prior to the Expiration Date, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of the Series B Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the Warrant Holder would have been entitled to receive upon the happening of such Fundamental Transaction had the Series B Warrant been exercised immediately prior to such Fundamental Transaction. Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Warrant Holder. If Warrant Holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Warrant Holder shall be given the same choice as to the consideration it receives upon any exercise of this Series B Warrant following such Fundamental Transaction. The provisions of this Section shall apply similarly and equally to successive Fundamental Transactions and Corporate Events and shall be applied without regard to any limitations on the exercise of this Series B Warrant. Notwithstanding the foregoing, in the event of a Change of Control, at the request of the Warrant Holder delivered before the 90th day after such Change of Control, the Company (or the Successor Entity) shall purchase this Series B Warrant from the Warrant Holder by paying to the Warrant Holder, within five Business Days after such request (or, if later, on the effective date of the Fundamental Transaction), cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Series B Warrant on the date of such Change of Control.

(d) Adjustment of Exercise Price upon Issuance of Common Stock, Options, Convertible Securities, Etc. If at any time after the Date of Issuance for so long as any Series B Warrants are outstanding, the Company (A) issues or sells any Common Stock, Convertible Securities, warrants, or

Options or (B) directly or indirectly effectively reduces the conversion, exercise or exchange price for any Convertible Securities or Options which are currently outstanding, at or to an effective Per Share Selling Price (as defined below) which is less than the greater of (I) the closing sale price per share of the Common Stock on the Principal Market or any Eligible Market on which the Common Stock is traded on the trading day immediately preceding such issue or sale ("**Fair Market Price**"), or (II) the Exercise Price, then in each such case the Exercise Price in effect immediately prior to such issue or sale date, as applicable, shall be automatically reduced effective concurrently with such issue or sale to an amount determined by multiplying the Exercise Price then in effect by a fraction, (x) the numerator of which shall be the sum of (1) the number of shares of Common Stock outstanding immediately prior to such issue or sale, plus (2) the number of shares of Common Stock which the aggregate consideration received by the Company for such additional shares would purchase at such Fair Market Price or Exercise Price, as the case may be, and (y) the denominator of which shall be the number of shares of Common Stock of the Company outstanding immediately after such issue or sale. Provision (I) of this Section 5(d) shall not apply until such time as the Company has issued in one or a series of transactions after the date of this Series B Warrant, an aggregate number of shares of Common Stock in excess of 20% of the Company's outstanding Common Stock as of the date hereof (subject to any appropriate adjustments of the type referred to in Section 5(a)) (the "**Issuance Threshold**") as of the date hereof, and then such provision shall apply only to the extent of issuances in excess of the Issuance Threshold, and shall not apply to Exempt Issuances. Provision (II) of this Section 5(d) shall apply and be effective from and after the date hereof without regard to the Issuance Threshold and shall not apply to Exempt Issuances covered by the provisions of clauses (a) and (b) of the next succeeding paragraph.

As used herein, "Exempt Issuance" means the issuance of (a) shares of Common Stock or Options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose in the aggregate of 10% of the current outstanding shares of Common Stock, (b) Common Stock, Convertible Securities, warrants, or Options upon the exercise or exchange of or conversion of any securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

For the purposes of the foregoing adjustments, in the case of the issuance of any Convertible Securities or Options, the maximum number of shares of Common Stock issuable upon exercise, exchange or conversion of such Convertible Securities or Options shall be deemed to be outstanding, provided that no further adjustment shall be made upon the actual issuance of Common Stock upon exercise, exchange or conversion of such Convertible Securities or Options, and provided further that to the extent such Convertible Securities or Options expire or terminate unconverted or unexercised, then at such time the Exercise Price shall be readjusted as if such portion of such Convertible Securities or Options had not been issued.

For purposes of this Section 5(d), if an event occurs that triggers more than one of the above adjustment provisions, then only one adjustment shall be made and the calculation method which yields the greatest downward adjustment in the Exercise Price shall be used.

For purposes of determining the adjusted Exercise Price under this Section 5(d), the following shall be applicable:

(i) *Record Date*. If the Company takes a record of the holders of Common Stock for the purpose of entitling them (1) to receive a dividend or other distribution payable in Common Stock, Options or in Convertible Securities or (2) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issue or sale of the Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(ii) *Other Events*. If any event occurs of the type contemplated by the provisions of this Section 5(d) but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company's Board of Directors will make an appropriate adjustment in the Exercise Price so as to protect the rights of the Warrant Holder under this Series B Warrant; provided that no such adjustment will increase the Exercise Price as otherwise determined pursuant to this Section 5(d).

For purposes hereof:

“*Convertible Securities*” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Stock.

“*Options*” means any rights, warrants or options to subscribe for or purchase Common Stock or Convertible Securities.

(e) “*Per Share Selling Price*” shall include the amount actually paid by third parties for each share of Common Stock in a sale or issuance by the Company. In the event a fee is paid by the Company in connection with such transaction directly or indirectly to such third party or its affiliates, any such fee shall be deducted from the selling price pro rata to all shares sold in the transaction to arrive at the Per Share Selling Price. A sale of shares of Common Stock shall include the sale or issuance of Convertible Securities or Options, and in such circumstances the Per Share Selling Price of the Common Stock covered thereby shall also include the exercise, exchange or conversion price thereof (in addition to the consideration received by the Company upon such sale or issuance less the fee amount as provided above). In case of any such security issued in a transaction in which the purchase price or the conversion, exchange or exercise price is directly or indirectly subject to adjustment or reset based on a future date, future trading prices of the Common Stock, specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock, or otherwise (but excluding standard stock split anti-dilution provisions or weighted-average anti-dilution provisions similar to that set forth herein, provided that any actual reduction of such price under any such security pursuant to such weighted-average anti-dilution provision shall be included and cause an adjustment hereunder), the Per Share Selling Price shall be deemed to be the lowest conversion, exchange, exercise or reset price at which such securities are converted, exchanged, exercised or reset or might have been converted, exchanged, exercised or reset, or the lowest adjustment, as the case may be, over the life of such securities. If shares are issued for a consideration other than cash, the Per Share Selling Price shall be the fair value of such consideration as determined in good faith by independent certified public accountants

mutually acceptable to the Company and the Warrant Holder. In the event the Company directly or indirectly effectively reduces the conversion, exercise or exchange price for any Convertible Securities or Options which are currently outstanding, then the Per Share Selling Price shall equal such effectively reduced conversion, exercise or exchange price.

(f) Adjustment Rules.

(i) Any adjustments pursuant to this Section 4 shall be made successively whenever any event referred to herein shall occur, except that, notwithstanding any other provision of this Section 4, no adjustment shall be made to the number of Warrant Shares to be delivered to the Warrant Holder (or to the Exercise Price) if such adjustment represents less than 1% of the number of Warrant Shares previously required to be so delivered, but any lesser adjustment shall be carried forward and shall be made at the time and together with the next subsequent adjustment which together with any adjustments so carried forward shall amount to 1% or more of the number of Warrant Shares to be so delivered.

(ii) No adjustments shall be made pursuant to this Section 4 in respect of the issuance of Warrant Shares upon exercise of the Series B Warrant;

(iii) If the Company shall take a record of the holders of its Shares for any purpose referred to in this Section 4, then (x) such record date shall be deemed to be the date of the issuance, sale, distribution or grant in question and (y) if the Company shall legally abandon such action prior to effecting such action, no adjustment shall be made pursuant to this Section 4 in respect of such action.

(iv) In computing adjustments under this Section 4, (A) fractional interests in Shares shall be taken into account to the nearest one-thousandth of a Share, and (B) calculations of the Exercise Price shall be carried to the nearest one-thousandth of one cent.

(g) Proceedings Prior to Any Action Requiring Adjustment. As a condition precedent to the taking of any action which would require an adjustment pursuant to this Section 4, the Company shall take any action which may be necessary, including obtaining regulatory approvals or exemptions, in order that the Company may thereafter validly and legally issue as fully paid and nonassessable all Shares which the Warrant Holder is entitled to receive upon exercise of the Series B Warrant.

(h) Notice of Adjustment. Not less than 20 days prior to the record date or effective date, as the case may be, of any action which requires or might require an adjustment or readjustment pursuant to this Section 4, the Company shall give notice to the Warrant Holder of such event, describing such event in reasonable detail and specifying the record date or effective date, as the case may be, and, if determinable, the required adjustment and computation thereof. If the required adjustment is not determinable at the time of such notice, the Company shall give notice to the Warrant Holder of such adjustment and computation as soon as reasonably practicable after such adjustment becomes determinable. In connection with any such adjustment or readjustment, at its sole cost and expense, the Company will also cause independent certified public accountants of recognized national standing (which may be the regular auditors of the Company) selected by the Company to verify its computations and confirm that such computations were made in accordance with this Section 4 and, in connection with the preparation of the Company's quarterly financial statements prepare a report setting forth such adjustment or readjustment and showing in reasonable detail the method of calculation thereof and the facts upon which such adjustment or readjustment is based, including a statement of (i) the number of Shares outstanding or deemed to be outstanding, and (ii) the Exercise Price in effect immediately prior to such issue or sale and as adjusted and readjusted (if required by this Section 4) on account thereof. The

Company will forthwith mail a copy of each such report to the Warrant Holder and will, upon the written request at any time of the Warrant Holder, furnish to such holder a like report setting forth the Exercise Price at the time in effect and showing in reasonable detail how it was calculated. The Company will also keep copies of all such reports at its office and will cause the same to be available for inspection at such office during normal business hours by the Warrant Holder or any prospective purchaser of this Series B Warrant designated by the Warrant Holder.

(i) Disputes. Any dispute which arises between the Warrant Holder and the Company with respect to the calculation of the adjusted Exercise Price or Warrant Shares issuable upon exercise shall be determined by the independent auditors of the Company in accordance with the terms of this Series B Warrant, and such determination shall be binding upon the Company and the holders of the Series B Warrants and the Warrant Shares if made in good faith and without manifest error.

(j) Other Actions Affecting Shares.

(i) Equitable Equivalent. In case any event shall occur as to which the provisions of this Section 4 set forth above hereof are not strictly applicable but the failure to make any adjustment would not, or if the application of the provisions of this Section 4 otherwise would not, in the opinion of the Warrant Holder, fairly protect the purchase rights represented by this Series B Warrant in accordance with the essential intent and principles of this Section 4, then, in each such case, at the request of the Warrant Holder, the Company shall appoint a firm of independent investment bankers of recognized national standing (which shall be completely independent of the Company and shall be satisfactory to the Warrant Holder or the Requisite Holders), which shall give their opinion upon the adjustment, if any, on a basis consistent with the essential intent and principles established in this Section 4, necessary to preserve the purchase rights of such Warrant Holder represented by this Series B Warrant. Upon receipt of such opinion, the Company will promptly mail a copy thereof to the holder of this Series B Warrant and shall make the adjustments described therein.

(ii) No Avoidance. The Company shall not, by amendment of its certificate of incorporation or bylaws or through any consolidation, merger, reorganization, transfer of assets, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Series B Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder of this Series B Warrant against dilution or other impairment as if the holder was a stockholder of the Company entitled to the benefit of fiduciary duties afforded to stockholders under Delaware law.

