**UNITED STATES**
**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 of 1934**

Date of Report (Date of Earliest Event Reported): March 21, 2018

# Titan Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

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

| **001-13341** | **94-3171940** |
|---|---|
| (Commission File Number) | (IRS Employer Identification No.) |

**400 Oyster Point Blvd., Suite 505, South San Francisco, CA** 94080
(Address of principal executive offices and zip code)

**650-244-4990**
(Registrant's telephone number including area code)

(Registrant's former name or former address, if 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

**Item 1.01. Entry into a Material Definitive Agreement.**

*Loan Restructure*

On March 21, 2018, Titan Pharmaceuticals, Inc. (the "Company" or "Titan") entered into an Amended and Restated Venture Loan and Security Agreement (the "Restated Loan Agreement") with Horizon Technology Finance Corporation ("Horizon") and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. ("Molteni") pursuant to which Horizon assigned $2,400,000 of the $4,000,000 outstanding principal balance of the loan to Molteni and Molteni was appointed collateral agent and assumed majority and administrative control of the debt. Under the Restated Loan Agreement, the interest only payment and forbearance periods were extended to December 31, 2019. In addition, Molteni has the right to convert its portion of the debt into shares of the Company's common stock at a conversion price of $1.20 per share and is required to effect this conversion of debt to equity if Titan completes an equity financing resulting in gross proceeds of at least $10,000,000 at a price per share of common stock in excess of $1.20 and repays the $1,600,000 principal balance of Horizon's loan amount.

In connection with the Restated Loan Agreement, the Company issued Horizon seven-year warrants to purchase 40,000 shares of its common stock at an exercise price of $1.20 per share.

*Asset Purchase, Supply and Support Agreement*

On March 21, 2018, Titan and Molteni entered into an Asset Purchase, Supply and Support Agreement (the "Purchase Agreement") pursuant to which Molteni acquired the European intellectual property related to Probuphine, including the Marketing Authorization Application ("MAA") under review by the European Medicines Agency ("EMA"), and will have the exclusive right to commercialize the Titan supplied Probuphine product in Europe, as well as certain countries of the Commonwealth of Independent States, the Middle East and North Africa (the "Molteni Territory"). The Purchase Agreement supersedes the previously executed term sheet that contemplated a license arrangement with respect to the intellectual property Titan has now sold to Molteni.

Titan received an initial payment of €2.0 million ($2,448,000) for the purchased assets and will receive the following additional potential payments totaling up to €4.5 million (approximately ($5,500,000) upon the achievement of certain regulatory and product label milestones, including: (i) a €1.0 million milestone payment upon the issuance by the EMA of the MAA and (ii) an aggregate of € 2.0 million of milestone payments upon approval of the product reimbursement price in certain key countries, provided that the payments in (i) and (ii) are subject to a 50% reduction if the EMA marketing authorization is not received on or prior to September 30, 2019 and shall not be payable in the event such authorization is not received on or prior to March 31, 2020. Additionally, Titan is entitled to receive earn-out payments for up to 15 years on net sales of Probuphine in the Molteni Territory ranging in percentage from the low-teens to the mid-twenties.

The Agreement provides that Titan will supply Molteni with semi-finished product (i.e., the implant and the applicator) on an exclusive basis at a fixed price through December 31, 2019, with subsequent price increases not to exceed annual cost increases to Titan under its current manufacturing agreement and for the purchase of the active pharmaceutical ingredient.

Molteni will be prohibited from marketing a Competitor Product (as defined in the Agreement) in the Territory for the five year period following approval of the MAA. Thereafter, Molteni will be required to pay Titan a low single digit royalty on net sales by Molteni of any Competitor Product.

*Rights Agreement*

In consideration of Molteni's entry into the Restated Loan Agreement and the Purchase Agreement, on March 21, 2018, the Company and Molteni entered into a Rights Agreement (the "Rights Agreement") pursuant to which the Company agreed to (i) issue Molteni seven-year warrants to purchase 540,000 shares of the Company's common stock at an exercise price of $1.20 per share, (ii) provide Molteni customary demand and piggy-back registration rights with respect to the shares of common stock issuable upon conversion of its loan and exercise of its warrants, (iii) appoint one member of the Company's board of directors and (iv) provide board observer rights to Molteni if it has not designated a board nominee as well as certain information rights. The board designation, observer and information rights will terminate at such time as Molteni ceases to beneficially own at least one percent of the Company's outstanding capital stock (inclusive of the shares issuable upon conversion of its note and exercise of its warrants).

*General*

The foregoing summary descriptions of certain terms of the Restated Loan Agreement, the Purchase Agreement, the Rights Agreement and the form of warrants do not purport to be complete, and are qualified in their entirety by reference to the full text of such documents and the press release issued in connection therewith e attached hereto as Exhibits 10.1, 10.2, 10.3, 4.1 and 99.1, respectively, which are incorporated herein by reference.

**Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant**

The information set forth under Item 1.01 "Loan Restructure" relating to the creation of a direct financial obligation of the Company is hereby incorporated by reference into this Item 2.03 of this report.

**Item 9.01. Financial Statements and Exhibits**.

(d) Exhibits

| **Exhibit No.** | **Description** |
|---|---|
| 4.1 | Form of Warrants |
| 10.1 | Amended and Restated Venture Loan and Security Agreement dated March 21, 2018 |
| 10.2 | Asset Purchase, Supply and Support Agreement dated March 21, 2018± |
| 10.3 | Rights Agreement dated March 21, 2018 |
| 99.1 | Press Release, dated March 21, 2018 |

± Confidential treatment has been requested with respect to portions of this exhibit.

**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 thereunto duly authorized.

TITAN PHARMACEUTICALS, INC.

By: /s/ Sunil Bhonsle
Name: Sunil Bhonsle
Title: Chief Executive Officer and President

Dated: March 26, 2018

**Exhibit 4.1**

NEITHER THIS WARRANT NOR THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED OR ANY STATE SECURITIES LAWS. NO SALE OR DISPOSITION OF THE WARRANT OR SUCH SHARES OF COMMON STOCK MAY BE EFFECTED WITHOUT (i) EFFECTIVE REGISTRATION STATEMENTS RELATED THERETO, (ii) AN OPINION OF COUNSEL OR OTHER EVIDENCE, REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATIONS ARE NOT REQUIRED, (iii) RECEIPT OF NO-ACTION LETTERS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITIES, OR (iv) OTHERWISE COMPLYING WITH THE PROVISIONS OF SECTION 8 OF THIS WARRANT.

**TITAN PHARMACEUTICALS, INC.**

WARRANT TO PURCHASE SHARES OF STOCK

THIS CERTIFIES THAT, for value received, _____ and its assignees ("Warrant Holder") are entitled to subscribe for and purchase _____ fully paid and nonassessable shares (the "Shares") of common stock, $.001 par value (the "Common Stock of TITAN PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), at the price per share equal to $1.20 ( "Warrant Price"), subject to the provisions and upon the terms and conditions hereinafter set forth. As used herein, (a) the term "Shares" shall mean the Common Stock and any stock into or for which such Common Stock may hereafter be converted or exchanged; (b) the term "Date of Grant" shall mean March 21, 2018, and (c) the term "Other Warrants" shall mean any warrant issued upon transfer or partial exercise of or in lieu of this Warrant. The term "Warrant" as used herein shall be deemed to include Other Warrants unless the context clearly requires otherwise. The Warrant Price and the number of Shares issuable upon exercise of this Warrant are subject to adjustment in accordance with the provisions of Section 5 hereof.

1. Term. The purchase right represented by this Warrant is exercisable, in whole or in part, at any time and from time to time from the Date of Grant through after the seventh anniversary of the Date of Grant (the "Term").

2. Method of Exercise; Payment; Issuance of New Warrant. Subject to Section 1 hereof, the purchase right represented by this Warrant may be exercised by the holder hereof, in whole or in part and from time to time, at the election of the holder hereof, by (a) the surrender of this Warrant (with the notice of exercise substantially in the form attached hereto as Exhibit A-1 duly completed and executed) at the principal office of the Company and by the payment to the Company, by certified or bank check, or by wire transfer to an account designated by the Company (a "Wire Transfer") of an amount equal to the Warrant Price multiplied by the number of Shares then being purchased; (b) if in connection with a registered public offering of the Company's securities, the surrender of this Warrant (with the notice of exercise form attached hereto as Exhibit A-2 duly completed and executed) at the principal office of the Company together with notice of arrangements reasonably satisfactory to the Company for payment to the Company either by certified or bank check or by Wire Transfer from the proceeds of the sale of shares to be sold by the holder in such public offering of an amount equal to the Warrant Price multiplied by the number of Shares then being purchased; or (c) exercise of the "net issuance" right provided for in Section 11.2 hereof. The person or persons in whose name(s) any certificate(s) representing the Shares shall be issuable upon exercise of this Warrant shall be deemed to have become the holder(s) of record of, and shall be treated for all purposes as the record holder(s) of, the shares represented thereby (and such shares shall be deemed to have been issued) immediately prior to the close of business on the date or dates upon which this Warrant is exercised. In the event of any exercise of the rights represented by this Warrant, certificates for the Shares shall be delivered to the holder hereof as soon as possible and in any event within thirty (30) days after such exercise and, unless this Warrant has been fully exercised or expired, a new Warrant representing the portion of the Shares, if any, with respect to which this Warrant shall not then have been exercised shall also be issued to the holder hereof as soon as possible and in any event within such thirty-day period; provided, however, if the Company is subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), if requested by the holder of this Warrant, the Company shall cause its transfer agent to deliver the certificate representing Shares issued upon exercise of this Warrant to a broker or other person (as directed by the holder exercising this Warrant) within the time period required to settle any trade made by the holder after exercise of this Warrant.

3. Exercise Limitation. Notwithstanding anything to the contrary contained herein, the Company shall not effect any issuance upon exercise of this Warrant, and Warrant Holder shall not have the right to exercise any portion of this Warrant, in each case, to the extent that, after giving effect to such issuance, Warrant Holder (or any of Warrant Holder's affiliates or any persons or entities acting as a group together with Warrant Holder or any of Warrant Holder's affiliates (such persons or entities, the "Attribution Parties")) would beneficially own in excess of any then applicable Beneficial Ownership Limitation (provided, that Warrant Holder shall be entitled to exercise this Warrant in part subject to the then applicable Beneficial Ownership Limitations). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by Warrant Holder and the Attribution Parties shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, unexercised portion of the Warrant beneficially owned by Warrant Holder or any the Attribution Parties the exercise of which is restricted by this Section 3 and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by Warrant Holder or any of the Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 3, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, Warrant Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Company's most recent periodic or annual report filed with the U.S. Securities and Exchange Commission (the "SEC"), as the case may be; (ii) a more recent public announcement by the Company; or (iii) a more recent written notice by the Company setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of Warrant Holder, the Company shall within two (2) days confirm orally and in writing to Warrant Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by Warrant Holder or the Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. For purposes hereof, the "4.99% Ownership Limitation" shall mean, as of any date of determination, 4.99% of the number of shares of Common Stock outstanding as of such date plus, to the extent not included therein, shares of Common Stock beneficially owned by Warrant Holder and the Attribution Parties and "9.99% Ownership Limitation" shall mean, as of any date of determination, 9.99% of the number of shares of Common Stock outstanding as of such date plus, to the extent not included therein, shares of Common Stock beneficially owned by Warrant Holder and the Attribution Parties (each, the 4.99% Ownership Limitation and the 9.99% Ownership Limitation, a "Beneficial Ownership Limitation". Warrant Holder may, upon written notice to the Company, waive either or both Beneficial Ownership Limitations applicable to this Warrant provided that such waiver shall not be effective until the 75$^{th}$ day following the date such notice is delivered to the Company. In the event that both Beneficial Ownership Limitations shall have been waived and such waivers shall have become effective, this Section 3 shall terminate and be of no further force and effect.

4. Stock Fully Paid; Reservation of Shares. All Shares that may be issued upon the exercise of this Warrant will, upon issuance pursuant to the terms and conditions herein, be fully paid and nonassessable, and free from all preemptive rights and taxes, liens and charges with respect to the issue thereof. During Term, the Company will at all times have authorized, and reserved for the purpose of the issue upon exercise of the purchase rights evidenced by this Warrant, a sufficient number of shares of its Common Stock to provide for the exercise in full of this Warrant.