(k) Adjustment of Par Value. If for any reason (including the operation of the adjustment provisions set forth in this Series B Warrant), the Exercise Price on any date of exercise of this Series B Warrant shall not be lawful and adequate consideration for the issuance of the relevant Warrant Shares, then the Company shall take such steps as are necessary (including the amendment of its certificate of incorporation so as to reduce the par value of the Shares) to cause such Exercise Price to be adequate and lawful consideration on the date the payment thereof is due, but if the Company shall fail to take such steps, then the Company acknowledges that the Warrant Holder shall have been damaged by the Company in an amount equal to an amount, that, when added to the total Exercise Price for the relevant Warrant Shares, would equal lawful and adequate consideration for the issuance of such Warrant Shares, and the Company irrevocably agrees that if the Warrant Holder shall then forgive the right to recover such damages from the Company, such forgiveness shall constitute, and Company shall accept such forgiveness as, additional lawful consideration for the issuance of the relevant Warrant Shares.

(l) Appraisal.

(i) If the Requisite Holders shall, for any reason whatsoever, disagree with the Company's determination of the Appraised Value of a Share, then such holders shall by notice to the Company (an "**Appraisal Notice**") given within sixty (60) days after the Company notifies the holders of such determination, elect to dispute such determination, and such dispute shall be resolved as set forth in clause (ii) of this Section.

(ii) The Company shall within ten (10) days after an Appraisal Notice has been given, engage an independent investment bank of national repute (the "**Appraiser**") selected by the Requisite Holders and retained pursuant to an engagement letter between the Company and the Appraiser with respect to such valuation in form and substance reasonably acceptable to Requisite Holders, to make an independent determination of the Appraised Value of a Share; such value shall be determined without deduction for (a) liquidity considerations, (b) minority stockholder status, or (c) any liquidation or other preference or any right of redemption in favor of any other equity securities of the Company. The costs of engagement of such investment bank for any such determination of Appraised Value shall be paid by the Company.

Section 5: Restrictions on Exercise. The Company shall provide to the Warrant Holder prompt written notice of any time that the Company is unable to issue the Warrant Shares via DTC transfer (or otherwise without restrictive legend), because (A) the Commission has issued a stop order with respect to the Registration Statement on Form S-3 (File No. 333-178656) (the "**Registration Statement**"), (B) the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, (C) the Company has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, or (D) the Registration Statement is otherwise not then effective (each a "**Restrictive Legend Event**"). To the extent that a Restrictive Legend Event occurs after the Warrant Holder has exercised this Series B Warrant but prior to the delivery of the Warrant Shares, the Company shall (i) if the VWAP over the last five consecutive trading days is greater than the Exercise Price, provide written notice to the Warrant Holder that the Company will deliver that number of Warrant Shares to the Warrant Holder as should be delivered in a cashless exercise in accordance with subsection (ii) of Section 2(a), and return to the Warrant Holder all consideration paid to the Company in connection with the Warrant Holder's attempted exercise of this Series B Warrant (a "**Company-Elected Conversion**"), or (ii) at the election of the Warrant Holder to be given within five (5) days of receipt of notice of a Company-Elected Conversion, the Warrant Holder shall be entitled to rescind the previously submitted Notice of Exercise and the Company shall return all consideration paid by Warrant Holder for such shares upon such rescission. The Company shall provide to the Warrant Holder prompt written notice of the termination of the Restrictive Legend Event. If a Restricted Legend Event is occurring as of the Expiration Date, the term of this Series B Warrant shall be extended until the fifth (5th) business day after the termination of such Restricted Legend Event. For purposes of clarity, notwithstanding a Restrictive Legend Event, the Warrant Holder has the right to exercise this Series B Warrant in accordance with subsection (ii) of Section 2(a).

The Warrant Holder understands that if the Company does not file reports pursuant to either Section 13(a) or Section 15(d) of the Exchange Act, or if a registration statement covering this Series B Warrant or the Warrant Shares, as applicable, is not in effect when it desires to sell (i) the rights to purchase Shares pursuant to this Series B Warrant or (ii) the Shares issuable upon exercise of the right to purchase, the Warrant Holder may be required to hold such securities for an indefinite period. The Warrant Holder also understands that any sale of (A) its rights hereunder to purchase Shares or (B) Shares issued or issuable hereunder that might be made by it in reliance upon Rule 144 under the Securities Act may be made only

in accordance with the terms and conditions of Rule 144. The Warrant Holder hereby acknowledges and agrees that if a registration statement under the Securities Act covering the Warrant Shares is not effective at the time this Series B Warrant is exercised, the Warrant Holder shall only be permitted to exercise this Series B Warrant by means of a net issuance pursuant to subsection (ii) of Section 2(a).

Section 6: Transfer of Series B Warrant. This Series B Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, subject to applicable securities laws.

Section 7: Identity of Transfer Agent. The Transfer Agent for the Shares is Continental Stock Transfer & Trust Company, LLC. Upon the appointment of any subsequent transfer agent for the Shares, the Company will mail to the Warrant Holder a statement setting forth the name and address of such transfer agent.

Section 8: Lost, Mutilated or Missing Series B Warrants. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of any Series B Warrant, and, in the case of loss, theft or destruction, upon receipt of indemnification satisfactory to the Company (in the case of the Initial Holder its unsecured, unbonded agreement of indemnity or affidavit of loss shall be sufficient) or, in the case of mutilation, upon surrender and cancellation of the mutilated Series B Warrant, the Company shall execute and deliver a new Series B Warrant of like tenor and representing the right to purchase the same aggregate number of Warrant Shares.

Section 9: Limitation on Exercise. Notwithstanding anything to the contrary contained herein, the number of Warrant Shares that may be acquired by the Warrant Holder upon any exercise of this Series B Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to ensure that, following such exercise (or other issuance), the total number of Shares then beneficially owned by the Warrant Holder and any other Persons whose beneficial ownership of Shares would be aggregated with the Warrant Holder's for purposes of Section 13(d) of the Exchange Act, does not exceed 4.99% of the total number of then issued and outstanding Shares (including for such purpose the Shares issuable upon such exercise). For such purposes, beneficial ownership shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Warrant Holder that the Company is not representing to such Warrant Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and such Warrant Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 9 applies, the determination of whether this Series B Warrant is exercisable (in relation to other securities owned by such Warrant Holder) and of which portion of this Series B Warrant is exercisable shall be in the sole discretion of the Warrant Holder, and the submission of a Notice of Exercise shall be deemed to be the Warrant Holder's determination of whether this Series B Warrant is exercisable (in relation to other securities owned by such Warrant Holder) and of which portion of this Series B Warrant is exercisable, in each case subject to such aggregate percentage limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 9, in determining the number of outstanding Shares, the Warrant Holder may rely on the number of outstanding Shares as reflected in (x) the Company's most recent Form 10-Q or Form 10-K, as the case may be, (y) a more recent public announcement by the Company or (z) any other notice by the Company or the Company's transfer agent setting forth the number of Shares outstanding. Upon the written request of the Warrant Holder, the Company shall within three Business Days confirm orally and in writing to such Warrant Holder the number of Shares. This provision shall not restrict the number of Shares which a Warrant Holder may receive or beneficially own in order to determine the amount of securities or other

consideration that such Warrant Holder may receive in the event of a transaction contemplated in Section 4 of this Series B Warrant. By written notice to the Company, which will not be effective until the 61st day after such notice is delivered to the Company, the Warrant Holder may waive the provisions of this Section 9 (but such waiver will not affect any other holder) to change the beneficial ownership limitation to 9.99% of the number of Shares outstanding immediately after giving effect to the issuance of Shares upon exercise of this Series B Warrant, and the provisions of this Section 9 shall continue to apply. Upon such a change by a Warrant Holder of the beneficial ownership limitation from such 4.99% limitation to such 9.99% limitation, the beneficial ownership limitation may not be further waived by such Warrant Holder.

Section 10: Waivers; Amendments. Any provision of this Series B Warrant may be amended or waived with (but only with) the written consent of the Company and the Warrant Holder. No failure or delay of the Company or the Warrant Holder in exercising any power or right hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereon or the exercise of any other right or power. No notice or demand on the Company in any case shall entitle the Company to any other or future notice or demand in similar or other circumstances. The rights and remedies of the Company and the Warrant Holder hereunder are cumulative and not exclusive of any rights or remedies which it would otherwise have.

Section 11: Miscellaneous.

(a) Stockholder Rights. The Series B Warrant shall not entitle any Warrant Holder, prior to the exercise of the Series B Warrant, to any voting rights as a stockholder of the Company.

(b) Expenses. The Company shall pay all reasonable expenses of the Warrant Holder, including reasonable fees and disbursements of counsel, in connection with the preparation of the Series B Warrant, any waiver or consent hereunder or any amendment or modification hereof (regardless of whether the same becomes effective), or the enforcement of the provisions hereof; *provided* that the Company shall not be required to pay any expenses of the Warrant Holder arising solely in connection with a transfer of the Series B Warrant.

(c) Successors and Assigns. All the provisions of this Series B Warrant by or for the benefit of the Company or the Warrant Holder shall bind and inure to the benefit of their respective successors and assigns.

(d) Severability. In case any one or more of the provisions contained in this Series B Warrant shall be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby. The parties shall endeavor in good faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

(e) Notices. Any notice or other communication hereunder shall be in writing and shall be sufficient if sent by facsimile or first-class mail or courier, postage prepaid, and addressed as follows: (a) if to the Company, addressed to the Company at its address for notices as set forth below its signature hereon or any other address as the Company may hereafter notify to the Warrant Holder and (b) if to the Warrant Holder, addressed to such address as the Warrant Holder may hereafter from time to time notify to the Company for the purposes of notice hereunder.

(f) Equitable Remedies. Without limiting the rights of the Company and the Warrant Holder to pursue all other legal and equitable rights available to such party for the other parties' failure to perform its obligations hereunder, the Company and the Warrant Holder each hereto acknowledge and agree that the remedy at law for any failure to perform any obligations hereunder would be inadequate and that each shall be entitled to specific performance, injunctive relief or other equitable remedies in the event of any such failure.

(g) Continued Effect. Rights and benefits conferred on the holders of Warrant Shares pursuant to the provisions hereof shall continue to inure to the benefit of, and shall be enforceable by, such holders, notwithstanding the surrender of the Series B Warrant to, and its cancellation by, the Company upon the full or partial exercise or repurchase hereof.

(h) Confidentiality. The Warrant Holder agrees to keep confidential any proprietary information relating to the Company delivered by the Company hereunder; *provided* that nothing herein shall prevent the Warrant Holder from disclosing such information: (i) to any holder of Series B Warrants or Warrant Shares, (ii) to any Affiliate of any holder of Series B Warrants or Warrant Shares or any actual or potential transferee of the rights or obligations hereunder that agrees to be bound by this

Section 11(h), (iii) upon order, subpoena, or other process of any court or administrative agency or otherwise required by law, (iv) upon the request or demand of any regulatory agency or authority having jurisdiction over such party, (v) which has been publicly disclosed, (vi) which has been obtained from any Person that is not a party hereto or an affiliate of any such party, (vii) in connection with the exercise of any remedy, or the resolution of any dispute hereunder, (viii) to the legal counsel or certified public accountants for any holder of Series B Warrants or Warrant Shares, or (ix) as otherwise expressly contemplated by this Series B Warrant. Notwithstanding the foregoing, the Company shall not provide material, non-public information to the Warrant Holder without such Warrant Holder's written consent.

(i) Governing Law. THIS SERIES B WARRANT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK, EXCEPT AS OTHERWISE REQUIRED BY MANDATORY PROVISIONS OF LAW.

(j) Section Headings. The section headings used herein are for convenience of reference only and shall not be construed in any way to affect the interpretation of any provisions of the Series B Warrant.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Company has caused this Series B Warrant to be duly executed by its authorized signatory as of the day and year first above written.