5. Adjustment of Warrant Price and Number of Shares. The number and kind of securities purchasable upon the exercise of this Warrant and the Warrant Price shall be subject to adjustment from time to time upon the occurrence of certain events, as follows:

(a) Reclassification or Merger. In case of any reclassification or change of securities of the class issuable upon exercise of this Warrant (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), or in case of any merger of the Company with or into another corporation (other than a merger with another corporation in which the Company is the acquiring and the surviving corporation and which does not result in any reclassification or change of outstanding securities issuable upon exercise of this Warrant), or in case of any sale of all or substantially all of the assets of the Company, the Company, or such successor or purchasing corporation, as the case may be, shall duly execute and deliver to the holder of this Warrant a new Warrant (in form and substance satisfactory to the holder of this Warrant), so that the holder of this Warrant shall have the right to receive upon exercise of this Warrant, at a total purchase price not to exceed that payable upon the exercise of the unexercised portion of this Warrant, and in lieu of the shares of Common Stock theretofore issuable upon exercise of this Warrant, (i) the kind and amount of shares of stock, other securities, money and property receivable upon such reclassification, change, merger or sale by a holder of the number of shares of Common Stock then purchasable under this Warrant, or (ii) in the case of such a merger or sale in which the consideration paid consists all or in part of assets other than securities of the successor or purchasing corporation, at the option of the holder of this Warrant, the securities of the successor or purchasing corporation having a value at the time of the transaction equivalent to the value of the Common Stock purchasable upon exercise of this Warrant at the time of the transaction. Any new Warrant shall provide for adjustments that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 5. The provisions of this Section 5(a) shall similarly apply to successive reclassifications, changes, mergers and sales.

(b) Subdivision or Combination of Shares. If the Company at any time while this Warrant remains outstanding and unexpired shall subdivide or combine its outstanding shares of Common Stock, the Warrant Price shall be proportionately decreased and the number of Shares issuable hereunder shall be proportionately increased in the case of a subdivision and the Warrant Price shall be proportionately increased and the number of Shares issuable hereunder shall be proportionately decreased in the case of a combination.

(c) Stock Dividends and Other Distributions. If the Company at any time while this Warrant is outstanding and unexpired shall (i) pay a dividend with respect to its Common Stock payable in Common Stock, then the Warrant Price shall be adjusted, from and after the date of determination of shareholders entitled to receive such dividend or distribution, to that price determined by multiplying the Warrant Price in effect immediately prior to such date of determination by a fraction (A) the numerator of which shall be the total number of shares of Common Stock outstanding immediately prior to such dividend or distribution, and (B) the denominator of which shall be the total number of shares of Common Stock outstanding immediately after such dividend or distribution; or (ii) make any other distribution with respect to Common Stock (except any distribution specifically provided for in Sections 5(a) and 5(b)), then, in each such case, provision shall be made by the Company such that the holder of this Warrant shall receive upon exercise of this Warrant a proportionate share of any such dividend or distribution as though it were the holder of the Shares as of the record date fixed for the determination of the shareholders of the Company entitled to receive such dividend or distribution.

(d) Adjustment of Number of Shares. Upon each adjustment in the Warrant Price, the number of Shares purchasable hereunder shall be adjusted, to the nearest whole share, to the product obtained by multiplying the number of Shares purchasable immediately prior to such adjustment in the Warrant Price by a fraction, the numerator of which shall be the Warrant Price immediately prior to such adjustment and the denominator of which shall be the Warrant Price immediately thereafter.

6. Notice of Adjustments. Whenever the Warrant Price or the number of Shares purchasable hereunder shall be adjusted pursuant to Section 5 hereof, the Company shall make a certificate signed by its chief financial officer setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated, and the Warrant Price and the number of Shares purchasable hereunder after giving effect to such adjustment, and shall cause copies of such certificate to be mailed (without regard to Section 14 hereof, by first class mail, postage prepaid) to the holder of this Warrant.

7. Fractional Shares. No fractional shares of Common Stock will be issued in connection with any exercise hereunder, but in lieu of such fractional shares the Company shall make a cash payment therefor based on the fair market value of the Common Stock on the date of exercise as reasonably determined in good faith by the Company's Board of Directors.

8. Compliance with Securities Act; Disposition of Warrant or Shares of Common Stock.

(a) Compliance with Securities Act. The holder of this Warrant, by acceptance hereof, agrees that this Warrant, and the Shares to be issued upon exercise hereof are being acquired for investment and that such holder will not offer, sell or otherwise dispose of this Warrant, or any Shares except under circumstances which will not result in a violation of the Securities Act of 1933, as amended (the "Act") or any applicable state securities laws. Upon exercise of this Warrant, unless the Shares being acquired are registered under the Act and any applicable state securities laws or an exemption from such registration is available, the holder hereof shall confirm in writing that the Shares so purchased are being acquired for investment and not with a view toward distribution or resale in violation of the Act and shall confirm such other matters related thereto as may be reasonably requested by the Company. This Warrant and all Shares issued upon exercise of this Warrant (unless registered under the Act and any applicable state securities laws) shall be stamped or imprinted with a legend in substantially the following form:

> "THE SECURITIES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS. NO SALE OR DISPOSITION MAY BE EFFECTED WITHOUT (i) EFFECTIVE REGISTRATION STATEMENTS RELATED THERETO, (ii) AN OPINION OF COUNSEL OR OTHER EVIDENCE, REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATIONS ARE NOT REQUIRED, (iii) RECEIPT OF NO-ACTION LETTERS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITIES, OR (iv) OTHERWISE COMPLYING WITH THE PROVISIONS OF SECTION 8 OF THE WARRANT UNDER WHICH THESE SECURITIES WERE ISSUED, DIRECTLY OR INDIRECTLY."

Said legend shall be removed by the Company, upon the request of a holder, at such time as the restrictions on the transfer of the applicable security shall have terminated. In addition, in connection with the issuance of this Warrant, the holder specifically represents to the Company by acceptance of this Warrant as follows:

(1) The holder is aware of the Company's business affairs and financial condition, and has acquired information about the Company sufficient to reach an informed and knowledgeable decision to acquire this Warrant. The holder is acquiring this Warrant for its own account for investment purposes only and not with a view to, or for the resale in connection with, any "distribution" thereof in violation of the Act.

(2) The holder understands that this Warrant has not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the holder's investment intent as expressed herein.

(3) The holder further understands that this Warrant must be held indefinitely unless subsequently registered under the Act and qualified under any applicable state securities laws, or unless exemptions from registration and qualification are otherwise available. The holder is aware of the provisions of Rule 144, promulgated under the Act.

(4) The holder is an "accredited investor" as such term is defined in Rule 501 of Regulation D promulgated under the Act.

(b) Applicability of Restrictions. No restriction of any legend described in this Warrant shall apply to any transfer of, or grant of a security interest in, this Warrant (or the Common Stock obtainable upon exercise thereof) or any part hereof (i) to a partner of the holder if the holder is a partnership or to a member of the holder if the holder is a limited liability company, (ii) to a partnership of which the holder is a partner or to a limited liability company of which the holder is a member, (iii) to any affiliate of the holder if the holder is a corporation, (iv) notwithstanding the foregoing, to any corporation, company, limited liability company, limited partnership, partnership, or other person managed or sponsored by Warrant Holder or in which Warrant Holder has an interest, (v) or to a lender to the holder or any of the foregoing; provided, however, in any such transfer, if applicable, the transferee shall on the Company's request agree in writing to be bound by the terms of this Warrant as if an original holder hereof.

9. Rights as Shareholders; Information. No holder of this Warrant, as such, shall be entitled to vote or receive dividends or be deemed the holder of Common Stock which may at any time be issuable upon the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the holder of this Warrant, as such, any of the rights of a shareholder of the Company or any right to vote for the election of directors or upon any matter submitted to shareholders at any meeting thereof, or to receive notice of meetings, or to receive dividends or subscription rights or otherwise until this Warrant shall have been exercised and the Shares purchasable upon the exercise hereof shall have become deliverable, as provided herein. Notwithstanding the foregoing, the Company will transmit to the holder of this Warrant such information, documents and reports as are generally distributed to the holders of any class or series of the securities of the Company concurrently with the distribution thereof to the shareholders. The requirements of the foregoing sentence shall be satisfied by the posting of any such information, documents or reports on sec.gov.

10. Registration Rights. The holder of this Warrant shall have the registration rights set forth on Appendix B to that certain Rights Agreement, dated as of the date hereof, by and between the Company and Warrant Holder.

11. Additional Rights.

11.1 Acquisition Transactions. The Company shall provide the holder of this Warrant with at least twenty (20) days' written notice prior to closing thereof of the terms and conditions of any of the following transactions (to the extent the Company has notice thereof): (i) the sale, lease, exchange, conveyance or other disposition of all or substantially all of the Company's property or business, or (ii) its merger into or consolidation with any other corporation (other than a wholly-owned subsidiary of the Company), or any transaction (including a merger or other reorganization) or series of related transactions, in which more than 50% of the voting power of the Company is disposed of.

11.2 Right to Convert Warrant into Stock: Net Issuance.

(a) Right to Convert. In addition to and without limiting the rights of the holder under the terms of this Warrant, the holder shall have the right to convert this Warrant or any portion thereof (the "Conversion Right") into shares of Common Stock as provided in this Section 11.2 at any time or from time to time during the term of this Warrant. Upon exercise of the Conversion Right with respect to a particular number of shares subject to this Warrant (the "Converted Warrant Shares"), the Company shall deliver to the holder (without payment by the holder of any exercise price or any cash or other consideration) that number of shares of fully paid and nonassessable Common Stock as is determined according to the following formula:

$$X = \frac{B - A}{Y}$$

Where:

X = the number of Shares that shall be issued to holder

Y = the fair market value of one Share

A = the aggregate Warrant Price of the specified number of Shares immediately prior to the exercise of the Conversion Right (i.e., the number of Shares multiplied by the Warrant Price)

B = the aggregate fair market value of the specified number of Shares (i.e., the number of Shares multiplied by the fair market value of one Share)

No fractional shares shall be issuable upon exercise of the Conversion Right, and, if the number of shares to be issued determined in accordance with the foregoing formula is other than a whole number, the Company shall pay to the holder an amount in cash equal to the fair market value of the resulting fractional share on the Conversion Date (as hereinafter defined). For purposes of Section 11 of this Warrant, shares issued pursuant to the Conversion Right shall be treated as if they were issued upon the exercise of this Warrant.

(b) Method of Exercise. The Conversion Right may be exercised by the holder by the surrender of this Warrant at the principal office of the Company together with a written statement (which may be in the form of Exhibit A-1 or Exhibit A-2 hereto) specifying that the holder thereby intends to exercise the Conversion Right and indicating the number of shares subject to this Warrant which are being surrendered (referred to in Section 11.2(a) hereof as the Converted Warrant Shares) in exercise of the Conversion Right. Such conversion shall be effective upon receipt by the Company of this Warrant together with the aforesaid written statement, or on such later date as is specified therein (the "Conversion Date"), and, at the election of the holder hereof, may be made contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the Act (a "Public Offering"). Certificates for the shares issuable upon exercise of the Conversion Right and, if applicable, a new warrant evidencing the balance of the shares remaining subject to this Warrant, shall be issued as of the Conversion Date and shall be delivered to the holder within thirty (30) days following the Conversion Date.

(c) Determination of Fair Market Value. For purposes of this Section 11.2, "fair market value" of a share of Common Stock as of a particular date (the "Determination Date") shall mean:

(i) If the Conversion Right is exercised in connection with and contingent upon a Public Offering, and if the Company's Registration Statement relating to such Public Offering ("Registration Statement") has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering.

(ii) If the Conversion Right is not exercised in connection with and contingent upon a Public Offering, then as follows:

(A) If traded on a securities exchange, the fair market value of the Common Stock shall be deemed to be the average of the closing prices of the Common Stock on such exchange over the five trading days immediately prior to the Determination Date;

(B) If traded on the NASDAQ Stock Market or other over-the-counter system, the fair market value of the Common Stock shall be deemed to be the average of the closing prices of the Common Stock over the five trading days immediately prior to the Determination Date; and

(C) If there is no public market for the Common Stock, then fair market value shall be determined by mutual agreement of the holder of this Warrant and the Company.

If closing prices or closing bid prices are no longer reported by a securities exchange or other trading system, the closing price or closing bid price shall be that which is reported by such securities exchange or other trading system at 4:00 p.m. New York City time on the applicable trading day.

11.3 Exercise Prior to Expiration. To the extent this Warrant is not previously exercised as to all of the Shares subject hereto, and if the fair market value of one share of the Common Stock is greater than the Warrant Price then in effect, this Warrant shall be deemed automatically exercised pursuant to Section 11.2 above (even if not surrendered) immediately before its expiration. For purposes of such automatic exercise, the fair market value of one share of the Common Stock upon such expiration shall be determined pursuant to Section 11.2(c). To the extent this Warrant or any portion thereof is deemed automatically exercised pursuant to this Section 11.3, the Company agrees to promptly notify the holder hereof of the number of Shares, if any, the holder hereof is to receive by reason of such automatic exercise.

12. Representations and Warranties. The Company represents and warrants to the holder of this Warrant as follows:

(a) This Warrant has been duly authorized and executed by the Company and is a valid and binding obligation of the Company enforceable in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and the rules of law or principles at equity governing specific performance, injunctive relief and other equitable remedies.

(b) The Shares have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable and free from preemptive rights.

(c) A true and correct copy of the Company's Certificate of Incorporation, as amended through the Date of Grant has been provided to Holder (the "Charter"). The rights, preferences, privileges and restrictions granted to or imposed upon the classes and series of the Company's capital stock and the holders thereof are as set forth in the Charter.