TITAN PHARMACEUTICALS, INC., a Delaware corporation

By: _____

Name: _____

Title: _____

Address for Notices: 400 Oyster Point Blvd., Suite 505
South San Francisco, California 94080
Facsimile: (650) 244-4956

EXHIBIT A TO SERIES B WARRANT

Form of Notice of Exercise

_____, 20____

To: Titan Pharmaceuticals, Inc.

Reference is made to the Series B Warrant dated _____, 2012. Terms defined therein are used herein as therein defined.

The undersigned, pursuant to the provisions set forth in the Series B Warrant, hereby irrevocably elects and agrees to purchase _____ Shares, and makes payment herewith in full therefor at the Exercise Price of \$_____ in the following form:

[If the number of Shares as to which the Series B Warrant is being exercised is less than all of the Shares purchasable thereunder, the undersigned hereby requests that a new Series B Warrant representing the remaining balance of the Shares be registered in the name of _____, whose address is:

_____.]

The undersigned hereby represents that it is exercising the Series B Warrant for its own account or the account of an Affiliate and not with the view to any sale or distribution and that the Warrant Holder will not offer, sell or otherwise dispose of the Series B Warrant or any underlying Warrant Shares in violation of applicable securities laws.

[NAME OF WARRANT HOLDER]

By: _____

Name: _____

Title: _____

[ADDRESS OF WARRANT HOLDER]

AMENDMENT NO. 2 TO RIGHTS AGREEMENT

This AMENDMENT (this “Amendment”) to the Rights Agreement (the “Rights Agreement”), dated as of December 20, 2011 by and between Titan Pharmaceuticals, Inc., a Delaware company (the “Company”), and Continental Stock Transfer & Trust Company, a New York banking corporation (the “Rights Agent”) is made as of April 9, 2012. Capitalized terms used herein and not otherwise defined shall have the meanings ascribed to such terms in the Rights Agreement (as defined below).

R E C I T A L S

WHEREAS, the Company has entered into subscription agreements (the “Subscription Agreements”) of even date herewith certain investors (the “Investors”) pursuant to which the Company will issue (x) shares of its common stock, \$0.001 per share (“Common Stock”) and (y) warrants to purchase shares of its Common Stock to the Investors; and

WHEREAS, pursuant to Section 27 of the Rights Agreement, the Company, by action of the board of directors of the Company (the “Board”), may from time to time and in its sole and absolute discretion, and the Rights Agent shall if the Company so directs, supplement or amend any provision of the Rights Agreement in any respect without the approval of any holders of rights; and

WHEREAS, in order to induce the Investors to enter into the Subscription Agreements, the Company has agreed to amend the Rights Agreement as set forth below.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto hereby agree as follows:

1. Amendment. The parties to the Rights Agreement hereby amend the Rights Agreement, as of the date hereof, by amending Section 1(l) of the Rights Agreement to read in its entirety as follows:

“(l) “Exempted Entity shall mean (i) the Company, (ii) any Subsidiary (as defined below) of the Company (in the case of subclauses (i) and (ii) including, without limitation, in its fiduciary capacity), (iii) any employee benefit plan of the Company or of any Subsidiary of the Company, (iv) any entity or trustee holding (or acting in a fiduciary capacity in respect of) Common Stock for or pursuant to the terms of any such plan or for the purpose of funding any such plan or funding other employee benefits for employees of the Company or of any Subsidiary of the Company or (v) any Person who becomes the Beneficial Owner of 15% or more of the Common Stock then outstanding as a result of the purchase of securities pursuant to the Company’s Registration Statement on Form S-3 (File No. 333-178656) and/or any amendment or supplement thereto; provided, however, that if such Person becomes the Beneficial Owner of 40% or more of the Common Stock then outstanding, such Person shall cease to be an Exempted Entity and shall be deemed to be an “Acquiring Person.”

2. Governing Law; Jurisdiction. This Amendment shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed in the State of New York.

3. Counterparts. This Amendment may be executed in two or more counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party.

4. Severability. If any provision of this Amendment shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Amendment or the validity or enforceability of this Amendment in any other jurisdiction.

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first written above.

TITAN PHARMACEUTICALS, INC.

By: /s/ Sunil Bhonsle
Name: Sunil Bhonsle
Title: President

**CONTINENTAL STOCK TRANSFER & TRUST
COMPANY**

By: /s/ John W. Comer, Jr.
Name: John W. Comer, Jr.
Title: Vice President

SUBSCRIPTION AGREEMENT

TITAN PHARMACEUTICALS, INC.
400 Oyster Point Blvd., Suite 505
South San Francisco, California 94080

Ladies and Gentlemen:

The undersigned (the “**Investor**”) hereby confirms its agreement with Titan Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), as follows:

1. This Subscription Agreement, including the Terms and Conditions for Purchase of Securities attached hereto as Annex I (collectively, this “**Agreement**”) is made as of the latest date set forth on the signature page hereto between the Company and the Investor.

2. The Company has authorized the sale and issuance to certain investors of up to an aggregate of (i) 6,517,648 shares (the “**Shares**”) of its common stock, par value \$0.001 per share (the “**Common Stock**”), (ii) Series A warrants (the “**Series A Warrants**”) to purchase up to an aggregate of 6,517,648 shares of Common Stock in substantially the form attached hereto as Exhibit B, subject to adjustment by the Company’s Board of Directors or a committee thereof and (iii) Series B warrants (the “**Series B Warrants**”) and together with the Series A Warrants, the “**Warrants**”) to purchase up to an aggregate of 6,517,648 shares of Common Stock in substantially the form attached hereto as Exhibit C, subject to adjustment by the Company’s Board of Directors or a committee thereof, for an aggregate purchase price of \$0.85 per Share, Series A Warrant and Series B Warrant (the “**Purchase Price**”). The Investor will receive a Series A Warrant to purchase 1 share of Common Stock for each Share purchased. The Investor will receive a Series B Warrant to purchase 1 share of Common Stock for each Share purchased. The Shares and Warrants are immediately separable and will be issued separately. The shares of Common Stock issuable upon exercise of the Warrants are referred to herein as the “**Warrant Shares**” and, together with the Shares and the Warrants, are referred to herein as the “**Securities**”).

3. The offering and sale of the Shares and Warrants (the “**Offering**”) are being made pursuant to (a) an effective Registration Statement on Form S-3 (File No. 333-178656) (the “**Registration Statement**”) filed by the Company with the Securities and Exchange Commission (the “**Commission**”), including the prospectus contained therein (the “**Base Prospectus**”), (b) if applicable, certain “free writing prospectuses” (as that term is defined in Rule 405 under the Securities Act of 1933, as amended (the “**Act**”), that have been or will be filed by

the Company with the Commission and delivered to the Investor on or prior to the date hereof (the “**Issuer Free Writing Prospectus**”), containing certain supplemental information regarding the Securities, the terms of the Offering and the Company and (c) a prospectus supplement (the “**Prospectus Supplement**” and, together with the Base Prospectus, the “**Prospectus**”) containing certain supplemental information regarding the Securities and terms of the Offering that has been or will be filed with the Commission and delivered to the Investor (or made available to the Investor by the filing by the Company of an electronic version thereof with the Commission).

4. The Company and the Investor agree that the Investor will purchase from the Company and the Company will issue and sell to the Investor the Shares and Warrants set forth below for the aggregate purchase price set forth below. The Shares and Warrants shall be purchased pursuant to the Terms and Conditions for Purchase of Securities attached hereto as Annex I and incorporated herein by this reference as if fully set forth herein. The Investor acknowledges that the Offering is not being underwritten by the Placement Agent (the “**Placement Agent**”) named in the Prospectus Supplement and that there is no minimum offering amount.

5. The manner of settlement of the Shares and Warrants purchased by the Investor shall be as follows:

A. The Shares shall be delivered by crediting the account of the Investor’s prime broker (as specified by such Investor on Exhibit A annexed hereto) with the Depository Trust Company (“**DTC**”) through its Deposit/Withdrawal At Custodian (“**DWAC**”) system, whereby Investor’s prime broker shall initiate a DWAC transaction on the Closing Date (as defined in Annex I) using its DTC participant identification number, and released by Continental Stock Transfer & Trust Company, LLC, the Company’s transfer agent (the “**Transfer Agent**”), at the Company’s direction. **NO LATER THAN ONE (1) BUSINESS DAY AFTER THE EXECUTION OF THIS AGREEMENT BY THE INVESTOR AND THE COMPANY, THE INVESTOR SHALL:**

- (I) DIRECT THE BROKER-DEALER AT WHICH THE ACCOUNT OR ACCOUNTS TO BE CREDITED WITH THE SHARES ARE MAINTAINED TO SET UP A DWAC INSTRUCTING THE TRANSFER AGENT TO CREDIT SUCH ACCOUNT OR ACCOUNTS WITH THE SHARES, AND**
- (II) REMIT BY WIRE TRANSFER THE AMOUNT OF FUNDS EQUAL TO THE AGGREGATE PURCHASE PRICE FOR THE SHARES AND WARRANTS BEING PURCHASED BY THE INVESTOR TO THE FOLLOWING ACCOUNT:**

; provided, however, that, in lieu of remittance of the aggregate Purchase Price to the account described above, if the Company and Placement Agent agree (pursuant to the Placement Agreement (as defined on Annex I) or otherwise) that the funds of Investor shall be deposited in an escrow account with a commercial bank or trust company ("**Escrow Account**") in connection with the closing of the transactions contemplated herein, Investor shall remit by wire transfer the amount of funds equal to the aggregate Purchase Price for the Shares and Warrants being purchased by the Investor to the Escrow Account in accordance with the delivery instructions provided by the Placement Agent, which funds shall be distributed pursuant to the terms of the escrow agreement between the Company and the Placement Agent which governs the Escrow Account.

IT IS THE INVESTOR'S RESPONSIBILITY TO (A) MAKE THE NECESSARY WIRE TRANSFER OR CONFIRM THE PROPER ACCOUNT BALANCE IN A TIMELY MANNER AND (B) ARRANGE FOR SETTLEMENT BY WAY OF DWAC IN A TIMELY MANNER. IF THE INVESTOR DOES NOT DELIVER THE AGGREGATE PURCHASE PRICE FOR THE SHARES AND WARRANTS OR DOES NOT MAKE PROPER ARRANGEMENTS FOR SETTLEMENT IN A TIMELY MANNER, THE SHARES AND WARRANTS WILL NOT BE DELIVERED AT CLOSING TO THE INVESTOR OR THE INVESTOR MAY BE EXCLUDED FROM THE CLOSING ALTOGETHER.

B. [RESERVED]

C. The executed Warrants shall be delivered in physical form to the Investor by facsimile with the original by overnight courier to the address set forth on the signature page hereto.

6. The Investor represents that, except as set forth below, (a) it has had no position, office or other material relationship within the past three years with the Company or persons known to it to be affiliates of the Company, (b) it is not a member of the Financial Industry Regulatory Authority, Inc. or an Associated Person (as such term is defined under the NASD Membership and Registration Rules Section 1011) as of the Closing, and (c) neither the Investor nor any group of Investors (as identified in a public filing made with the Commission) of which the Investor is a part in connection with the Offering of the Securities, acquired, or obtained the right to acquire, 15% or more of the Common Stock (or securities convertible into or exercisable for Common Stock) or the voting power of the Company on a post-transaction basis. Exceptions:

(If no exceptions, write "none." If left blank, response will be deemed to be "none.")