(d) The execution and delivery of this Warrant are not, and the issuance of the Shares upon exercise of this Warrant in accordance with the terms hereof will not be, inconsistent with the Company's Charter or by-laws, do not and will not contravene any law, governmental rule or regulation, judgment or order applicable to the Company, and do not and will not conflict with or contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other instrument of which the Company is a party or by which it is bound or require the consent or approval of, the giving of notice to, the registration or filing with or the taking of any action in respect of or by, any Federal, state or local government authority or agency or other person, except for the filing of notices pursuant to federal and state securities laws, which filings will be effected by the time required thereby.

(e) There are no actions, suits, audits, investigations or proceedings pending or, to the knowledge of the Company, threatened against the Company in any court or before any governmental commission, board or authority which, if adversely determined, could have a material adverse effect on the ability of the Company to perform its obligations under this Warrant.

(f) The number of shares of Common Stock of the Company outstanding on the date hereof, on a fully diluted basis (assuming the conversion of all outstanding convertible securities and the exercise of all outstanding options and warrants other than this Warrant, the Other Warrants and that certain promissory note, dated as of the date hereof, issued to Warrant Holder by the Company), does not exceed 27,000,000 shares.

13. Modification and Waiver. This Warrant and any provision hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of the same is sought.

14. Notices. Any notice, request, communication or other document required or permitted to be given or delivered to the holder hereof or the Company shall be delivered, or shall be sent by certified or registered mail, postage prepaid, to each such holder at its address as shown on the books of the Company or to the Company at the address indicated therefor on the signature page of this Warrant.

15. Binding Effect on Successors. This Warrant shall be binding upon any corporation succeeding the Company by merger, consolidation or acquisition of all or substantially all of the Company's assets, and all of the obligations of the Company relating to the Shares issuable upon the exercise or conversion of this Warrant shall survive the exercise, conversion and termination of this Warrant and all of the covenants and agreements of the Company shall inure to the benefit of the successors and assigns of the holder hereof.

16. Lost Warrants or Stock Certificates. The Company covenants to the holder hereof that, upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant or any stock certificate and, in the case of any such loss, theft or destruction, upon receipt of an indemnity reasonably satisfactory to the Company, or in the case of any such mutilation upon surrender and cancellation of such Warrant or stock certificate, the Company will make and deliver a new Warrant or stock certificate, of like tenor, in lieu of the lost, stolen, destroyed or mutilated Warrant or stock certificate.

17. Descriptive Headings. The descriptive headings of the various Sections of this Warrant are inserted for convenience only and do not constitute a part of this Warrant. The language in this Warrant shall be construed as to its fair meaning without regard to which party drafted this Warrant.

18. Governing Law. This Warrant shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of Delaware.

19. Survival of Representations, Warranties and Agreements. All representations and warranties of the Company and the holder hereof contained herein shall survive the Date of Grant, the exercise or conversion of this Warrant (or any part hereof) or the termination or expiration of rights hereunder. All agreements of the Company and the holder hereof contained herein shall survive indefinitely until, by their respective terms, they are no longer operative.

20. Remedies. In case any one or more of the covenants and agreements contained in this Warrant shall have been breached, the holders hereof (in the case of a breach by the Company), or the Company (in the case of a breach by a holder), may proceed to protect and enforce their or its rights either by suit in equity and/or by action at law, including, but not limited to, an action for damages as a result of any such breach and/or an action for specific performance of any such covenant or agreement contained in this Warrant.

21. No Impairment of Rights. The Company will not, by amendment of its Charter or through any other means, avoid or seek to avoid the observance or performance of any of the terms of this 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 Warrant against impairment.

22. Severability. The invalidity or unenforceability of any provision of this Warrant in any jurisdiction shall not affect the validity or enforceability of such provision in any other jurisdiction, or affect any other provision of this Warrant, which shall remain in full force and effect.

23. Recovery of Litigation Costs. If any legal action or other proceeding is brought for the enforcement of this Warrant, or because of an alleged dispute, breach, default, or misrepresentation in connection with any of the provisions of this Warrant, the successful or prevailing party or parties shall be entitled to recover reasonable attorneys' fees and other costs incurred in that action or proceeding, in addition to any other relief to which it or they may be entitled.

24. Entire Agreement; Modification. This Warrant constitutes the entire agreement between the parties pertaining to the subject matter contained in it and supersedes all prior and contemporaneous agreements, representations, and undertakings of the parties, whether oral or written, with respect to such subject matter.

[Remainder of page intentionally blank. Signature page follows.]

The Company has caused this Warrant to be duly executed and delivered as of the Date of Grant specified above.

**TITAN PHARMACEUTICALS, INC.**

By: _____

Name: Sunil Bhonsle
Title: Chief Executive Officer and President

Address: 400 Oyster Point Blvd., Suite 505
South San Francisco, CA 94080

[SIGNATURE PAGE TO WARRANT]

EXHIBIT A-1

NOTICE OF EXERCISE

To: TITAN PHARMACEUTICALS, INC. (the "Company")

1. The undersigned hereby:

☐ elects to purchase_____ shares of Common Stock of the Company pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price of such shares in full, or

☐ elects to exercise its net issuance rights pursuant to Section 11.2 of the attached Warrant with respect to_____ shares of Common Stock.

2. Please issue a certificate or certificates representing _____ shares in the name of the undersigned or in such other name or names as are specified below:

_____
(Name)

_____

_____
(Address)

3. The undersigned represents that the aforesaid shares are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares, all except as in compliance with applicable securities laws.

_____
(Signature)

_____
(Date)

EXHIBIT A-2

NOTICE OF EXERCISE

To: TITAN PHARMACEUTICALS, INC. (the "Company")

1. Contingent upon and effective immediately prior to the closing (the "Closing") of the Company's public offering contemplated by the Registration Statement on Form S___, filed_____, 20__, the undersigned hereby:

☐ elects to purchase _____ shares of Common Stock of the Company (or such lesser number of shares as may be sold on behalf of the undersigned at the Closing) pursuant to the terms of the attached Warrant, or

☐ elects to exercise its net issuance rights pursuant to Section 11.2 of the attached Warrant with respect to _____ shares of Common Stock.

2. Please deliver to the custodian for the selling shareholders a stock certificate representing such _____ shares.

3. The undersigned has instructed the custodian for the selling shareholders to deliver to the Company $_____or, if less, the net proceeds due the undersigned from the sale of shares in the aforesaid public offering. If such net proceeds are less than the purchase price for such shares, the undersigned agrees to deliver the difference to the Company prior to the Closing.

_____
(Signature)

_____
(Date)

**Exhibit 10.1**

# AMENDED AND RESTATED VENTURE LOAN AND SECURITY AGREEMENT

Dated as of March 21, 2018

by and among

L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A.,
a company organized and existing under the laws of Italy
Strada Statale 67, Frazione Granatieri,
Scandicci (Florence), Italy

as a Lender and Collateral Agent,

HORIZON CREDIT II LLC,
a Delaware limited liability company
312 Farmington Avenue
Farmington, CT 06032

as a Lender

And

TITAN PHARMACEUTICALS, INC.,
a Delaware corporation

400 Oyster Point Blvd., Suite 505
South San Francisco, CA 94080

as Borrower

Loan Amount: $4,000,000

WHEREAS, Borrower, Horizon (as lender) and Horizon TFC (as collateral agent), are party to that certain Venture and Security Agreement, dated as of the Original Closing Date (as amended, restated, supplemented or otherwise modified from time to time prior to the effectiveness hereof, the "Original Agreement");

WHEREAS, pursuant to the terms of the Original Agreement, as of the date hereof immediately prior to the effectiveness of this Agreement, the aggregate principal amount outstanding under the Original Agreement was $4,000,000;

WHEREAS, Horizon TFC desires to resign as the Collateral Agent under the Original Agreement, the Lenders party hereto desire to appoint Molteni as successor Collateral Agent under this Agreement and the Loan Documents, the Borrower desires to approve such appointment and Molteni wishes to accept such appointment; and

WHEREAS, Borrower and Horizon (as lender) desire to amend and restate in its entirety the Original Agreement, without constituting a novation, all on terms subject to the conditions contained herein.

NOW THEREFORE, in consideration of the mutual agreements herein contained, the Lenders, Collateral Agent and Borrower hereby agree to amend and restate the Original Agreement in its entirety as follows:

AGREEMENT

1. Definitions and Construction.

1.1 Definitions. As used in this Agreement, the following capitalized terms shall have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined):

"4.99% Ownership Limitation" has the meaning given such term in Section 2.5 of this Agreement.

"9.99% Ownership Limitation" has the meaning given such term in Section 2.5 of this Agreement.

"Account Control Agreement" means an agreement acceptable to the Required Lenders which perfects via control Collateral Agent's security interest in Borrower's deposit accounts and/or securities accounts for the benefit of the Lenders.

"Affiliate" means, with respect to any Person, any other Person that owns or controls directly or indirectly ten percent (10%) or more of the stock of such Person, any other Person that controls or is controlled by or is under common control with such Person and each of such Person's officers, directors, managers, or partners. For purposes of this definition, the term "control" of a Person means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting Equity Securities, by contract or otherwise and the terms "controlled by" and "under common control with" shall have correlative meanings.

"Agreement" means this certain Amended and Restated Venture Loan and Security Agreement by and among Borrower, Collateral Agent and Lenders dated as of the date on the cover page hereto (as it may from time to time be amended, modified or supplemented in a writing signed by Borrower, Collateral Agent and Lenders).

"Anti-Terrorism Laws" means any laws relating to terrorism or money laundering, including Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"Asset Purchase, Supply and Support Agreement" means that certain Asset Purchase, Supply and Support Agreement by and among Borrower and Molteni dated as of the Restatement Effective Date, in the form attached hereto as Exhibit F.

"Attribution Parties" has the meaning given such term in Section 2.5 of this Agreement.

"Beneficial Ownership Limitation" has the meaning given such term in Section 2.5 of this Agreement.

"Borrower" means Borrower as set forth on the cover page of this Agreement.

"Business Day" means any day that is not a Saturday, Sunday, or other day on which banking institutions are authorized or required to close in New York.

"Claim" has the meaning given such term in Section 10.3 of this Agreement.

"Code" means the Uniform Commercial Code as adopted and in effect in the State of New York, as amended from time to time; *provided* that if by reason of mandatory provisions of law, the creation and/or perfection or the effect of perfection or non-perfection of the security interest in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of New York, the term "Code" shall also mean the Uniform Commercial Code as in effect from time to time in such jurisdiction for purposes of the provisions hereof relating to such creation, perfection or effect of perfection or non-perfection.

"Collateral" has the meaning given such term in Section 4.1 of this Agreement.

"Collateral Agent" means Molteni, or any successor collateral agent appointed by the Required Lenders.

"Collateral Agent Parties" has the meaning given such term in Section 18.2 of this Agreement.

"Communication" has the meaning given such term in Section 18.2 of this Agreement.

"Consolidated" means the consolidation of accounts in accordance with GAAP.

"Conversion Closing" has the meaning given such term in Section 2.5 of this Agreement.

"Conversion Notice" has the meaning given such term in Section 2.5 of this Agreement.

"Conversion Option" has the meaning given such term in Section 2.5 of this Agreement.

"Conversion Price" has the meaning given such term in Section 2.5 of this Agreement.

"Conversion Shares" has the meaning given such term in Section 2.5 of this Agreement.

"Conversion Stock" has the meaning given such term in Section 2.5 of this Agreement.

"Default" means any Event of Default or any event which with the passing of time or the giving of notice or both would become an Event of Default hereunder.

"Default Rate" means the per annum rate of interest equal to five percent (5%) over the Loan Rate, but such rate shall in no event be more than the highest rate permitted by applicable law to be charged on commercial loans in a default situation.

"Disclosure Schedule" means Exhibit A attached hereto.

"Environmental Laws" means all foreign, federal, state or local laws, statutes, common law duties, rules, regulations, ordinances and codes, together with all administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authorities, in each case relating to environmental, health, safety and land use matters, including the Comprehensive Environmental Response, Compensation and Liability Act of 1980, the Clean Air Act, the Federal Water Pollution Control Act of 1972, the Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, the Toxic Substances Control Act and the Emergency Planning and Community Right-to-Know Act.

"Equity Securities" of any Person means (a) all common stock, preferred stock, participations, shares, partnership interests, membership interests or other equity interests in and of such Person (regardless of how designated and whether or not voting or non-voting) and (b) all warrants, options and other rights to acquire any of the foregoing.

"ERISA" has the meaning given such term in Section 7.12 of this Agreement.

"Event of Default" has the meaning given such term in Section 8 of this Agreement.

"Excluded Property" means all Purchased Assets (as defined in the Asset Purchase, Supply and Support Agreement).

"FATCA" means Sections 1471 through 1474 of the Internal Revenue Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b) of the Internal Revenue Code and any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the Internal Revenue Code.

"GAAP" means generally accepted accounting principles as in effect in the United States of America from time to time, consistently applied.

"Good Faith Deposit" has the meaning given such term in Section 2.6(a) of this Agreement.

"Governmental Authority" means (a) any federal, state, county, municipal or foreign government, or political subdivision thereof, (b) any governmental or quasi-governmental agency, authority, board, bureau, commission, department, instrumentality or public body, (c) any court or administrative tribunal, or (d) with respect to any Person, any arbitration tribunal or other non-governmental authority to whose jurisdiction that Person has consented.

"Hazardous Materials" means all those substances which are regulated by, or which may form the basis of liability under, any Environmental Law, including all substances identified under any Environmental Law as a pollutant, contaminant, hazardous waste, hazardous constituent, special waste, hazardous substance, hazardous material, or toxic substance, or petroleum or petroleum derived substance or waste.

"Horizon" means Horizon Credit II LLC.

"Horizon TFC" means Horizon Technology Finance Corporation.

"Horizon Loan" has the meaning given such term in Section 2.1(e).

"Indebtedness" means, with respect to any Person, the aggregate amount of, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes or other similar instruments, (c) all obligations of such Person to pay the deferred purchase price of property or services (excluding trade payables aged less than one hundred eighty (180) days), (d) all capital lease obligations of such Person, (e) all obligations or liabilities of others secured by a Lien on any asset of such Person, whether or not such obligation or liability is assumed, (f) all obligations or liabilities of others guaranteed by such Person, and (g) any other obligations or liabilities which are required by GAAP to be shown as debt on the balance sheet of such Person.

"Indemnified Person" has the meaning given such term in Section 10.3 of this Agreement.

"Intellectual Property" means, with respect to any Person, all of such Person's right, title and interest in and to patents, patent rights (and applications and registrations therefor and divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same), trademarks and service marks (and applications and registrations therefor and the goodwill associated therewith), whether registered or not, inventions, copyrights (including applications and registrations therefor and like protections in each work or authorship and derivative work thereof), whether published or unpublished, mask works (and applications and registrations therefor), trade names, trade styles, software and computer programs, source code, object code, trade secrets, licenses, methods, processes, know how, drawings, specifications, descriptions, and all memoranda, notes, and records with respect to any research and development, all whether now owned or subsequently acquired or developed by such Person and whether in tangible or intangible form or contained on magnetic media readable by machine together with all such magnetic media (but not including embedded computer programs and supporting information included within the definition of "goods" under the Code).

"Internal Revenue Code" has the meaning given such term in Section 5.19 of this Agreement.

"Investment" means the purchase or acquisition of any capital stock, equity interest, or any obligations or other securities of, or any similar interest in, any Person, or the extension of any advance, loan, extension of credit or capital contribution to, or any other investment in, or deposit with, any Person.

"Landlord Agreement" means an agreement substantially in the form provided by Collateral Agent to Borrower or such other form as the Collateral Agent may agree to accept in the exercise of its reasonable discretion.

"Lender" means each Lender as set forth on the cover page of this Agreement.

"Lender's Expenses" means all reasonable costs or expenses (including reasonable attorneys' fees and expenses) incurred by Horizon in connection with the preparation, negotiation, documentation, drafting, amendment, modification, administration, perfection and funding of the Loan Documents; and all of each Lender's reasonable attorneys' fees, costs and expenses incurred in enforcing or defending the Loan Documents (including reasonable fees and expenses of appeal or review), including the exercise of any rights or remedies afforded hereunder or under applicable law, whether or not suit is brought, whether before or after bankruptcy or insolvency, including all reasonable fees and costs incurred by each Lender in connection with such Lender's enforcement of its rights in a bankruptcy or insolvency proceeding filed by or against Borrower, any Subsidiary or their respective Property.

"Lien" means any voluntary or involuntary security interest, pledge, bailment, lease, mortgage, hypothecation, conditional sales and title retention agreement, encumbrance or other lien with respect to any Property in favor of any Person.

"Loan" means collectively the Molteni Loan and the Horizon Loan.

"Loan Documents" means, collectively, this Agreement, the Notes, the Warrants, any Landlord Agreement, any Account Control Agreement and all other documents, instruments and agreements entered into in connection with this Agreement, as each may be amended, restated or otherwise modified from time to time.

"Loan Rate" means, with respect to each Loan, the per annum rate of interest equal to 9.50% plus the amount by which the one month LIBOR Rate (rounded to the nearest one hundredth percent), as reported in the Wall Street Journal exceeds 1.10%. Notwithstanding the foregoing, in no event shall the Loan Rate be less than 9.50%.

"Material Adverse Effect" means a material adverse effect on (a) the condition (financial or otherwise), business, or operations of Borrower, (b) the ability of Borrower to perform its Obligations under the Loan Documents or (c) the Collateral or Collateral Agent's security interest in the Collateral for the benefit of the Lenders.

"Maturity Date" means, with respect to each Loan, June 1, 2021, or if earlier, the date of acceleration of such Loan following an Event of Default or the date of prepayment, whichever is applicable.

"Molteni" means L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A.

"Molteni Declined Scheduled Payment" has the meaning given such term in Section 2.2(a)(i) of this Agreement.

"Molteni Loan" has the meaning set forth in Section 2.1(e) of this Agreement.

"Note" means each promissory note executed in connection with a Loan in substantially the form of either (a) Exhibit C-1 with respect to the Horizon Loan and (b) Exhibit C-2 with respect to the Molteni Loan, in each case, attached hereto.

"Obligations" means all debt, principal, interest, fees, charges, expenses and reasonable attorneys' fees and costs and other amounts, obligations, covenants, and duties owing by Borrower to Collateral Agent or any Lender of any kind and description (whether pursuant to or evidenced by the Loan Documents (other than the Warrants), or by any other agreement between any Lender and Borrower (other than the Warrants), and whether or not for the payment of money), whether direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising, including all Lender's Expenses.

"OFAC" means the Office of Foreign Assets Control of the United States Department of the Treasury.

"Officer's Certificate" means a certificate executed by a Responsible Officer substantially in the form of Exhibit E or such other form as the Required Lenders may agree to accept.

"Original Agreement" has the meaning set forth in the Preamble.

"Original Closing Date" means July 27, 2017.

"Payment Date" has the meaning given such term in Section 2.2(a) of this Agreement.

"Permitted Indebtedness" means and includes:

(a) Indebtedness of Borrower to Lenders under the Loan Documents;

(b) Indebtedness arising from the endorsement of instruments in the ordinary course of business;

(c) Indebtedness of Borrower existing on the date hereof and set forth on the Disclosure Schedule;

(d) intercompany Indebtedness owed by any Subsidiary to Borrower or any wholly-owned Subsidiary, as applicable; *provided* that, if applicable, such Indebtedness is also permitted as a Permitted Investment and, in the case of such Indebtedness owed to Borrower, such Indebtedness shall be evidenced by one or more promissory notes;

(e) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness under subsection (d) above; *provided* that the principal amount thereof is not increased or the terms thereof are not modified to impose materially more burdensome terms upon Borrower.

(f) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;

(g) Indebtedness of Borrower secured by Liens permitted under clause (g) of the definition of Permitted Liens, up to an aggregate principal amount of Five Hundred Thousand Dollars ($500,000) at any one time;

(h) to the extent constituting or that may constitute Indebtedness, any Equity Securities of Borrower outstanding as of the date hereof, including any preferred stock, warrants, options and other rights to acquire Borrower's Equity Securities and any payments that may arise thereunder; and

(i) Indebtedness for deferred compensation to Borrower's employees, including accrued vacation, in an aggregate amount not to exceed Five Hundred Thousand Dollars ($500,000) as of the date of this Agreement, provided, however, that commencing on the date that is ninety (90) days after the date of this Agreement, and continuing until the indefeasible repayment in full of the Obligations, the aggregate amount of Indebtedness permitted pursuant to this clause (i) shall not exceed Four Hundred Thousand Dollars ($400,000).

"Permitted Investments" means and includes any of the following Investments as to which the Collateral Agent, for the benefit of the Lenders, has a perfected security interest:

(a) Deposits and deposit accounts with commercial banks organized under the laws of the United States or a state thereof to the extent: (i) the deposit accounts of each such institution are insured by the Federal Deposit Insurance Corporation up to the legal limit; and (ii) each such institution has an aggregate capital and surplus of not less than One Hundred Million Dollars ($100,000,000);

(b) Investments in marketable obligations issued or fully guaranteed by the United States, any state thereof or any agency thereof and maturing not more than one (1) year from the date of issuance;

(c) Investments in open market commercial paper rated at least "A1" or "P1" or higher by a national credit rating agency and maturing not more than one (1) year from the creation thereof;

(d) Investments pursuant to or arising under currency agreements or interest rate agreements entered into in the ordinary course of business;

(e) Investments by Borrower and Subsidiaries in their Subsidiaries outstanding on the date hereof;

(f) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;

(g) Investments in joint ventures or strategic alliances in the ordinary course of Borrower's business consisting of the licensing of technology, intellectual property and/or product, the development of such technology, intellectual property and/or product or the providing of technical support, provided that any cash Investments by Borrower do not exceed $100,000 in the aggregate in any fiscal year; and

(h) other Investments aggregating not in excess of One Hundred Thousand Dollars ($100,000) at any time.

"Permitted Licenses" means and includes (i) non-exclusive licenses of Intellectual Property entered into in the ordinary course of business, (ii) exclusive licenses of Intellectual Property entered into in the ordinary course of business and applicable solely outside the United States, provided that such exclusive licenses could not result in a legal transfer of title of the licensed Intellectual Property and (iii) exclusive licenses of Intellectual Property entered into in the ordinary course of business that are exclusive as to the United States, to the extent consented to by the Required Lenders, which consent shall not be unreasonably withheld, conditioned or delayed, provided, however, that any exclusive license of Borrower's Intellectual Property to Molteni or any Affiliate of Molteni shall require the prior written consent of each Lender, which consent shall not be unreasonably withheld, conditioned or delayed.

"Permitted Liens" means and includes:

(a) the Liens created by this Agreement;

(b) Liens for fees, taxes, levies, imposts, duties or other governmental charges of any kind which are not yet delinquent or which are being contested in good faith by appropriate proceedings which suspend the collection thereof (*provided* that such appropriate proceedings do not involve any substantial danger of the sale, forfeiture or loss of any material item of Collateral which in the aggregate is material to Borrower and that Borrower has adequately bonded such Lien or reserves sufficient to discharge such Lien have been provided on the books of Borrower);

(c) Liens identified on the Disclosure Schedule;

(d) carriers', warehousemen's, mechanics', materialmen's, repairmen's or other similar Liens arising in the ordinary course of business and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings (*provided* that such appropriate proceedings do not involve any substantial danger of the sale, forfeiture or loss of any material item of Collateral or Collateral which in the aggregate is material to Borrower and that Borrower has adequately bonded such Lien or reserves sufficient to discharge such Lien have been provided on the books of Borrower);

(e) leases or subleases of real property granted in the ordinary course of Borrower's business, and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's business, if the leases, subleases, licenses and sublicenses do not prohibit granting Lenders a security interest therein;

(f) leases or subleases granted in the ordinary course of Borrower's business, including in connection with Borrower's leased premises or leased property;

(g) Liens upon any equipment or other personal property acquired by Borrower after the date hereof to secure (i) the purchase price of such equipment or other personal property, or (ii) capital lease obligations or indebtedness incurred solely for the purpose of financing the acquisition of such equipment or other personal property; *provided* that (A) such Liens are confined solely to the equipment or other personal property so acquired and the amount secured does not exceed the acquisition price thereof, and (B) no such Lien shall be created, incurred, assumed or suffered to exist in favor of Borrower's officers, directors or shareholders holding five percent (5%) or more of Borrower's Equity Securities; and

(h) Liens in favor of financial institutions arising solely in connection with Borrower's deposit or securities accounts held at such institutions.

"Person" means and includes any individual, any partnership, any corporation, any business trust, any joint stock company, any limited liability company, any unincorporated association or any other entity and any domestic or foreign national, state or local government, any political subdivision thereof, and any department, agency, authority or bureau of any of the foregoing.

"Property" means any interest in any kind of property or asset, whether real, personal or mixed, whether tangible or intangible.

"Required Lenders" means, at any time, Lenders holding more than 50% of the outstanding principal amount of the Loan.

"Responsible Officer" has the meaning given such term in Section 6.4 of this Agreement.

"Restatement Closing Certificate" means a certificate executed by a duly authorized Responsible Officer of Borrower substantially in the form of Exhibit B or such other form as the Required Lenders may agree to accept.

"Restatement Effective Date" means the date on which all conditions precedent set forth in Section 3 have been satisfied (or waived in accordance with the terms hereof).

"Restricted License" means any license or other agreement with respect to which Borrower is the licensee and such license or agreement is material to Borrower's business and (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or any other property or (b) for which a default under or termination of would reasonably be expected to interfere with Collateral Agent's right to sell any Collateral.

"Rights to Payment" has the meaning given such term in Section 4.1 of this Agreement.

"Sanctions" means any economic or financial sanction administered or enforced by the United States Government (including, without limitation, OFAC and the United States Department of State), the United Nations Security Council, the European Union, Her Majesty's Treasury of the United Kingdom or other relevant sanctions authority.

"Scheduled Payments" has the meaning given such term in Section 2.2(a)(i) of this Agreement.

"Solvent" has the meaning given such term in Section 5.12 of this Agreement.