7. The Investor represents that it has received (or otherwise had made available to it by the filing by the Company of an electronic version thereof with the Commission) the Base Prospectus which is a part of the Company's Registration Statement, the documents incorporated by reference therein and any free writing prospectus (collectively, the "**Disclosure Package**"), prior to or in connection with the receipt of this Agreement. The Investor acknowledges that, prior to the delivery of this Agreement to the Company, the Investor will receive certain additional information regarding the Offering, including pricing information (the "**Offering Information**"). Such information may be provided to the Investor by any means permitted under the Act, including the Prospectus Supplement, a free writing prospectus and oral communications.

8. No offer by the Investor to buy Shares and Warrants will be accepted and no part of the Purchase Price will be delivered to the Company until the Investor has received the Offering Information and the Company has accepted such offer by countersigning a copy of this Agreement, and any such offer may be withdrawn or revoked, without obligation or commitment of any kind, at any time prior to the Company (or Placement Agent on behalf of the Company) sending (orally, in writing or by electronic mail) notice of its acceptance of such offer. An indication of interest will involve no obligation or commitment of any kind until the Investor has been delivered the Offering Information and this Agreement is accepted and countersigned by or on behalf of the Company.

9. Other than information to be disclosed on a Current Report on Form 8-K in connection with the Offering, the Company acknowledges that the only material, non-public information relating to the Company it has provided to the Investor in connection with the Offering prior to the date hereof is the existence of the Offering.

(Remainder of this page intentionally left blank; signatures begin on the next page.)

Number of Shares: _____

Number of Series A Warrants: _____
(such number equal to 100% of the number of Shares being purchased by the Investor)

Number of Series B Warrants: _____
(such number equal to 100% of the number of Shares being purchased by the Investor)

Aggregate Purchase Price Per Share and Warrants: \$0.85

Aggregate Purchase Price: \$_____

Please confirm that the foregoing correctly sets forth the agreement between us by signing in the space provided below for that purpose.

Dated as of: April __, 2012

INVESTOR

By: _____

Print Name: _____

Title: _____

Address: _____

Agreed and Accepted
this ____ day of April, 2012:

TITAN PHARMACEUTICALS, INC.

By: _____

Name:

Title:

ANNEX I

TERMS AND CONDITIONS FOR PURCHASE OF SECURITIES

1. Authorization and Sale of Securities. Subject to the terms and conditions of this Agreement, the Company has authorized the sale of the Shares and the Warrants.

2. Agreement to Sell and Purchase the Shares and Warrants; Placement Agent.

2.1 At the Closing (as defined in Section 3.1), the Company will sell to the Investor, and the Investor will purchase from the Company, upon the terms and conditions set forth herein, the number of Shares and Warrants set forth on the last page of the Agreement to which these Terms and Conditions for Purchase of Securities are attached as Annex I (the “**Signature Page**”) for the aggregate purchase price therefor set forth on the Signature Page.

2.2 The Company proposes to enter into substantially this same form of Subscription Agreement with certain other investors (the “**Other Investors**”) and expects to complete sales of Shares and Warrants to them. The Investor and the Other Investors are hereinafter sometimes collectively referred to as the “**Investors**”, and this Agreement and the Subscription Agreements executed by the Other Investors are hereinafter sometimes collectively referred to as the “**Agreements**”.

2.3 Investor acknowledges that the Company has agreed to pay Rodman & Renshaw, LLC (the “**Placement Agent**”) a fee (the “**Placement Fee**”) in respect of the sale of Shares and Warrants to the Investor.

2.4 The Company has entered into a Placement Agent Agreement, dated April 9, 2012 (the “**Placement Agreement**”), with the Placement Agent that contains certain representations, warranties, covenants and agreements of the Company that may be relied upon by the Investor, which shall be a third party beneficiary thereof. The Company confirms that neither it nor any other person acting on its behalf has provided the Investor or its agents or counsel with any information that constitutes or could reasonably be expected to constitute material, nonpublic information, except as will be disclosed in the Prospectus and the Company’s Current Report on Form 8-K filed with the Commission in connection with the Offering. The Company understands and confirms that the Investor will rely on the foregoing representation in effecting transactions in securities of the Company.

2.5 Anything in this Agreement, the Placement Agreement or elsewhere herein or therein to the contrary notwithstanding (except for Section 4.5 hereof as to the Investors), it is understood and agreed by the Company (i) that none of the Investors or any person to whom an offer of Securities has been made (each, an “**Offeree**”) has been asked to agree, nor has any Investor or Offeree agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or “derivative” securities based on securities issued by the Company or to hold the Shares, the Warrants, securities of the Company, or “derivative” securities based on securities issued by the Company for any specified term; (ii) that past or future open market or other transactions by any Investor or Offeree, including without limitation, Short Sales (as defined below) or “derivative” transactions, before or after the closing of this or

future private placement transactions, may negatively impact the market price of the Company's publicly-traded securities; (iii) that any Investor or Offeree, and counter parties in "derivative" transactions to which any such Investor or Offeree is a party, directly or indirectly, presently may have a "short" position in the Common Stock, and (iv) that no Investor or Offeree shall be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction.

3. Closings and Delivery of the Shares and Warrants and Funds; Prohibition on Subsequent Equity Sales by the Company.

3.1 Closing. The completion of the purchase and sale of the Shares and Warrants (the "**Closing**") shall occur at a place and time (the "**Closing Date**") to be specified by the Company and the Placement Agent, and of which the Investors will be notified in advance by the Placement Agent, in accordance with Rule 15c6-1 promulgated under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"). At the Closing, (a) the Company shall (i) cause the Transfer Agent to deliver to the Investor the number of Shares and (ii) cause to be delivered to the Investor the number of Warrants, each as set forth on the Signature Page, registered in the name of the Investor or, if so indicated on the Investor Questionnaire attached hereto as Exhibit A, in the name of a nominee designated by the Investor and (b) the aggregate purchase price for the Shares and Warrants being purchased by the Investor will be delivered by or on behalf of the Investor to the Company (or, as provided herein, to the Escrow Account).

3.2 Conditions to the Obligations of the Parties.

(a) **Conditions to the Company's Obligations.** The Company's obligation to issue and sell the Shares and Warrants to the Investor shall be subject to: (i) the receipt by the Company of the Purchase Price for the Shares and Warrants being purchased hereunder as set forth on the Signature Page and (ii) the accuracy of the representations and warranties made by the Investor and the fulfillment of those undertakings of the Investor to be fulfilled prior to the Closing Date.

(b) **Conditions to the Investor's Obligations.** The Investor's obligation to purchase the Shares and Warrants will be subject to the accuracy of the representations and warranties made by the Company and the fulfillment of those undertakings of the Company to be fulfilled prior to the Closing Date, including without limitation, those contained in the Placement Agreement, and to the condition that the Placement Agent shall not have: (i) terminated the Placement Agreement pursuant to the terms thereof or (ii) determined that the conditions to the Closing in the Placement Agreement have not been satisfied. The Investor's obligations are expressly not conditioned on the purchase by any or all of the Other Investors of the Shares and Warrants that they have agreed to purchase from the Company. The Investor understands and agrees that, in the event that the Placement Agent in its sole discretion determines that the conditions to Closing in the Placement Agreement have not been satisfied or if the Placement Agent Agreement may be terminated for any other reason permitted by such Agreement, then the Placement Agreement may, but shall not be obligated to, terminate such Placement Agreement, which shall have the effect of terminating this Subscription Agreement pursuant to Section 14 below.

3.3 Delivery of Funds.

(a) DWAC Delivery. If the Investor elects to settle the Shares purchased by such Investor through DTC's Deposit/Withdrawal at Custodian ("DWAC") delivery system, **no later than one (1) business day after the execution of this Agreement by the Investor and the Company**, the Investor shall remit by wire transfer the amount of funds equal to the aggregate purchase price for the Shares being purchased by the Investor to the following account designated by the Company:

; provided, however, that, in lieu of remittance of the aggregate Purchase Price to the account described above, if the Company and Placement Agent agree (pursuant to the Placement Agreement or otherwise) that the funds of Investor shall be deposited in an escrow account with a commercial bank or trust company ("**Escrow Account**") in connection with the closing of the transactions contemplated herein, Investor shall remit by wire transfer the amount of funds equal to the aggregate Purchase Price for the Shares and Warrants being purchased by the Investor to the Escrow Account in accordance with the delivery instructions provided by the Placement Agent, which funds shall be distributed pursuant to the terms of the escrow agreement between the Company and the Placement Agent which governs the Escrow Account.

(b) [RESERVED]

3.4 Delivery of Shares.

(a) DWAC Delivery. If the Investor elects to settle the Shares purchased by such Investor through DTC's DWAC delivery system, **no later than one (1) business day after the execution of this Agreement by the Investor and the Company**, the Investor shall direct the broker-dealer at which the account or accounts to be credited with the Shares being purchased by such Investor are maintained, which broker/dealer shall be a DTC participant, to set up a DWAC instructing Continental Stock Transfer & Trust Company, the Company's Transfer Agent, to credit such account or accounts with the Shares. Such DWAC instruction shall indicate the settlement date for the deposit of the Shares, which date shall be provided to the Investor by the Placement Agent. On the Closing Date, the Company shall direct the Transfer Agent to credit the Investor's account or accounts with the Shares pursuant to the information contained in the DWAC.

(b) [RESERVED]

3.5 Delivery of Warrants. The Warrants will be issued in certificated form. Upon receipt by the Company of the funds due it pursuant to Section 3.3 above, on the Closing Date the Company shall direct the delivery of a copy of the Warrants to the Investor by facsimile and the originally executed Warrant by overnight courier at the address provided by the Investor on the Signature Page hereto.

3.6 Prohibition on Subsequent Equity Sales. The Company covenants that, from the date hereof until 60 days after the Closing Date, neither the Company nor any subsidiary of the Company shall issue, enter into any agreement to issue, or announce the issuance or proposed issuance of (i) any shares of Common Stock or (ii) any securities of the Company or any subsidiary of the Company that would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock, other than (a) shares of Common Stock or options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose or (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities.

4. Representations, Warranties and Covenants of the Investor.

The Investor acknowledges, represents and warrants to, and agrees with, the Company and the Placement Agent that:

4.1 The Investor (a) is knowledgeable, sophisticated and experienced in making, and is qualified to make decisions with respect to, investments in securities presenting an investment decision like that involved in the purchase of the Securities, including investments in securities issued by the Company and investments in comparable companies, (b) has answered all questions on the Signature Page and the Investor Questionnaire and the answers thereto are true and correct as of the date hereof and will be true and correct as of the Closing Date and (c) in connection with its decision to purchase the Shares and Warrants set forth on the Signature Page, has received and is relying only upon the Disclosure Package and the documents incorporated by reference therein and the Offering Information.

4.2 (a) No action has been or will be taken in any jurisdiction outside the United States by the Company or the Placement Agent that would permit an offering of the Securities, or possession or distribution of offering materials in connection with the issue of the Securities in any jurisdiction outside the United States where action for that purpose is required, (b) if the Investor is outside the United States, it will comply with all applicable laws and regulations in each foreign jurisdiction in which it purchases, offers, sells or delivers Securities or has in its possession or distributes any offering material, in all cases at its own expense and (c) the Placement Agent is not authorized to make and has not made any representation, disclosure or use of any information in connection with the issue, placement, purchase and sale of the Securities, except as set forth or incorporated by reference in the Base Prospectus or the Prospectus Supplement.

4.3 (a) The Investor has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, (b) this Agreement constitutes a valid and binding obligation of the Investor enforceable against the Investor in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and except as to the enforceability of any rights to indemnification or contribution that may be violative of the public policy underlying any law, rule or regulation (including any federal or state securities law, rule or regulation) and (c) the execution and delivery of this Subscription Agreement and the consummation of the transactions contemplated hereby do not conflict with or result in a breach of (i) Investor's certificate of incorporation or by-laws (or other similar governing documents) or (ii) any agreement or any law or regulation to which Investor is a party or by which any of its property or assets is bound.

4.4 The Investor understands that nothing in this Agreement, the Prospectus or any other materials presented to the Investor in connection with the purchase and sale of the Shares and Warrants constitutes legal, tax or investment advice. The Investor has consulted such legal, tax and investment advisors and made such investigation as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of Shares and Warrants. The Investor also understands that there is no established public trading market for the Warrants being offered in the Offering, and that the Company does not expect such a market to develop. In addition, the Company does not intend to apply for listing the Warrants on any securities exchange. Without an active market, the liquidity of the Warrants will be limited.

4.5 Since the date on which the Placement Agent first contacted the Investor about the Offering, the Investor has not disclosed any information regarding the Offering to any third parties (other than its legal, accounting and other advisors) and has not engaged in any transactions involving the securities of the Company (including, without limitation, any Short Sales involving the Company's securities). The Investor covenants that it will not engage in any transactions in the securities of the Company (including Short Sales) prior to the time that the transactions contemplated by this Agreement are publicly disclosed. The Investor agrees that it will not use any of the Securities acquired pursuant to this Agreement to cover any short position in the Common Stock if doing so would be in violation of applicable securities laws. For purposes hereof, "**Short Sales**" include, without limitation, all "short sales" as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sales contracts, options, puts, calls, short sales, swaps, "put equivalent positions" (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and sales and other transactions through non-U.S. broker dealers or foreign regulated brokers.

5. Survival of Representations, Warranties and Agreements; Third Party Beneficiary. Notwithstanding any investigation made by any party to this Agreement or by the Placement Agent, all covenants, agreements, representations and warranties made by the Company and the Investor herein will survive the execution of this Agreement, the delivery to the Investor of the Shares and Warrants being purchased and the payment therefor. The Placement Agent shall be a third party beneficiary with respect to the representations, warranties and agreements of the Investor in Section 4 hereof.

6. Notices. All notices, requests, consents and other communications hereunder will be in writing, will be mailed (a) if within the domestic United States by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, or by facsimile or (b) if delivered from outside the United States, by International Federal Express or facsimile, and (c) will be deemed given (i) if delivered by first-class registered or certified mail domestic, three business days after so mailed, (ii) if delivered by nationally recognized overnight carrier, one business day after so mailed, (iii) if delivered by International Federal Express, two (2) business days after so mailed and (iv) if delivered by facsimile, upon electric confirmation of receipt and will be delivered and addressed as follows:

if to the Company, to:

Titan Pharmaceuticals, Inc.
400 Oyster Point Blvd., Suite 505
South San Francisco, California 94080
Attention: Sunil Bhonsle, President
Facsimile: (650) 244-4956

with a copy to:

Loeb & Loeb LLP
345 Park Avenue
New York, New York 10154
Attention: Fran Stoller, Esq.
Facsimile: (212) 407-4990

if to the Investor, at its address on the Signature Page hereto, or at such other address or addresses as may have been furnished to the Company in writing.

7. Changes. This Agreement may not be modified or amended except pursuant to an instrument in writing signed by the Company and the Investor.

8. Headings. The headings of the various sections of this Agreement have been inserted for convenience of reference only and will not be deemed to be part of this Agreement.

9. Severability. In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein will not in any way be affected or impaired thereby.

10. Governing Law. This Agreement will be governed by, and construed in accordance with, the internal laws of the State of New York, without giving effect to the principles of conflicts of law that would require the application of the laws of any other jurisdiction.

11. Counterparts. This Agreement may be executed in multiple counterparts, each of which will constitute an original, but all of which, when taken together, will constitute but one instrument, and will become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. The Company and the Investor acknowledge and agree that the Company shall deliver its counterpart to the Investor along with the Prospectus Supplement (or the filing by the Company of an electronic version thereof with the Commission).

12. Confirmation of Sale. The Investor acknowledges and agrees that such Investor's receipt of the Company's signed counterpart to this Agreement, together with the Prospectus Supplement (or the filing by the Company of an electronic version thereof with the Commission), shall constitute written confirmation of the Company's sale of Shares and Warrants to such Investor.

13. Press Release. The Company and the Investor agree that the Company shall issue a press release announcing the Offering and disclosing all material information regarding the Offering prior to the opening of the financial markets in New York City on the business day immediately after the date hereof.

14. Termination. In the event that the Placement Agreement is terminated by the Placement Agent pursuant to the terms thereof, this Agreement shall terminate without any further action on the part of the parties hereto.



Innovations
in MEDICINE™

TITAN PHARMACEUTICALS, INC. 

Corporate Presentation

March 2012

Safe Harbor

The presentation may contain “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. 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 but not limited to, uncertainties relating to financing and strategic agreements and relationships; difficulties or delays in the regulatory approval process; uncertainties relating to sales, marketing and distribution of the Company’s drug candidates that may be successfully developed and approved for commercialization; adverse side effects or inadequate therapeutic efficacy of the Company’s drug candidates that could slow or prevent product development or commercialization; dependence on third party suppliers; the uncertainty of protection for the Company’s patents and other intellectual property or trade secrets; and competition.

Presentation Content

- Titan Pharmaceuticals Highlights
- Probuphine Development
- Probuphine Market Opportunity
- Financial Summary
- Summary

Titan Pharmaceuticals: Highlights

- **Specialty pharmaceutical company focused in CNS with an NDA submission for Probuphine™ expected in Q3, 2012**
 - **Probuphine has the potential to be the first long acting therapeutic on the market for the treatment of opioid dependence**
 - Six month controlled release formulation of an approved drug, buprenorphine
 - Clinical development completed
 - Addresses U.S. market of over \$1B and growing
 - Significant unmet needs continue to exist in the market place
 - Potential peak sales of \$300m –\$500m
 - U.S. patent life to 2024
 - Probuphine has the potential to be developed for treating chronic pain
 - **ProNeura™ – unique long term drug delivery system can provide around the clock medication and has potential in additional applications**
- **Near term value-creating milestones**
- **Lean and capital efficient organization**



Probuphine Development

Disease Overview

- **Addiction is a primary, chronic disease of brain reward, motivation, memory and related neurobiological circuitry***
 - inability to consistently abstain
 - impairment in behavioral control
 - craving
 - diminished recognition of significant problems with one's behaviors
- **Addiction involves cycles of relapse and remission**
- **Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death**

*American Society of Addiction Medicine, Inc., 2011

Disease Treatment Overview

- In the U.S. buprenorphine has replaced methadone as the gold standard in treating opioid dependence
- Buprenorphine is a mixed partial agonist at the mu receptor and an antagonist at the kappa receptor
 - Ceiling effect
 - Improved safety profile
 - Lack of euphoria

Ceiling Effect of Buprenorphine

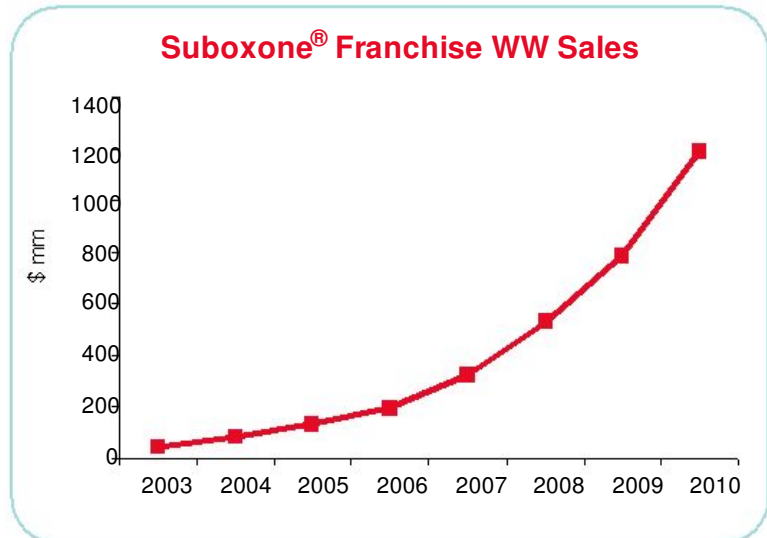


Incremental Treatment Improvements Have Driven Conversion and Growth of the Market

Suboxone has grown rapidly

Launched in 2003

Global sales exceed \$1.2B in 2010 (U.S. sales of \$1B)



Source: EvaluatePharma; Reckitt Benckiser 2010 Annual Report

Significant Unmet Medical Needs in the Treatment of Opioid Dependence

- **Efficacy**

- Medication compliance
- Retention of patients
- Reduction in the use of opioids and other substances

- **Safety and tolerability**

- Risks of misuse, abuse, diversion
- Risk of precipitating withdrawal
- Risk of overdose

Probuphine

Probuphine is a subcutaneous implant capable of delivering continuous and persistent around the clock blood levels of buprenorphine for 6 months following a single treatment, enhancing patient compliance and retention

Solid Matrix Long-Term Delivery

- Non-biodegradable
- Inserted subcutaneously
- Stable non-fluctuating blood levels of drug maintained for over 6 months