"Specified Breach" means the occurrence of an Event of Default under Sections 8.1, 8.2, 8.13 or 8.14 hereof which is not otherwise waived by the affected Lenders or cured within any applicable cure or grace period.

"Subsidiary" means any corporation or other entity of which a majority of the outstanding Equity Securities entitled to vote for the election of directors or other governing body (otherwise than as the result of a default) is owned by Borrower directly or indirectly through Subsidiaries.

"Transfer" has the meaning given such term in Section 7.4 of this Agreement.

"Warrant" means the separate warrant or warrants in favor of any Lender or its designees to purchase securities of Borrower.

1.2 Construction. References in this Agreement to "Articles," "Sections," "Exhibits," "Schedules" and "Annexes" are to recitals, articles, sections, exhibits, schedules and annexes herein and hereto unless otherwise indicated. References in this Agreement and each of the other Loan Documents to any document, instrument or agreement shall include (a) all exhibits, schedules, annexes and other attachments thereto, (b) all documents, instruments or agreements issued or executed in replacement thereof, and (c) such document, instrument or agreement, or replacement or predecessor thereto, as amended, modified and supplemented from time to time and in effect at any given time (subject, in the case of clauses (b) and (c), to any restrictions on such replacement, amendment, modification or supplement set forth in the Loan Documents). The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement or any other Loan Document shall refer to this Agreement or such other Loan Document, as the case may be, as a whole and not to any particular provision of this Agreement or such other Loan Document, as the case may be. The words "include" and "including" and words of similar import when used in this Agreement or any other Loan Document shall not be construed to be limiting or exclusive. Unless the context requires otherwise, any reference in this Agreement or any other Loan Document to any Person shall be construed to include such Person's successors and assigns. Unless otherwise indicated in this Agreement or any other Loan Document, all accounting terms used in this Agreement or any other Loan Document shall be construed, and all accounting and financial computations hereunder or thereunder shall be computed, in accordance with GAAP, and all terms describing Collateral shall be construed in accordance with the Code. The terms and information set forth on the cover page of this Agreement are incorporated into this Agreement.

2. Loans; Repayment.

2.1 Loans.

(a) The Loan Amounts. Borrower acknowledges and agrees that, immediately prior to the effectiveness of this Agreement, the outstanding principal amount of the indebtedness owing under the Original Agreement is $4,000,000 and that the entirety of such amount is hereby deemed to have been, and hereby is, converted into the outstanding Loans hereunder in like principal amount without constituting a novation, and that no additional amounts shall be advanced to Borrower on the Restatement Effective Date.

(b) The Loans and the Notes. The obligation of Borrower to repay the unpaid principal amount of and interest on each Loan shall be evidenced by Notes issued to the Lenders.

(c) Use of Proceeds. The proceeds of the Loans shall be used solely for working capital or general corporate purposes of Borrower.

(d) Lender Assignments. Effective as of the Restatement Effective Date, each Lender hereby severally and not jointly agrees that its pro rata share of the Loan shall be as set forth on Schedule I attached hereto. To the extent necessary to give effect to the provisions of the preceding sentence, effective as of the Restatement Effective Date, Horizon hereby sells and assigns to Molteni, without recourse, representation or warranty of any kind (except that Horizon hereby represents and warrants to Molteni that Horizon is the legal and beneficial owner of and has good and marketable title to, and is hereby assigning, selling, transferring, delivering and conveying to Molteni legal and beneficial ownership of and good and marketable title to, the interests so assigned by Horizon, free and clear of any Liens of any kind thereon), and Molteni hereby purchases and assumes from Horizon, as the case may be, a percentage interest in the respective “Loan A” and “Loan B” (under and as defined in the Original Agreement) in amounts sufficient to give effect to the pro rata share of the Loan set forth on Schedule I attached hereto. The foregoing sale and assignments of “Loan A” and “Loan B” (under and as defined in the Original Agreement) shall be made at a purchase price equal to the outstanding principal amount of the “Loan A” and “Loan B” (as defined in the Original Agreement) so assigned. All accrued but unpaid interest under the Original Agreement shall be for the benefit of Horizon. The Lenders hereby agree to effect such inter-lender transfers so that the respective pro rata share of the Loan Amount as of the Restatement Effective Date shall be as set forth on Schedule I attached hereto.

(e) Molteni Loan and Horizon Loan. Immediately upon the effectiveness of the assignments described in Section 2.1(d), the aggregate principal amount of Loan held by Molteni shall be deemed the "Molteni Loan" and the aggregate principal amount of Loan held by Horizon shall be deemed the "Horizon Loan". The Molteni Loan and Horizon Loan shall be subject to the respective terms and conditions assigned to such Loans as provided herein.

2.2 Payments.

(a) Scheduled Payments.

(i) Molteni Loan and Horizon Loan. Borrower shall make (i) a payment of accrued interest only to the respective Lender on the outstanding principal amount of Molteni Loan and Horizon Loan on the Payment Dates specified in the Note applicable to each such Loan and (ii) an equal payment of principal plus accrued interest to the respective Lender on the outstanding principal amount of Molteni Loan and Horizon Loan on the Payment Dates as set forth in the Note applicable to each such Loan (collectively, the "Scheduled Payments"). Borrower shall make such Scheduled Payments commencing on the date set forth in the Notes applicable to such Loans and continuing thereafter on the first Business Day of each calendar month (each a "Payment Date") through the Maturity Date. In any event, all unpaid principal and accrued interest shall be due and payable in full on the Maturity Date; *provided*, however, that if Molteni has delivered a Conversion Notice to Borrower in accordance with Section 2.5(a), then solely with respect to the Molteni Loan, such amounts shall be due and payable on the first Business Day immediately following the date specified in the Conversion Notice for the Conversion Closing to occur to the extent the Conversion Closing does not occur. Notwithstanding the foregoing and notwithstanding anything to the contrary in Section 2.3, Molteni may, by notice to the Borrower in writing (delivered by facsimile or other similar electronic transmission) at least 3 Business Days prior to the applicable Payment Date, elect to decline all or any portion of its pro rata share of any Scheduled Payment (each a "Molteni Declined Scheduled Payment"), in which case the aggregate amount of such Molteni Declined Scheduled Payment shall be retained by the Borrower. For the avoidance of doubt, Horizon shall not be permitted, at any time, to decline any payment of its pro rata share of any Scheduled Payment whether or not Molteni makes any such election pursuant to this Section 2.2(a)(i).

(b) Interim Payment. Unless the Restatement Effective Date is the first day of a calendar month, Borrower shall pay the per diem interest (accruing at the Loan Rate from the Restatement Effective Date through the last day of that month) payable with respect to such Loan on the first Business Day of the next calendar month.

(c) Payment of Interest. Borrower shall pay interest on each Loan at a per annum rate of interest equal to the Loan Rate. The Loan Rate shall initially be calculated using the LIBOR Rate reported in the Wall Street Journal on the date which is five (5) Business Days prior to the Restatement Effective Date, but shall thereafter be calculated for each calendar month using the LIBOR Rate reported in the Wall Street Journal on the first calendar day of such month, provided, however, that if the first calendar day of any month is not a Business Day, the Loan Rate shall be calculated using the LIBOR Rate reported in the Wall Street Journal on the Business Day immediately preceding the first calendar day of such month. Horizon hereby agrees that it shall, on or prior to the 15th day of each month following the Restatement Effective Date, provide each other Lender party hereto and the Borrower a written notice of the effective LIBOR Rate to be used for the determination of the Loan Rate for such month. Interest (including interest at the Default Rate, if applicable) shall be computed on the basis of a 360-day year for the actual number of days elapsed. Notwithstanding any other provision hereof, the amount of interest payable hereunder shall not in any event exceed the maximum amount permitted by the law applicable to interest charged on commercial loans.

(d) Application of Payments. All payments received by Lenders prior to an Event of Default shall be applied as follows: (i) first, to Lenders' Expenses then due and owing; and (ii) second, ratably, to all Scheduled Payments then due and owing (*provided*, however, if such payments are not sufficient to pay the whole amount then due, such payments shall be applied first to unpaid interest at the Loan Rate, then to the remaining amounts then due). After the occurrence and during the continuation of an Event of Default, all payments and application of proceeds shall be made as set forth in Section 9.7.

(e) Late Payment Fee. Borrower shall pay to Lenders a late payment fee equal to six percent (6%) of any Scheduled Payment not paid to Lenders within two (2) Business Days of the applicable Payment Date or Maturity Date.

(f) Default Rate. Following the occurrence and during the continuation of an Event of Default, Borrower shall pay interest at a per annum rate equal to the Default Rate on any amounts required to be paid by Borrower to Collateral Agent or Lenders under this Agreement or the other Loan Documents (including Scheduled Payments), payable with respect to any Loan, accrued and unpaid interest, and any fees or other amounts which remain unpaid after such amounts are due. If an Event of Default has occurred and the Obligations have been accelerated (whether automatically or at the election of the Lenders), Borrower shall pay interest on the aggregate outstanding accelerated balance hereunder from the date of the Event of Default until all Events of Default are cured, at a per annum rate equal to the Default Rate.

(g) Final Payment.

(i) Horizon Loan Final Payment. Borrower shall pay to Horizon a payment in the amount of Two Hundred Forty-Six Thousand Seven Hundred Thirty-Nine and 00/100 Dollars ($246,739) upon the earlier of (A) payment in full of the Horizon Loan, (B) an Event of Default and demand by the Required Lenders of payment in full of the Loans or (C) the Maturity Date, as applicable.

(ii) Molteni Final Payment. Borrower shall pay to Molteni a payment in the amount of Four Hundred Sixty Three Thousand Two Hundred Sixty-One and 00/100 Dollars ($463,261) upon the earlier of (A) payment in full of the Molteni Loan, (B) an Event of Default and demand by the Required Lenders of payment in full of the Loans, (C) the exercise by Molteni of its conversion option in accordance with Section 2.5 hereof or (D) the Maturity Date, as applicable.

(h) Original Loan Prepayment Fee. Borrower shall pay to Horizon a payment in the amount of Ninety-Six Thousand and 00/100 Dollars ($96,000) upon the earlier of (A) payment in full of the Horizon Loan, (B) an Event of Default and demand by the Required Lenders of payment in full of the Loans or (C) the Maturity Date, as applicable.

2.3 Prepayments.

(a) Mandatory Prepayment Upon an Acceleration. If the Loans are accelerated following the occurrence of an Event of Default pursuant to Section 9.1(a) hereof, then Borrower, in addition to any other amounts which may be due and owing hereunder, shall immediately pay to Lenders the amount set forth in Section 2.3(b) below, as if Borrower had opted to prepay on the date of such acceleration.

(b) Optional Prepayment. Upon ten (10) Business Days' prior written notice to Lenders, Borrower may, at its option, at any time, prepay all (and not less than all) of the outstanding Loans by simultaneously paying to each Lender its pro rata portion of an amount equal to (i) any accrued and unpaid interest on the outstanding principal balance of the Loans; *plus* (ii) an amount equal to (A) if the Loans are prepaid on or before December 31, 2018, four percent (4%) of the then outstanding principal balance of the Loans, (B) if the Loans are prepaid after December 31, 2018 but on or before December 31, 2019, three percent (3%) of the then outstanding principal balance of the Loans, or (C) if the Loans are prepaid after December 31, 2019, two percent (2%) of the then outstanding principal balance of the Loans; *plus* (iii) the outstanding principal balance of the Loans; *plus* (iv) all other sums, if any, that shall have become due and payable hereunder. Notwithstanding the foregoing and notwithstanding anything to the contrary in Section 2.3: (i) Molteni may consent in writing to elect to decline all or any portion of its pro rata share of any prepayment made pursuant to this Section 2.3(b), in which case the aggregate amount of such declined prepayment shall be retained by the Borrower and (ii) unless Molteni consents to the receipt of such prepayment in writing, no prepayment made pursuant to this Section 2.3(b) may be made to Molteni during any period during which there exists a Beneficial Ownership Limitation. For the avoidance of doubt, Horizon shall not be permitted, at any time, to decline any portion of its pro rata share of any prepayment made pursuant to this Section 2.3(b) whether or not Molteni makes any such election pursuant to this Section 2.3(b).

2.4 Other Payment Terms.

(a) Place and Manner. Borrower shall make all payments due to Lenders in lawful money of the United States. All payments of principal, interest, fees and other amounts payable by Borrower hereunder shall be made, in immediately available funds, not later than 3:00 p.m. New York time, on the date on which such payment is due. Borrower shall make such payments to Lenders via wire transfer or ACH as instructed by each Lender from time to time.

(b) Date. Whenever any payment is due hereunder on a day other than a Business Day, such payment shall be made on the next succeeding Business Day, and such extension of time shall be included in the computation of interest or fees, as the case may be.

(c) Taxes.

(i) Unless otherwise required under applicable law, any and all payments made hereunder or under the Notes shall be made free and clear of and without deduction for any taxes; provided that if Borrower shall be required to deduct any taxes from such payments, then (A) except with respect to any taxes excluded from indemnified taxes pursuant to the proviso in Section 2.4(c)(ii) below, the sum payable shall be increased as necessary so that after making all required deductions (including deductions applicable to additional sums payable under this Section 2.4(c)) each Lender receives an amount equal to the sum it would have received had no such deductions been made, (B) Borrower shall make such deductions and (C) Borrower shall pay the full amount deducted to the relevant Governmental Authority in accordance with applicable law.