Probuphine

EVA polymer



Inert component of several approved products

+

Buprenorphine



Approved for treatment of opioid addiction, and acute and chronic pain

Blended
&
Extruded

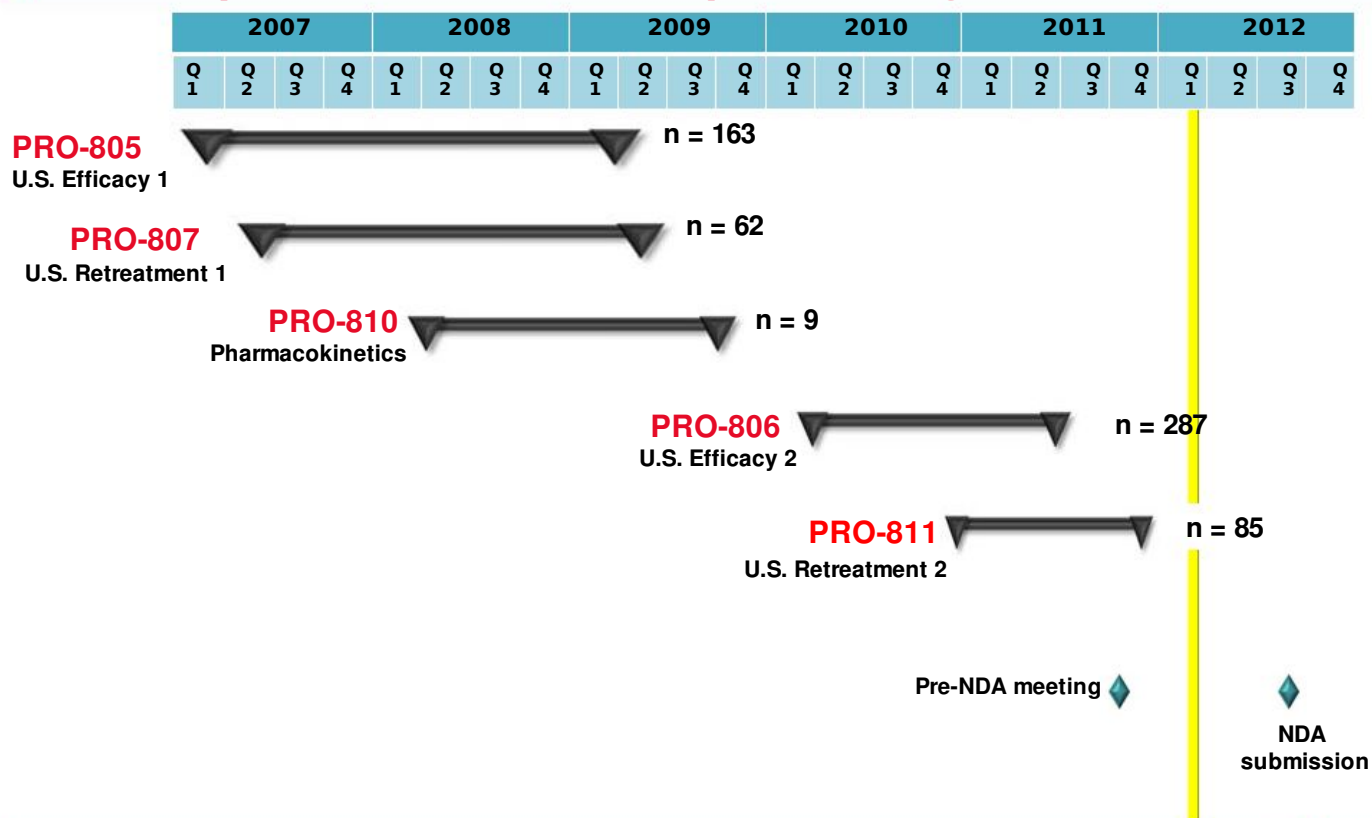
Probuphine



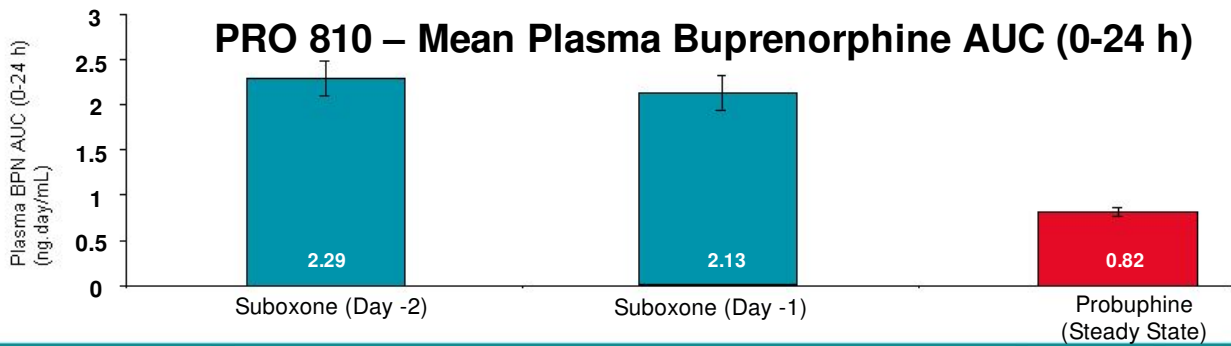
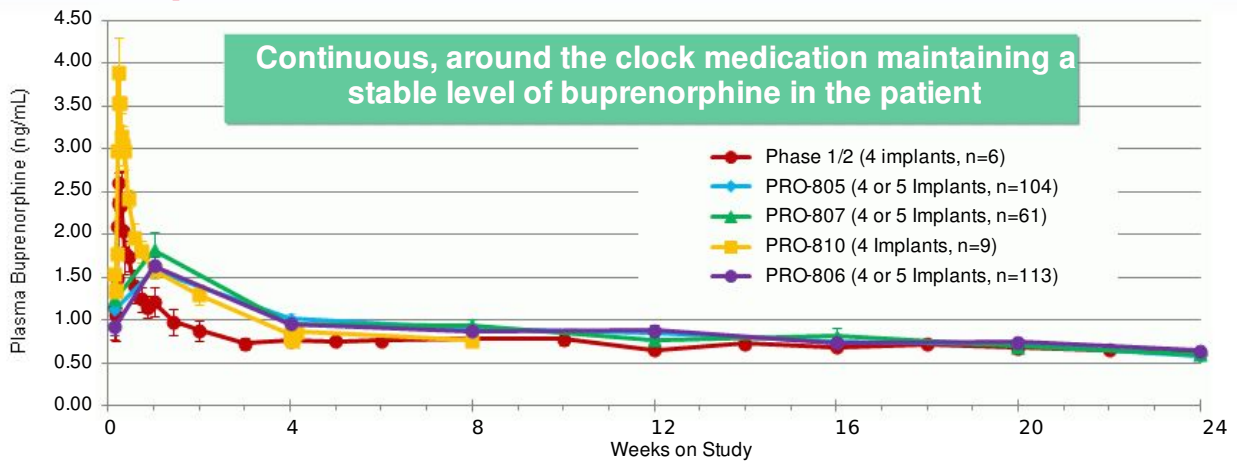
26 mm long,
2.5 mm
diameter

Each implant contains 80 mg of buprenorphine HCl which has been blended and extruded with ethylene vinyl acetate (EVA) co-polymer

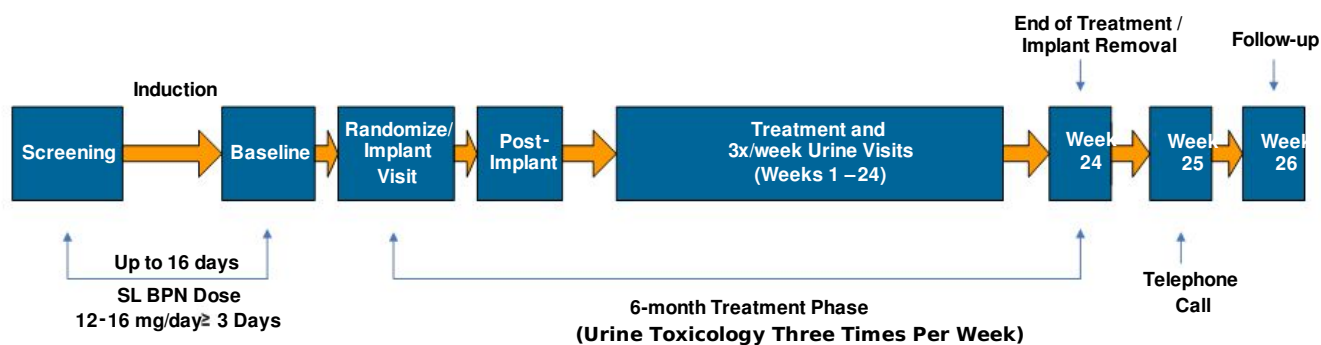
Probuphine: Clinical Development Program



Probuphine: Plasma Pharmacokinetics



Probuphine: Two Phase 3 Controlled Studies



Study 1 (PRO-805):

- n = 163; 18 sites
- Two-arm: Double-blind randomized, placebo-controlled

Study 2 (PRO-806):

- n = 287; 20 sites
- Three-arm: Double-blind randomized, placebo-controlled and open-label active (Suboxone)

Study Assessments

- **Urine toxicology (blinded to sites and patients)**
- Tests for presence of opioids (heroin, methadone, prescription pain medications, etc.)
- **Clinical Global Improvement**
 - Clinician-rated
 - Patient-rated
- **Symptoms of opioid withdrawal and craving**
 - Clinician-rated (COWS)
 - Patient-rated (SOWS and craving VAS)
- **Patient-reported illicit drug use**
- **Mood**
 - Beck Depression Inventory II

Study 1: Efficacy Results – Probuphine vs Placebo

Outcome Measures

Probuphine > Placebo

| | |
|---|-----------------------------|
| CDF of % Negative Urines (24 weeks) | p = 0.0117 (primary) |
| Treatment Retention (24 weeks) | p < 0.0001 |
| Global Severity of Opioid Addiction (Patient Rated) (24 Weeks) | p < 0.0021 |
| Global Severity of Opioid Addiction (Physician Rated) (24 Weeks) | p < 0.0086 |
| Patient-rated opioid withdrawal (24 weeks) | p = 0.0005 |
| Clinician-rated opioid withdrawal (24 weeks) | p = 0.0008 |
| Opioid craving (24 weeks) | p = 0.0006 |

Study 2: Efficacy Results – Probuphine vs Placebo

Outcome Measures

Probuphine > Placebo

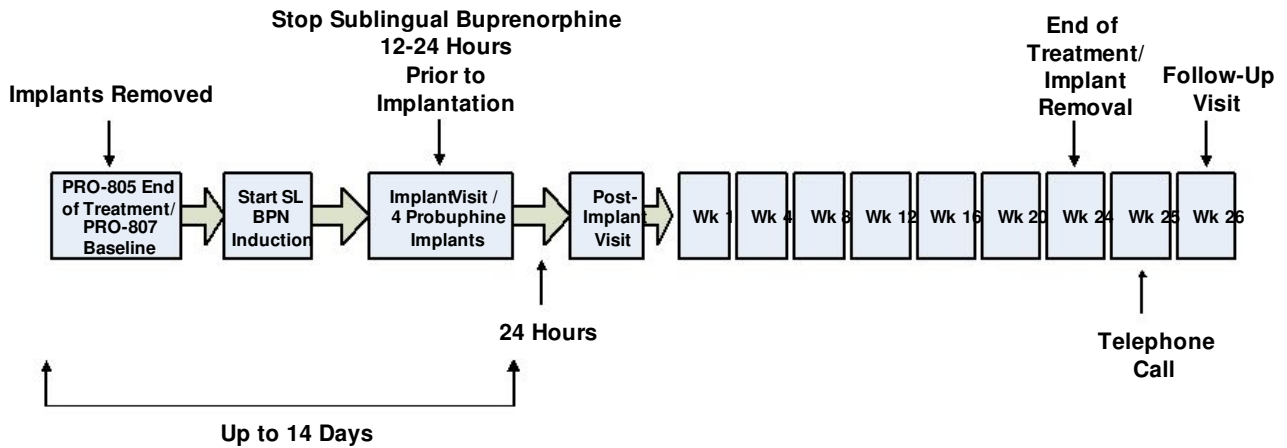
| | |
|--|------------------------|
| CDF of % Negative Urines (24 weeks) | $p < 0.0001$ (primary) |
| CDF of % Negative Urines Incorporating Patient Self Report (24 weeks) | $p < 0.0001$ (primary) |
| Treatment Retention (24 weeks) | $p = 0.0002$ |
| Patient-Rated Global Severity | $p = 0.005$ |
| Global Improvement (24 Weeks) | $p = 0.031$ |
| Clinician-Rated Global Severity | $p = 0.0003$ |
| Global Improvement (24 Weeks) | $p = 0.0002$ |
| Patient-rated opioid withdrawal (24 weeks) | $p < 0.0001$ |
| Clinician-rated opioid withdrawal (24 weeks) | $p < 0.0001$ |
| Opioid craving (24 weeks) | $p < 0.0001$ |

Study 2: Efficacy Results – Probuphine vs Suboxone

Probuphine vs. Suboxone: Percentage of Urine Samples Negative for Illicit Opioids in Weeks 1-24

- **Non-Inferiority Comparison (-15% Margin):**
 - **31% Probuphine vs. 33% Suboxone**
 - 95% Confidence Interval for Difference: **-10.8, 5.9**
- **Least-Squared Means Comparison:**
 - **36% Probuphine vs. 35% Suboxone**

Six-Month, Open-Label, Multicenter Retreatment Trials in Patients Completing the Controlled Studies



PRO - 807

- 14 study sites in the U.S.
- 62 patients who completed PRO-805 received 4 initial Probuphine implants
- 6 patients received a 5th implant

PRO - 811

- 20 study sites in the U.S.
- 85 patients who completed PRO-806 received 4 initial Probuphine implants
- Study completed end of Dec 2011 and initial results released in Feb 2012

Clinical Summary

- Probuphine was clinically and statistically superior to placebo in the treatment of opioid-addicted patients, and demonstrated non-inferiority to Suboxone.
- Adverse events were mild to moderate in severity and generally consistent with the patient population and the known safety profile of buprenorphine in all studies.
- Early termination due to adverse events was low in all studies.
- The number and profile of serious adverse events was low in all studies and similar to placebo.
- The implant procedure was generally well tolerated in all studies and there was no evidence of implant diversion or misuse.
- Probuphine delivers an efficacious, low level of buprenorphine continuously for six months.