(ii) Borrower shall indemnify each Lender, within 10 days after written demand therefor, for the full amount of any taxes imposed or asserted directly on each Lender by any Governmental Authority on or attributable to amounts payable under this Agreement solely as a result of each Lender entering into this Agreement to the extent such taxes are paid by each Lender, and any penalties, interest and reasonable expenses arising therefrom or with respect thereto, whether or not such taxes were correctly or legally imposed or asserted by the relevant Governmental Authority; provided, however, that such indemnified taxes shall not include (1) income, branch profits or franchise taxes imposed on (or measured by) any Lender's net income by the jurisdiction, or any political subdivision thereof or taxing authority therein, under the laws of which such recipient is organized or in which its principal office is located or in which its applicable lending office is located or in which it has a present or former connection, (2) any U.S. federal withholding taxes imposed on amounts payable to or for the account of a Lender with respect to any applicable interest in a Loan pursuant to a law in effect on the date on which such Lender acquires such interest in the Loan or such Lender changes its lending office, except in each case to the extent that, pursuant to this Section 2.4(c), amounts with respect to such taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (3) any taxes attributable to a Lender's failure to comply with section 2.4(c)(iv), and (4) any withholding taxes imposed under FATCA. A certificate as to the amount of such payment or liability delivered to Borrower by any Lender shall be conclusive absent manifest error.

(iii) As soon as practicable after any payment of taxes by Borrower hereunder to a Governmental Authority, Borrower shall deliver to each Lender the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to each Lender.

(iv) If any Lender is entitled to an exemption from or reduction of withholding tax under the law of the jurisdiction in which Borrower is located, or any treaty to which such jurisdiction is a party, with respect to payments under this Agreement, such Lender shall deliver to Borrower, as reasonably requested by Borrower, such properly completed and executed documentation prescribed by applicable law as will permit such payments to be made without withholding or at a reduced rate.

(v) If any Lender receives a refund in respect of taxes paid by Borrower pursuant to this Section 2.4(c), which in the reasonable discretion of such Lender exercised in good faith is allocable to such payment, it shall promptly pay such refund, together with any other amounts paid by Borrower in connection with such refunded taxes, to Borrower, net of all out-of-pocket expenses (including any taxes to which such Lender has become subject as a result of its receipt of such refund) of such Lender incurred in obtaining such refund and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund); *provided* that Borrower, upon the request of such Lender, shall repay to such Lender amounts paid over pursuant to the preceding clause (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such Lender is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (v), in no event will any Lender be required to pay any amount to Borrower pursuant to this paragraph (v) the payment of which would place such Lender in a less favorable net after-tax position than such Lender would have been in if the indemnification payments or additional amounts giving rise to such refund had never been paid. This paragraph shall not be construed to require any Lender to make available its tax returns (or any other information relating to its taxes that it deems confidential) to Borrower or any other Person.

2.5 Molteni Conversion Option.

(a) At any time during the period following the Restatement Effective Date through the Maturity Date, Molteni shall have the right and option ("Conversion Option"), exercisable by written notice (a "Conversion Notice") to Borrower to (i) convert any and all Obligations outstanding under the Molteni Loan on the desired conversion date specified in the Conversion Notice into a number of shares (the "Conversion Shares") of common stock (the "Conversion Stock") of Borrower equal to the aggregate principal amount of the Molteni Loan outstanding on the date of the closing of such conversion (together with any and all accrued but unpaid interest thereon), divided by $1.20 (the "Conversion Price"), and (ii) pursuant to such conversion, issue the Conversion Shares as contemplated by this Section 2.5; *provided* that, in the event (x) Borrower issues or sells common stock on a per share price in excess of the Conversion Price for an aggregate purchase or sale price equal to or greater than $10,000,000 in a single transaction and (y) Borrower indefeasibly pays in full and satisfies all Obligations in respect of the Horizon Loan, all Obligations outstanding under the Molteni Loan shall automatically be converted into a number of shares of common stock of Borrower equal to the aggregate principal amount of the Molteni Loan outstanding (together with any and all accrued but unpaid interest thereon), divided by the Conversion Price. The Conversion Price shall be adjusted, from time to time, applying the same terms, mutandis mutandi, as set forth in the Warrant Agreement, dated March 21, 2018, between the Borrower and Molteni.

(b) Borrower shall cause the closing (the "Conversion Closing") of any conversion of Obligations outstanding under the Molteni Loan into Conversion Shares, and the issuance of the Conversion Shares, pursuant to the immediately preceding Section 2.5(a) to occur as promptly as practicable (but not more than thirty days) after the receipt of the Conversion Notice delivered by Molteni, and at the Conversion Closing Borrower shall deliver to, and in the name of, Molteni one or more certificates representing the Conversion Shares, free and clear of any and all Liens. Upon Molteni's receipt of the Conversion Shares in accordance with this Section 2.5, the Obligations outstanding under the Molteni Loan shall be deemed paid in full. As promptly as practicable (but no more than five days) following Molteni's receipt of the Conversion Shares issuable to Molteni pursuant to this Section 2.5, Molteni shall provide to Borrower a written acknowledgement that all Obligations outstanding under the Molteni Loan have been paid in full.

(c) Notwithstanding anything to the contrary contained herein, Borrower shall not effect any issuance upon exercise of Molteni's Conversion Option, and Molteni shall not have the right to exercise its Conversion Option, in each case, to the extent that, after giving effect to such issuance, Molteni (or any of Molteni's affiliates or any persons or entities acting as a group together with Molteni or any of Molteni's affiliates (such persons or entities, the "Attribution Parties")) would beneficially own in excess of any then applicable Beneficial Ownership Limitation (provided, that Molteni shall be entitled to exercise its Conversion Option in part subject to the then applicable Beneficial Ownership Limitations). For purposes of the foregoing sentence, the number of shares of Conversion Stock beneficially owned by Molteni and the Attribution Parties shall exclude the number of shares of Conversion Stock which would be issuable upon (i) exercise of the remaining, unexercised portion of Molteni's Conversion Option beneficially owned by Molteni or any the Attribution Parties the exercise of which is restricted by this Section 2.5(c) and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of Borrower subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by Molteni or any of the Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2.5(c), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder. For purposes of this Agreement, in determining the number of outstanding shares of Conversion Stock, Molteni may rely on the number of outstanding shares of Conversion Stock as stated in the most recent of the following: (i) Borrower's most recent periodic or annual report filed with the U.S. Securities and Exchange Commission, as the case may be; (ii) a more recent public announcement by Borrower; or (iii) a more recent written notice by Borrower setting forth the number of shares of Conversion Stock outstanding. Upon the written or oral request of Molteni, Borrower shall within two (2) days confirm orally and in writing to Molteni the number of shares of Conversion Stock then outstanding. In any case, the number of outstanding shares of Conversion Stock shall be determined after giving effect to the conversion or exercise of securities of Borrower, including the Molteni Note, by Molteni or the Attribution Parties since the date as of which such number of outstanding shares of Conversion Stock was reported. For purposes hereof, the "4.99% Ownership Limitation" shall mean, as of any date of determination, 4.99% of the number of shares of Conversion Stock outstanding as of such date plus, to the extent not included therein, shares of Conversion Stock beneficially owned by Molteni and the Attribution Parties and "9.99% Ownership Limitation" shall mean, as of any date of determination, 9.99% of the number of shares of Conversion Stock outstanding as of such date plus, to the extent not included therein, shares of Conversion Stock beneficially owned by Molteni and the Attribution Parties (each, the 4.99% Ownership Limitation and the 9.99% Ownership Limitation, a "Beneficial Ownership Limitation". Molteni may, upon written notice to Borrower, waive either or both Beneficial Ownership Limitations applicable to this Note provided that such waiver shall not be effective until the 75th day following the date such notice is delivered to Borrower. In the event that both Beneficial Ownership Limitations shall have been waived and such waivers shall have become effective, this Section 2.5(c) shall terminate and be of no further force and effect.

3. Conditions Precedent to Effectiveness of this Agreement. At the time of the execution and delivery of this Agreement, Lenders shall have received, in form and substance reasonably satisfactory to the Lenders, all of the following (unless Lenders have agreed to waive such condition or document):

(a) Loan Agreement. This Agreement duly executed by Borrower, Collateral Agent and Lenders.

(b) Secretary's Certificate. A certificate of the secretary or assistant secretary of Borrower, dated as of the date hereof, with copies of the following documents attached: (i) the certificate of incorporation and bylaws (or equivalent documents) of Borrower certified by Borrower as being complete and in full force and effect on the date thereof, (ii) incumbency and representative signatures, and (iii) resolutions authorizing the execution and delivery of this Agreement and each of the other Loan Documents.

(c) Good Standing Certificates. A good standing certificate from Borrower's state of organization and the state in which Borrower's principal place of business is located, each dated as of a date no earlier than thirty (30) days prior to the date hereof.

(d) Certificate of Insurance. Evidence of the insurance coverage required by Section 6.8 of this Agreement.

(e) Consents. All necessary consents of shareholders and other third parties with respect to the execution, delivery and performance of this Agreement, the Warrants and the other Loan Documents.

(f) Legal Opinion. A legal opinion of Borrower's counsel, dated as of the date hereof, covering the matters set forth in Exhibit D hereto.

(g) Account Control Agreements. Account Control Agreements for all of Borrower's deposit accounts and securities accounts (to the extent required under Section 7.13 of this Agreement) duly executed by all of the parties thereto.

(h) Fees and Expenses. Payment of all fees and expenses then due hereunder or under any other Loan Document.

(i) Molteni Purchase Price. Horizon shall have received from Molteni an amount in cash equal to the outstanding principal amount of each of "Loan A" and "Loan B" (as defined in the Original Agreement) that is being assigned by Horizon to Molteni pursuant to the terms of this Agreement.

(j) Sale of European Assets. Borrower shall have provided Lenders with evidence reasonably satisfactory to Lenders that Borrower has (or substantially concurrently will) consummated the transfer of the Purchased Assets pursuant to the Asset Purchase, Supply and Support Agreement.

(k) No Default. No Default or Event of Default has occurred under the Original Agreement or the other Loan Documents and is continuing or will exist immediately after giving effect to this Agreement; provided that, Lenders and Collateral Agent hereby acknowledge that during the period commencing on the Original Closing Date through the Restatement Effective Date, none of the following has constituted nor formed or will constitute or form the basis upon which Lenders may at any time declare a Default or an Event of Default under this Agreement (including, without limitation, under Section 8.4 thereof) or under any other Loan Document: (i) the level of Probuphine sales or royalties related thereto, (ii) the valuation of Probuphine, or (iii) the termination or amendment of the existing Probuphine license agreement.

(l) Landlord Agreements. Borrower shall have provided the Collateral Agent with a Landlord Agreement for each location where Borrower's books and records and the Collateral (other than (i) clinical trial materials, (ii) laptops and similar equipment maintained by Borrower's employees, (iii) research materials maintained at contract research and storage facilities, and (iv) other Collateral with an aggregate value of not more than $100,000) is located (unless Borrower is the fee owner thereof).

(m) Notes. Borrower shall have duly executed and delivered a Note to each Lender in the amount of each Lender's Loan as set forth opposite such Lender's name on Schedule I hereto.

(n) UCC Financing Statements. Lenders shall have received such documents, instruments and agreements, including UCC financing statements or amendments to UCC financing statements and UCC financing statement searches, as Lenders shall reasonably request to evidence the perfection and priority of the security interests granted to Collateral Agent for the benefit of the Lenders pursuant to Section 4. Borrower authorizes Collateral Agent to file any UCC financing statements, continuations of or amendments to UCC financing statements they deem necessary to perfect its security interest in the Collateral. Borrower and Molteni also consent to Horizon filing a UCC financing statement in its name evidencing its security interest in the Collateral; *provided that* such UCC financing statement shall not be filed by Horizon until after Horizon is provided with filed and stamped copies of UCC financing statements to be filed by the Collateral Agent in connection with this Agreement.

(o) Restatement Closing Certificate. Borrower shall have duly executed and delivered to Lenders the Restatement Closing Certificate.

(p) Warrants. Borrower shall have executed and delivered to Lenders the Warrants, including an additional Warrant issued to Horizon for the purchase of Borrower's Equity Securities having an aggregate value of Forty-Eight Thousand Dollars ($48,000), in substantially identical form as the Warrant being issued to Molteni on the date hereof.

(q) IP Assignment. Horizon, Horizon TFC and Borrower shall have duly executed, delivered to Collateral Agent for filing by Collateral Agent (with the appropriate authority) any and all documents provided by the Collateral Agent which are necessary to effectuate the assignment of any and all Liens and security interests in Intellectual Property (including, without limitation, assignments of security interests in trademarks, patents and copyrights and the collateral assignment of all of Borrower's rights to all moneys and claims for moneys due and/or to become due to the Borrower pursuant to its material contracts (including, for the avoidance of doubt, that certain License Agreement by and between Borrower and Braeburn Pharmaceuticals SPRL, dated as of December 14, 2012, as amended, amended and restated, supplemented or otherwise modified from time to time) to Molteni, in its capacity as Collateral Agent.