NDA Preparation Status

- Pre-NDA meeting completed with the FDA on October 25, 2011
 - Clinical data on safety and efficacy of Probuphine considered to be sufficient for NDA submission
 - Manufacturing scale up plans are acceptable to the FDA, however, additional data on the characterization of the EVA and Probuphine is required to complete the Chemistry, Manufacturing and Controls section
 - FDA provided guidance on the requirements for a Priority Review designation and suggested that appropriate information should be included with the NDA submission
- NDA submission is targeted for Q3, 2012
 - CMC section related analytical testing underway at two vendors
 - Electronic NDA document preparation commenced at CRO
 - Manufacturing facility expansion and production scale-up in process

Probuphine for the Treatment of Chronic Pain

- Buprenorphine has several advantages over other opioids used for chronic pain
 - Safer than other opioids
 - ceiling effect for respiratory depression, relatively long half-life, minimal euphoric effect
- Buprenorphine transdermal patch (3-7 days) is approved in U.S., Europe and Australia for the treatment of moderate to severe chronic pain
 - Therapeutic window of 0.1 – 0.5 ng/ml plasma level can be delivered with 1 to 2 Probuphine implants
- Probuphine value proposition for treating chronic pain
 - Around the clock non-fluctuating therapeutic levels, no on/off therapy cycling, enhances compliance and increases patient convenience

Sources: NEJM 2003;349:1943-53
Sittl, Expert Rev. Neurotherapeutics 2005;5(3): 315-323



Probuphine Market Opportunity

Market Overview

- Prevalence is large and growing rapidly
- Worldwide: > 6m persons addicted to opioids
- U.S. > 2m, range varies between 2-4m depending on source
- Opioid addiction is a chronic long term illness
- Patients who stop all medically-assisted therapy (MAT) are highly susceptible to relapse
- Opioid addiction market is now >\$1.2B globally
 - Opioid prescriptions have grown 400% from 1997-2007
 - Hospitalizations have increased 500% over the last 10 years
 - Treatment for abuse of pain relievers increased at a 13% CAGR from 2002-2009

Sources: EPIDEMIC: RESPONDING TO AMERICA'S PRESCRIPTION DRUG ABUSE CRISIS, Executive Office of the President of the United States (2011); 2009 National Survey on Drug Use and Health (NSDUH); "A Wave of Addiction and Crime, with the Medicine Cabinet to Blame", New York Times (Sept 23, 2010); Drug Abuse Warning Network (DAWN), SAMHSA, HHS; "A General in the Drug War", New York Times (Jun 14, 2011)

Competitors: Few and Well Established with no New Innovations on Immediate Horizon

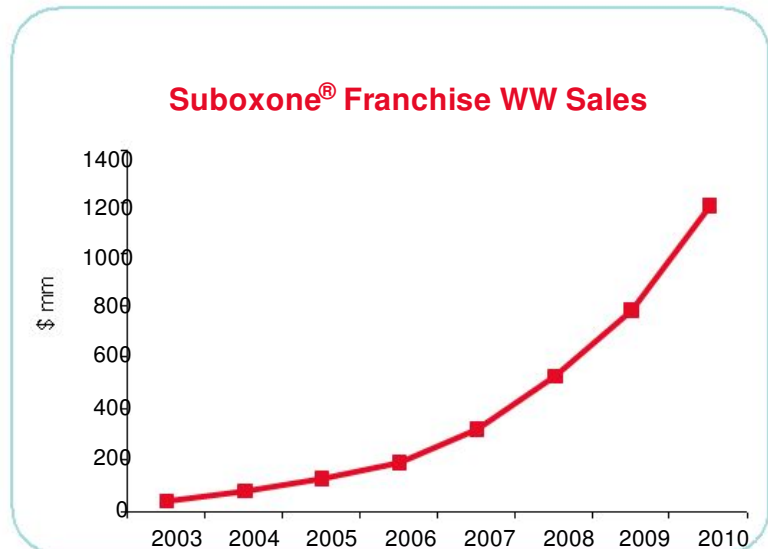
- Methadone tablets mainstay for opioid addiction in U.S. from late 1960's to 2002
 - Strong restrictions regarding patient access and administration access in U.S.
 - Can be lethal and has high potential for misuse, abuse and diversion
- Subutex® and Suboxone® oral formulations approved in 2002
 - Safer than methadone and other opioids
 - Buprenorphine can occupy opioid receptors but produces "ceiling effect"
 - Mitigates euphoric effect and respiratory depression
 - Fewer restrictions on patient access
 - Enabled treatment in office-based setting
 - Misuse, abuse and diversion problematic
- Naltrexone
 - Opioid antagonist
 - Must be completely detoxified before initiating therapy
 - Minority of opioid addicted patients succeed

Extremely Concentrated Prescriber Base

90% of prescriptions were written by 5,037 physicians

Suboxone® Sales Exceed \$1B a Year in the U.S.

Suboxone® sales have grown at a 58% CAGR over the last 4 years

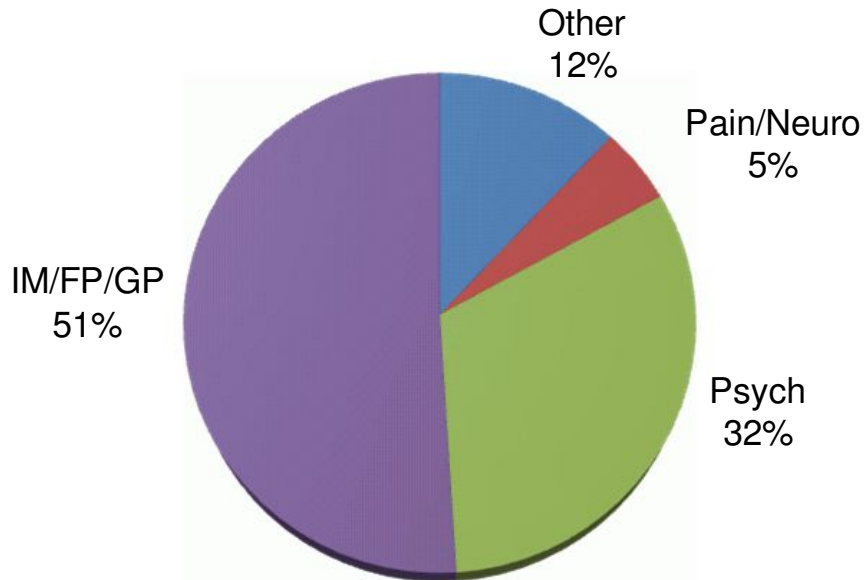


- **Launched in 2003**
- **Global sales exceed \$1.2B in 2010 (U.S. sales of \$1B)**

Source: EvaluatePharma; Reckitt Benckiser 2010 Annual Report

Suboxone Prescribing Physicians

Breakdown of Suboxone Prescribing Physicians



Source: IMS Health

Top Unmet Needs Defined by Physicians

- **Efficacy**
 - Reduction in the use of opioids
 - Retention of patients and their treatment on therapy
 - Reduction in the use of other substances
- **Safety and tolerability**
 - Risk of overdose
 - Risk of misuse, abuse, diversion
 - Risk of precipitating withdrawal
- **Accessibility / cost**
- **Delivery**
 - Onset of action
 - Restrictions on administration

Source: Decision Resources 2011

Probuphine Value Proposition

Probuphine is the first and only potential treatment for opioid dependence that can provide continuous and persistent around the clock blood levels of buprenorphine for six months, enhancing patient compliance and retention and preventing diversion

| | |
|--------------------|---|
| Efficacy | Effective in reducing illicit opioid use Enhanced compliance may lead to superior outcomes |
| Safety | Lower drug exposure may provide superior safety and tolerability |
| Ease of Use | Unique delivery system dosed once every six months Continuous buprenorphine delivery <ul style="list-style-type: none">• Non-fluctuating blood levels, around-the clock medication• Potential 100% compliance |
| Diversion | Limited access to implants <ul style="list-style-type: none">• Subcutaneous placement• Specific distribution (non-retail) |

Market Opportunity Ideal as Specialty Pharma Stand-alone or as an Addition to Existing CNS Franchise

- **Billion dollar market large and growing**
- **Significant unmet needs continue to exist in the market place**
- **Excellent margins due to small, target prescriber population**
 - 5,037 physicians wrote 90% of buprenorphine prescriptions in the U.S. in 2010
 - Sales Force of 50 reps can cover majority of prescribers
 - Controlled distribution facilitates efficiency and maintenance of accounts
- **Unique value proposition for Probuphine better addresses unmet needs and has the potential to become the new gold standard of treatment – Peak sales \$300-500m**

Probuphine Intellectual Property

| Country | Opioid Dependence | Pain Treatment |
|--------------------|-------------------|-------------------|
| U.S. | Granted (to 2024) | Pending |
| Europe | Pending | Pending |
| Japan | Granted (to 2023) | Granted (to 2023) |
| Canada | Pending | Pending |
| Mexico | Granted (to 2023) | Granted (to 2023) |
| Australia | Granted (to 2023) | Granted (to 2023) |
| New Zealand | Granted (to 2023) | Granted (to 2023) |
| Hong Kong | Pending | Pending |
| India | Pending | Pending |

- Patent applications are for method-of-use claims
- Method-of-use and similar claims provide strong protection of commercial product:
 - Alternate device or alternate indication would require de novo clinical trials

Financial Summary

- **Equity**

- Common Stock Outstanding 59.4m
- Stock Options/ Restricted Stock 5.6m
 - weighted-average exercise price of \$1.56 per share
- Warrants 13.0m
 - weighted-average exercise price of \$1.78 per share

- **December 30, 2011**

- Cash \$ 5.4m
- Debt \$ 12.3m
 - Principal \$10m + Present Value of Interest \$2.3m