(r) Control Agreements. Borrower shall take all actions as are reasonably necessary to cause each depository institution that maintains accounts that are subject any existing deposit account control agreement or securities account control agreement to assign, amend or replace each such deposit account control agreement or securities account control agreement with a new deposit account control agreement or securities account control agreement, or an amendment thereto, as applicable, naming Molteni as the Collateral Agent, including, for the avoidance of doubt, that certain Deposit Account Control Agreement dated July 27, 2017, by and between the Borrower, Horizon TFC and Silicon Valley Bank.

(s) Other Documents. Such other documents and completion of such other matters, as any Lender may reasonably deem necessary or appropriate, including, for the avoidance of doubt, to effect the appointment of Molteni as the Collateral Agent.

4. Creation of Security Interest.

4.1 Grant of Security Interests. Borrower grants to Collateral Agent, for the benefit of the Lenders, a valid, continuing security interest in all presently existing and hereafter acquired or arising Collateral in order to secure prompt, full and complete payment of any and all Obligations and in order to secure prompt, full and complete performance by Borrower of each of its covenants and duties under each of the Loan Documents (other than the Warrants). The "Collateral" shall mean and include all right, title, interest, claims and demands of Borrower in the following:

(a) All goods (and embedded computer programs and supporting information included within the definition of "goods" under the Code) and equipment now owned or hereafter acquired, including all laboratory equipment, computer equipment, office equipment, machinery, fixtures, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing, and all attachments, accessories, accessions, replacements, substitutions, additions, and improvements to any of the foregoing, wherever located;

(b) All inventory now owned or hereafter acquired, including all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products including such inventory as is temporarily out of Borrower's custody or possession or in transit and including any returns upon any accounts or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above, and Borrower's books relating to any of the foregoing;

(c) All contract rights and general intangibles (including Intellectual Property), now owned or hereafter acquired, including goodwill, license agreements (subject to the terms thereof), franchise agreements, blueprints, drawings, purchase orders, customer lists, route lists, infringements, claims, software, computer programs, computer disks, computer tapes, literature, reports, catalogs, design rights, income tax refunds, payment intangibles, commercial tort claims, payments of insurance and rights to payment of any kind;

(d) All now existing and hereafter arising accounts, contract rights, royalties, license rights, license fees and all other forms of obligations owing to Borrower arising out of the sale or lease of goods, the licensing of technology or the rendering of services by Borrower (subject, in each case, to the contractual rights of third parties to require funds received by Borrower to be expended in a particular manner), whether or not earned by performance, and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by Borrower and Borrower's books relating to any of the foregoing;

(e) All documents, cash, deposit accounts, letters of credit and letters of credit rights (whether or not the letter of credit is evidenced by a writing) and other supporting obligations, certificates of deposit, instruments, promissory notes, chattel paper (whether tangible or electronic) and investment property, including all securities, whether certificated or uncertificated, security entitlements, securities accounts, commodity contracts and commodity accounts, and all financial assets held in any securities account or otherwise, wherever located, now owned or hereafter acquired and Borrower's books relating to the foregoing; and

(f) To the extent not covered by clauses (a) through (e), all other personal property of the Borrower, whether tangible or intangible, and any and all rights and interests in any of the above and the foregoing and, any and all claims, rights and interests in any of the above and all substitutions for, additions and accessions to and proceeds thereof, including insurance, condemnation, requisition or similar payments and proceeds of the sale or licensing of Intellectual Property.

4.2 After-Acquired Property. If Borrower shall at any time acquire a commercial tort claim, as defined in the Code with a value in excess of Fifty Thousand Dollars ($50,000), Borrower shall promptly notify Collateral Agent and Lenders in writing signed by Borrower of the brief details thereof and grant to Collateral Agent in such writing a security interest therein and in the proceeds thereof, for the benefit of the Lenders, all upon the terms of this Agreement, with such writing to be in form and substance satisfactory to Collateral Agent and the Required Lenders.

4.3 Duration of Security Interest. Collateral Agent's security interest in the Collateral for the benefit of the Lenders shall continue until the indefeasible payment in full and the satisfaction of all Obligations whereupon such security interest shall terminate. Collateral Agent shall, at Borrower's sole cost and expense, execute such further documents and take such further actions as may be reasonably necessary to make effective the releases contemplated by this Section 4.3 (including with respect to Collateral Agent's security interest in Borrower's Intellectual Property as contemplated by the immediately succeeding sentence), including duly authorizing and delivering termination statements for filing in all relevant jurisdictions under the Code and Intellectual Property security interest releases for filing with the United States Patent and Trademark Office. Notwithstanding the foregoing, Collateral Agent's security interest in Borrower's Intellectual Property for the benefit of the Lenders shall automatically terminate if Borrower provides Lenders with evidence reasonably satisfactory to Lenders that Borrower has, during any twelve (12) consecutive month period commencing on January 1, 2018 and continuing through December 31, 2019, received cash royalties and/or sales milestone payments in an aggregate amount of not less than Five Hundred Thousand Dollars ($500,000) as the result of sales of Probuphine in the United States and Canada pursuant to a license agreement with a third party.

4.4 Location and Possession of Collateral. The Collateral (other than (i) clinical trial materials, (ii) laptops and similar equipment maintained by Borrower's employees, (iii) research materials maintained at contract research and storage facilities, and (iv) other Collateral with an aggregate value of not more than $100,000) is and shall remain in the possession of Borrower at its location listed on the cover page hereof or as set forth in the Disclosure Schedule or at such other location(s) as to which Borrower has provided written notice to Collateral Agent. Borrower shall remain in full possession, enjoyment and control of the Collateral (other than (i) clinical trial materials, (ii) laptops and similar equipment maintained by Borrower's employees, (iii) research materials maintained at contract research and storage facilities, and (iv) other Collateral with an aggregate value of not more than $100,000 and otherwise except only as may be required by Collateral Agent for perfection of the security interests therein created hereunder) and so long as no Event of Default has occurred, shall be entitled to manage, operate, dispose of and use the same and each part thereof with the rights and franchises appertaining thereto; *provided* that the possession, enjoyment, control and use of the Collateral shall at all times be subject to the observance and performance of the terms of this Agreement.

4.5 Delivery of Additional Documentation Required. Borrower shall from time to time execute and deliver to Collateral Agent , at the request of Collateral Agent, all financing statements and other documents Collateral Agent may reasonably request, in form reasonably satisfactory to Collateral Agent , to perfect and continue Collateral Agent's perfected security interests in the Collateral for the benefit of the Lenders and in order to consummate fully all of the transactions contemplated under the Loan Documents.

4.6 Right to Inspect. Collateral Agent and any Lender (through any of their officers, employees, or agents) shall have the right, upon reasonable prior notice, from time to time during Borrower's usual business hours, to inspect the books and records of Borrower and Subsidiaries and to make copies thereof and to inspect, test, and appraise the Collateral in order to verify Borrower's financial condition or the amount, condition of, or any other matter relating to, the Collateral; provided that prior to an Event of Default, Collateral Agent and Lenders shall make such inspections, in the aggregate, not more than twice in any calendar year. Any inspection, test or appraisal conducted hereunder shall be done at the sole cost and expense of Borrower.

4.7 Protection of Intellectual Property. Borrower shall:

(a) protect, defend and maintain the validity and enforceability of its Intellectual Property material to Borrower's business (as determined by Borrower in its reasonable judgment) and promptly advise Collateral Agent in writing of material infringements;

(b) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without the Required Lenders written consent, which consent shall not be unreasonably withheld or delayed;

(c) provide written notice to the Collateral Agent within ten (10) days after entering or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public); and

(d) take such commercially reasonable steps as Collateral Agent or Required Lenders request to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for Collateral Agent to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Collateral Agent's rights and remedies under this Agreement and the other Loan Documents.

4.8 Notice of Exclusive Control. Collateral Agent shall not deliver a notice of exclusive control to any financial institution at which Borrower's deposit accounts and/or securities accounts covered by an Account Control Agreement are maintained unless an Event of Default shall have occurred that has not been waived.

4.9 Intellectual Property. Borrower shall promptly notify Lenders within five (5) Business Days after the federal registration or filing by Borrower of any patent or patent application, or trademark or trademark application, or copyright or copyright application and shall promptly execute and deliver to Collateral Agent any grants of security interests in same, in form reasonably acceptable to the Required Lenders, to file with the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

5. Representations and Warranties. Except as set forth in the Disclosure Schedule, Borrower represents and warrants as follows:

5.1 Organization and Qualification. Each of Borrower and its Subsidiaries is a corporation duly organized and validly existing under the laws of its state of incorporation and qualified and licensed to do business in, and is in good standing in, any jurisdiction in which the conduct of its business or its ownership of Property requires that it be so qualified and licensed or in which the Collateral is located, except for such states as to which any failure to so qualify would not have a Material Adverse Effect.

5.2 Authority. Borrower has all necessary power and authority to execute, deliver, and perform its obligations in accordance with the terms thereof, the Loan Documents to which it is a party. Borrower and Subsidiaries have all requisite power and authority to own and operate their Property and to carry on their businesses as now conducted. Borrower and Subsidiaries have obtained all licenses, permits, approvals and other authorizations necessary for the operation of their business.

5.3 Conflict with Other Instruments, etc. Neither the execution and delivery of any Loan Document to which Borrower is a party nor the consummation of the transactions therein contemplated nor compliance with the terms, conditions and provisions thereof will conflict with or result in a breach of any of the terms, conditions or provisions of the certificate of incorporation, the by-laws, or any other organizational documents of Borrower or any law or any regulation, order, writ, injunction or decree of any court or Governmental Authority by which Borrower or any Subsidiary or any of their respective property or assets may be bound or affected or any material agreement or instrument to which Borrower is a party or by which it or any of its Property is bound or to which it or any of its Property is subject, or constitute a default thereunder or result in the creation or imposition of any Lien, other than Permitted Liens.

5.4 Authorization; Enforceability. The execution and delivery of this Agreement, the granting of the security interest in the Collateral, the incurrence of the Loans, the execution and delivery of the other Loan Documents to which Borrower is a party and the consummation of the transactions herein and therein contemplated have each been duly authorized by all necessary action on the part of Borrower. No authorization, consent, approval, license or exemption of, and no registration, qualification, designation, declaration or filing with, or notice to, any Person is, was or will be necessary to (a) the valid execution and delivery of any Loan Document to which Borrower is a party, (b) the performance of Borrower's obligations under any Loan Document or (c) the granting of the security interest in the Collateral, except for filings in connection with the perfection of the security interest in any of the Collateral or the issuance of the Warrants. The Loan Documents have been duly executed and delivered and constitute legal, valid and binding obligations of Borrower, enforceable against Borrower in accordance with their respective terms, except as the enforceability thereof may be limited by bankruptcy, insolvency or other similar laws of general application relating to or affecting the enforcement of creditors' rights or by general principles of equity.

5.5 No Prior Encumbrances. Borrower has good and marketable title to the Collateral, free and clear of Liens except for Permitted Liens. Borrower has good title and ownership of, or is licensed under, all of Borrower's current Intellectual Property. Borrower is the sole owner of the Intellectual Property which it owns or purports to own except for (a) non-exclusive licenses granted to its customers, resellers and/or distributors in the ordinary course of business, (b) over-the-counter software that is commercially available to the public and (c) material Intellectual Property licensed to Borrower (other than off-the-shelf software) and noted on the Disclosure Schedule. Each patent which it owns or purports to own and which is material to Borrower's business is valid and enforceable, and no part of the Intellectual Property which Borrower owns or purports to own and which is material to Borrower's business has been judged invalid or unenforceable, in whole or in part. Except as noted on the Disclosure Schedule, Borrower is not a party to, nor is it bound by, any Restricted License. Borrower has not received any communications alleging that Borrower has violated, or by conducting its business as proposed, would violate any proprietary rights of any other Person, in each case that could reasonably be expected to have a Material Adverse Effect. Borrower has no knowledge of any infringement or violation by it of the intellectual property rights of any third party and has no knowledge of any violation or infringement by a third party of any of its Intellectual Property. The Collateral and the Intellectual Property constitute substantially all of the assets and property of Borrower, and Borrower owns all Intellectual Property associated with the business of Borrower and Subsidiaries, free and clear of any Liens other than Permitted Liens.

5.6 Security Interest. The provisions of this Agreement create legal and valid security interests in the Collateral in favor of the Collateral Agent, for the benefit of the Lenders, and, assuming the proper filing of one or more financing statement(s) identifying the Collateral with the proper state and/or local authorities, the security interests in the Collateral granted to Collateral Agent pursuant to this Agreement (a) constitute and will continue to constitute first priority security interests (except to the extent any Permitted Liens may have a superior priority to Collateral Agent's Lien under this Agreement) and (b) are and will continue to be superior and prior to the rights of all other creditors of Borrower (except to the extent of such Permitted Liens).