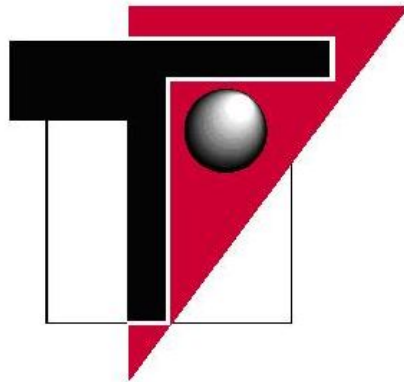
Titan Pharmaceuticals Summary

Probuphine

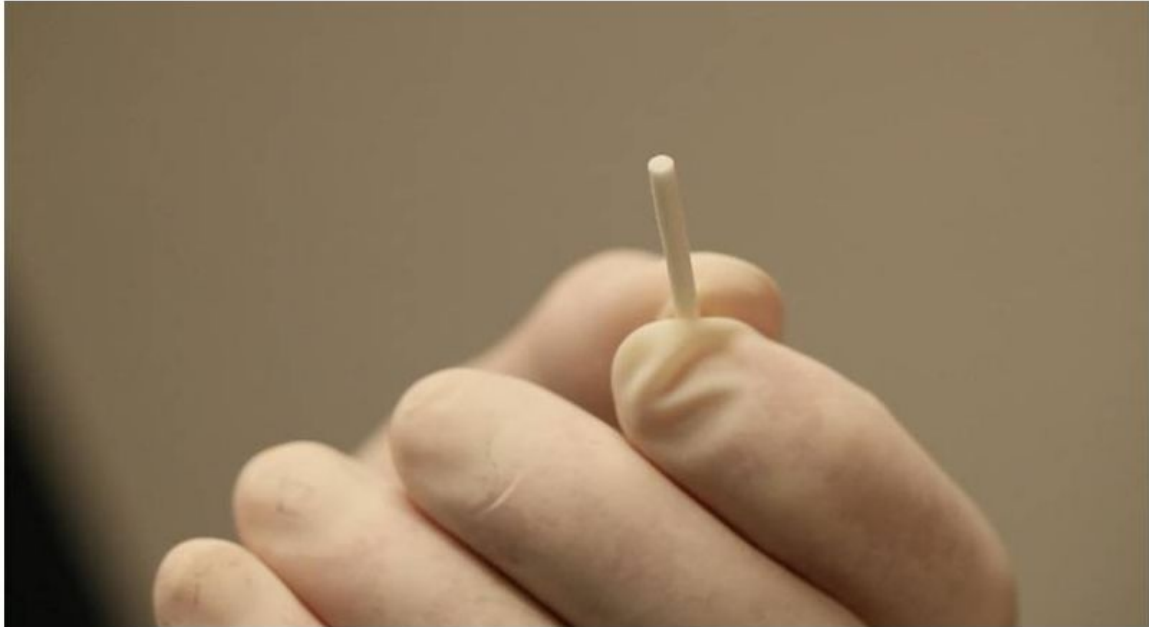
- **Billion dollar opioid dependence market is large and growing**
 - Worldwide: > 6m people addicted to opioids
- **Addresses significant unmet needs that exist in the market place**
 - Reduction in the use of opioids
 - Retention of patients on therapy (persistence and compliance)
 - Diversion, abuse
- **Probuphine has the potential to be the first long acting therapeutic on the market for the treatment of opioid dependence**
 - Six month controlled release formulation of buprenorphine has key advantages in patient compliance to treatment, and avoidance of diversion/abuse
 - \$300-500m potential annual peak sales in opioid dependence
 - Potential application in treating chronic pain
 - Goal to establish U.S. commercialization partnership by the time of NDA filing

ProNeura

- **Possible applications of technology for long term drug delivery in other chronic illnesses, e.g. Parkinson's Disease**



Buprenorphine Implant



Insertion Applicator



Insertion Location



Removal Clamp



Summary of Non-Implant Site Adverse Events Frequency $\geq 10\%$ in Any Treatment Group)

| System Organ Class | PRO-805 | | | | PRO-807 | |
|--------------------|-------------------------|------|---------------------|------|------------------------|------|
| | Probuphine (n = 108) | | Placebo (n = 55) | | Probuphine (n = 62) | |
| | n | % | n | % | n | % |
| Any Adverse Events | 85 | 78.7 | 41 | 74.5 | 43 | 69.4 |
| Gastrointestinal | | | | | | |
| Constipation | 15 | 13.9 | 3 | 5.5 | 8 | 12.9 |
| Diarrhea | 6 | 5.6 | 7 | 12.7 | 2 | 3.2 |
| Nausea | 15 | 13.9 | 7 | 12.7 | 2 | 3.2 |
| Toothache | 12 | 11.1 | 3 | 5.5 | 3 | 4.8 |
| Infections | | | | | | |
| Nasopharyngitis | 15 | 13.9 | 3 | 5.5 | 2 | 3.2 |
| Upper Respiratory | 14 | 13.0 | 6 | 10.9 | 3 | 4.8 |
| Musculoskeletal | | | | | | |
| Back Pain | 13 | 12.0 | 3 | 5.5 | 5 | 8.1 |
| Nervous System | | | | | | |
| Headache | 27 | 25.0 | 10 | 18.2 | 11 | 17.7 |
| Psychiatric | | | | | | |
| Anxiety | 11 | 10.2 | 5 | 9.1 | 2 | 3.2 |
| Insomnia | 23 | 21.3 | 12 | 21.8 | 8 | 12.9 |

Summary of Non-Implant Site Adverse Events Frequency ($\geq 10\%$ in Any Treatment Group)

| System Organ Class | PRO-806 | | | | | | PRO-811 | |
|-------------------------|-------------------------|------|---------------------|------|-----------------------|------|------------------------|------|
| | Probuphine (n = 114) | | Placebo (n = 54) | | Suboxone (n = 119) | | Probuphine (n = 85) | |
| | n | % | n | % | n | % | n | % |
| Any Adverse Events | 77 | 67.5 | 33 | 61.1 | 85 | 71.4 | 57 | 67.1 |
| Gastrointestinal | | | | | | | | |
| Constipation | 5 | 4.4 | 1 | 1.9 | 5 | 4.2 | 2 | 2.4 |
| Diarrhea | 2 | 1.8 | 3 | 5.6 | 2 | 1.7 | 2 | 2.4 |
| Nausea | 7 | 6.1 | 1 | 1.9 | 8 | 6.7 | 3 | 3.5 |
| Toothache | 4 | 3.5 | 1 | 1.9 | 5 | 4.2 | 3 | 3.5 |
| Infections | | | | | | | | |
| Nasopharyngitis | 6 | 5.3 | 3 | 5.6 | 12 | 10.1 | 2 | 2.4 |
| Upper Respiratory | 10 | 8.8 | 4 | 7.4 | 11 | 9.2 | 7 | 8.2 |
| Musculoskeletal | | | | | | | | |
| Back Pain | 6 | 5.3 | 3 | 5.6 | 7 | 5.9 | 5 | 5.9 |
| Nervous System | | | | | | | | |
| Headache | 15 | 13.2 | 5 | 9.3 | 19 | 16.0 | 10 | 11.8 |
| Psychiatric | | | | | | | | |
| Anxiety | 2 | 1.8 | 3 | 5.6 | 6 | 5.0 | 3 | 3.5 |
| Insomnia | 9 | 7.9 | 8 | 14.8 | 16 | 13.4 | 2 | 2.4 |

Summary of Implant Site Adverse Events Frequency (≥ 10% in Any Treatment Group)

| | PRO-805 | | PRO-807 | PRO-806 | | PRO-811 |
|----------|-------------------------|---------------------|------------------------|-------------------------|---------------------|------------------------|
| | Probuphine (n = 108) | Placebo (n = 55) | Probuphine (n = 62) | Probuphine (n = 114) | Placebo (n = 54) | Probuphine (n = 85) |
| Erythema | 25.0% | 21.8% | 25.8% | 3.5% | 0% | 1.2% |
| Edema | 13.0% | 9.1% | 12.9% | 1.8% | 0% | 0.0% |
| Itching | 25.0% | 14.5% | 19.4% | 4.4% | 3.7% | 1.2% |
| Pain | 22.2% | 10.9% | 19.4% | 8.8% | 9.3% | 0.0% |
| Bleeding | 12.0% | 12.7% | 16.1% | 1.8% | 3.7% | 3.5% |
| Bruising | 5.6% | 14.5% | 9.7% | 7.9% | 11.1% | 3.6% |
| Scar | 9.3% | 12.7% | 1.6% | 0% | 0% | 1.6% |



For Immediate Release

**TITAN PHARMACEUTICALS TO RAISE \$5.5 MILLION IN
REGISTERED DIRECT OFFERING**

South San Francisco, CA – April 10, 2012 – Titan Pharmaceuticals, Inc. (TTNP.OB) today announced that it has entered into definitive agreements to sell approximately \$5.5 million of shares of its common stock and warrants to purchase shares of its common stock in a registered direct offering to institutional investors. Titan will issue an aggregate of 6,517,648 shares of common stock to the institutional investors together with warrants to purchase an additional 13,035,296 shares of common stock.

Each investor will receive one share of common stock, a series A warrant to purchase one share of common stock and a series B warrant to purchase one share of common stock for a purchase price of \$0.85. The series A warrants have an exercise price of \$1.15 per share and are exercisable commencing six months after the date of issuance through the six year anniversary of the issuance date. The series B warrants have an exercise price of \$0.85 and are exercisable for six months commencing on the date of issuance.

The Company intends to use the net proceeds from the offering to fund the preparation of a New Drug Application for Probuphine® and for working capital and general corporate purposes.

The closing of the offering is expected to occur on or about April 13, 2012, subject to customary closing conditions, at which time Titan will receive the cash proceeds and deliver the securities.

Rodman & Renshaw, LLC, a wholly-owned subsidiary of Rodman & Renshaw Capital Group, Inc. (NASDAQ: RODM), acted as the exclusive placement agent for the offering.

The common stock and warrants are being offered by Titan pursuant to an effective registration statement on Form S-3 filed with the Securities and Exchange Commission (SEC). A prospectus supplement relating to the offering described above will be filed with the SEC.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. The securities may only be offered by means of a prospectus. Copies of the prospectus supplement and related prospectus can be obtained directly from Rodman & Renshaw, LLC at placements@rodm.com or (212) 356-0549, or by mail at 1251 Avenue of the Americas, 20th floor, New York, NY 10020, or from the SEC's website at www.sec.gov.

About Probuphine

Probuphine is a novel product that has completed Phase 3 clinical development for the long term treatment of opioid dependence and a New Drug Application (NDA) preparation is in process with submission expected in the third quarter of 2012. Probuphine is a subcutaneous implant, capable of delivering continuous and persistent, around the clock blood levels of buprenorphine for six months following a single treatment, enhancing patient compliance and retention. Buprenorphine, an approved agent for the treatment of opioid dependence, is currently available in the form of daily dosed sublingual tablet and film formulations with reported annual sales of over \$1 billion in the United States. The safety and effectiveness of treatment with Probuphine has been demonstrated in several clinical studies conducted to date, including a 163-patient placebo-controlled study which demonstrated clinically meaningful and statistically significant treatment with Probuphine over a 24-week period and was published in the *Journal of the American Medical Association (JAMA)*, and a confirmatory study of 287 patients that showed statistically significant efficacy versus placebo and non-inferiority with a currently marketed sublingual formulation of buprenorphine.

Probuphine was developed using ProNeura™, Titan's continuous drug delivery system that 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.

About Titan Pharmaceuticals

For information concerning Titan Pharmaceuticals, Inc., please visit the Company's website at www.titanpharm.com.

The press release may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Such statements include, but are not limited to, any statements relating to the Company's development program and any other statements that are not historical facts. Such statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to difficulties or delays in development, testing, regulatory approval, production and marketing of the Company's drug candidates, adverse side effects or inadequate therapeutic efficacy of the Company's drug candidates that could slow or prevent product development or commercialization, the uncertainty of patent protection for the Company's intellectual property or trade secrets, and the Company's ability to obtain additional financing. Such statements are based on management's current expectations, but actual results may differ materially due to various factors, including those risks and uncertainties mentioned or referred to in this press release.

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