5.7 Name; Location of Chief Executive Office, Principal Place of Business and Collateral. Borrower has not done business under any name other than that specified on the signature page hereof. Borrower's jurisdiction of incorporation, chief executive office, principal place of business, and the place where Borrower maintains its records concerning the Collateral are presently located in the state and at the address set forth on the cover page of this Agreement. The Collateral is presently located at the address set forth on the cover page hereof or as set forth in the Disclosure Schedule or at such locations permitted under Section 7.2 of this Agreement.

5.8 Litigation. There are no actions or proceedings pending by or against Borrower or any Subsidiary before any court, arbitral tribunal, regulatory organization, administrative agency or similar body in which an adverse decision could have a Material Adverse Effect. Borrower does not have knowledge of any such pending or threatened actions or proceedings.

5.9 Financial Statements. All financial statements relating to Borrower, any Subsidiary or any Affiliate that have been delivered by Borrower to Collateral Agent or Lenders present fairly in all material respects Borrower's Consolidated financial condition as of the date thereof and Borrower's Consolidated results of operations for the period then ended.

5.10 Full Disclosure. No representation, warranty or other statement made by Borrower in any Loan Document (including the Disclosure Schedule), certificate or written statement furnished to Collateral Agent or Lenders (other than projections, forward-looking statements and other information of a general economic or industry nature, which projections, forward-looking statements and other information of a general economic or industry nature have been prepared by Borrower in good faith based upon assumptions believed by Borrower to be reasonable at the time) contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading. There is no fact known to Borrower which materially adversely affects, or which could in the future be reasonably expected to materially adversely affect, its ability to perform its obligations under this Agreement.

5.11 Solvency, Etc. Borrower is Solvent (as defined below) and, after the execution and delivery of the Loan Documents and the consummation of the transactions contemplated thereby, Borrower will be Solvent. "Solvent" means, with respect to any Person on any date, that on such date (a) the fair value of the property of such Person is greater than the fair value of the liabilities (including contingent liabilities) of such Person, (b) the present fair saleable value of the assets of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, (c) such Person does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person's ability to pay as such debts and liabilities mature and (d) such Person is not engaged in business or a transaction, and is not about to engage in business or a transaction, for which such Person's property would constitute an unreasonably small capital.

5.12 Subsidiaries. Borrower has no Subsidiaries.

5.13 Capitalization. All issued and outstanding Equity Securities of Borrower are duly authorized and validly issued, fully paid and non-assessable, and such securities were issued in compliance with all applicable state and federal laws concerning the issuance of securities, except for such compliance with such laws that would not reasonably be expected to result in a Material Adverse Effect.

5.14 Catastrophic Events; Labor Disputes. None of Borrower, any Subsidiary or any of their respective Property is or has been affected by any fire, explosion, accident, strike, lockout or other labor dispute, drought, storm, hail, earthquake, embargo, act of God or other casualty that could reasonably be expected to have a Material Adverse Effect. There are no disputes presently subject to grievance procedure, arbitration or litigation under any of the collective bargaining agreements, employment contracts or employee welfare or incentive plans to which Borrower or any Subsidiary is a party, and there are no strikes, lockouts, work stoppages or slowdowns, or, to the knowledge of Borrower, jurisdictional disputes or organizing activity occurring or threatened which could reasonably be expected to have a Material Adverse Effect.

5.15 Certain Agreements of Officers, Employees and Consultants.

(a) No Violation. To the knowledge of Borrower, no officer, employee or consultant of Borrower is, or is now expected to be, in violation of any term of any employment contract, proprietary information agreement, nondisclosure agreement, noncompetition agreement or any other material contract or agreement or any restrictive covenant relating to the right of any such officer, employee or consultant to be employed by Borrower because of the nature of the business conducted or to be conducted by Borrower or relating to the use of trade secrets or proprietary information of others, and to Borrower's knowledge, the continued employment of Borrower's officers, employees and consultants does not subject Borrower to any material liability for any claim or claims arising out of or in connection with any such contract, agreement, or covenant.

(b) No Present Intention to Terminate. To the knowledge of Borrower, no officer of Borrower, and no employee or consultant of Borrower whose termination, either individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect, has any present intention of terminating his or her employment or consulting relationship with Borrower.

5.16 No Plan Assets. Neither Borrower nor any Subsidiary is an "employee benefit plan," as defined in Section 3(3) of ERISA, subject to Title I of ERISA, and none of the assets of Borrower or any Subsidiary constitutes or will constitute "plan assets" of one or more such plans within the meaning of 29 C.F.R. Section 2510.3-101. In addition, (a) neither Borrower nor any Subsidiary is a "governmental plan" within the meaning of Section 3(32) of ERISA and (b) transactions by or with Borrower or any Subsidiary are not subject to state statutes regulating investment of, and fiduciary obligations with respect to, governmental plans similar to the provisions of Section 406 of ERISA or Section 4975 of the Internal Revenue Code currently in effect, which prohibit or otherwise restrict the transactions contemplated by this Loan Agreement.

5.17 Sanctions, Etc. None of Borrower, any of its Subsidiaries or, to the knowledge of Borrower after due inquiry, any director, officer, employee, agent or Affiliate of Borrower or any of its Subsidiaries, is a Person that is, or is owned or controlled by Persons that are, (b) the subject or target of any Sanctions or (b) located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions. To the best of Borrower's knowledge, as of the date hereof and at all times throughout the term of this Agreement, including after giving effect to any transfers of interests permitted pursuant to the Loan Documents, none of the funds of Borrower, any Subsidiary or of their Affiliates have been (or will be) derived from any unlawful activity with the result that the investment in the respective party (whether directly or indirectly), is prohibited by applicable law or the Loans are in violation of applicable law.

5.18 Regulatory Compliance. Borrower is not a "bank holding company" or a direct or indirect subsidiary of a "bank holding company" as defined in the Bank Holding Company Act of 1956, as amended, and Regulation Y thereunder of the Board of Governors of the Federal Reserve System. Neither Borrower nor any Subsidiary is an "investment company" or a company controlled by an "investment company" under the Investment Company Act of 1940. Borrower is not engaged in the business of extending credit for the purpose of purchasing or carrying margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System) and no proceeds of any Loan will be used to purchase or carry margin stock or to extend credit to others for the purpose of purchasing or carrying any margin stock.

5.19 Payment of Taxes. All federal and other material tax returns, reports and statements (including any attachments thereto or amendments thereof) of Borrower and its Subsidiaries filed or required to be filed by any of them have been timely filed (or extensions have been obtained and such extensions have not expired) and all taxes shown on such tax returns or otherwise due and payable and all assessments, fees and other governmental charges upon Borrower, its Subsidiaries and their respective properties, assets, income, businesses and franchises which are due and payable have been paid when due and payable, except for the payment of any such taxes, assessments, fees and other governmental charges which are being diligently contested by Borrower in good faith by appropriate proceedings and for which adequate reserves have been made under GAAP. To the knowledge of Borrower, no tax return of Borrower or any Subsidiary is currently under an audit or examination, and Borrower has not received written notice of any proposed audit or examination, in each case, where a material amount of tax is at issue. Borrower is not an "S corporation" within the meaning of Section 1361(a)(1) of the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code").

5.20 Anti-Terrorism Laws. Borrower will not, directly or indirectly, use the proceeds of the Loans, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other Person, (i) to fund any activities or business of or with any Person, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions, or (ii) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the Loans, whether as lender, underwriter, advisor, investor or otherwise). Lenders hereby notify Borrower that pursuant to the requirements of Anti-Terrorism Laws, and each Lender's policies and practices, Lenders are required to obtain, verify and record certain information and documentation that identifies Borrower and its principals, which information includes the name and address of Borrower and its principals and such other information that will allow Lenders to identify such party in accordance with Anti-Terrorism Laws.

6. Affirmative Covenants. Borrower, until the full and complete payment of the Obligations, covenants and agrees that:

6.1 Good Standing. Borrower shall maintain, and cause each of its Subsidiaries to maintain, its corporate existence and its good standing in its jurisdiction of incorporation and maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Effect. Borrower shall maintain, and cause each of its Subsidiaries to maintain, in force all licenses, approvals and agreements, the loss of which could reasonably be expected to have a Material Adverse Effect.

6.2 Government Compliance. Borrower shall comply, and cause each of its Subsidiaries to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which could reasonably be expected to have a Material Adverse Effect.

6.3 Financial Statements, Reports, Certificates. Borrower shall deliver to Lenders: (a) at the time of filing of Borrower's Form 10-K with the U.S. Securities and Exchange Commission after the end of each fiscal year of Borrower, the financial statements of Borrower filed with such Form 10-K; and (ii) at the time of filing of Borrower's Form 10-Q with the U.S. Securities and Exchange Commission after the end of each of the first three fiscal quarters of Borrower, the Consolidated financial statements of Borrower filed with such Form 10-Q; and (c) as soon as available, but in any event within forty-five (45) days after the earlier of (i) the end of Borrower's fiscal year or (ii) the date of Borrower's board of directors' adoption, Borrower's operating budget and plan for the next fiscal year; and (d) such other financial information as the Required Lenders may reasonably request from time to time. In addition, Borrower shall deliver to Lenders (A) promptly upon becoming available, copies of all statements, reports and notices sent or made available generally by Borrower to its security holders and (B) immediately upon receipt of notice thereof, a report of any material legal actions pending or threatened against Borrower or any Subsidiary or the commencement of any action, proceeding or governmental investigation involving Borrower or any Subsidiary is commenced that is reasonably expected to result in damages or costs to Borrower of One Hundred Thousand Dollars ($100,000) or more.

6.4 Certificates of Compliance. Each time financial statements are furnished pursuant to Section 6.3 above, Borrower shall deliver to Lenders an Officer's Certificate signed by Borrower's president, treasurer or chief financial officer (each, a "Responsible Officer") in the form of, and certifying to the matters set forth in Exhibit E hereto.

6.5 Notice of Defaults. As soon as possible, and in any event within five (5) days after the discovery of a Default or an Event of Default, Borrower shall provide Lenders with an Officer's Certificate setting forth the facts relating to or giving rise to such Default or Event of Default and the action which Borrower proposes to take with respect thereto.

6.6 Taxes. Borrower shall make, and cause each Subsidiary to make, due and timely payment or deposit of all federal, state, and local taxes, assessments, or contributions required of it by law or imposed upon any Property belonging to it, and will execute and deliver to Collateral Agent and Lenders, on demand, appropriate certificates attesting to the payment or deposit thereof; and Borrower will make, and cause each Subsidiary to make, timely payment or deposit of all tax payments and withholding taxes required of it by applicable laws, including those laws concerning F.I.C.A., F.U.T.A., state disability, and local, state, and federal income taxes, and will, upon request, furnish Collateral Agent and Lenders with proof satisfactory to the Required Lenders indicating that Borrower and each Subsidiary has made such payments or deposits; *provided* that Borrower need not make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings which suspend the collection thereof (provided that such proceedings do not involve any substantial danger of the sale, forfeiture or loss of any material item of Collateral or Collateral which in the aggregate is material to Borrower and that Borrower has adequately bonded such amounts or reserves sufficient to discharge such amounts have been provided on the books of Borrower). In addition, Borrower shall not change, and shall not permit any Subsidiary to change, its respective jurisdiction of residence for taxation purposes.

6.7 Use; Maintenance. Borrower shall keep and maintain all items of equipment and other similar types of personal property that form any significant portion or portions of the Collateral in good operating condition and repair (ordinary wear and tear excepted) and shall make all necessary replacements thereof and renewals thereto so that the value and operating efficiency thereof shall at all times be maintained and preserved. Borrower shall not permit any such material item of Collateral to become a fixture to real estate or an accession to other personal property of another Person, without the prior written consent of Collateral Agent and the Required Lenders. Borrower shall not permit any such material item of Collateral to be operated or maintained in violation of any applicable law, statute, rule or regulation. With respect to items of leased equipment (to the extent Collateral Agent has, for the benefit of the Lenders, any security interest in any residual Borrower's interest in such equipment under the lease), Borrower shall keep, maintain, repair, replace and operate such leased equipment in accordance in all material respects with the terms of the applicable lease.

6.8 Insurance. Borrower shall keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location, and as Collateral Agent may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are reasonably satisfactory to Collateral Agent and the Required Lenders. All property policies shall have a lender's loss payable endorsement showing Collateral Agent as an additional loss payee and all general liability policies shall show Collateral Agent as an additional insured and all policies shall provide that the insurer must give Collateral Agent at least thirty (30) days' notice before canceling its policy At Collateral Agent's or any Lender's request, Borrower shall deliver certified copies of policies and evidence of all premium payments. Proceeds payable under any property policy shall, at Collateral Agent's or the Required Lenders option, be payable to Collateral Agent, for the benefit of Lenders, or to Lenders on account of the Obligations (as directed by the Required Lenders). Notwithstanding the foregoing, so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any property policy, toward the replacement or repair of destroyed or damaged property; *provided* that (a) any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Collateral Agent has been granted a first priority security interest for the benefit of the Lenders and (b) after the occurrence and during the continuation of an Event of Default all proceeds payable under such property policy shall, at the option of Collateral Agent or the Required Lenders, be payable to Collateral Agent, for the benefit of Lenders, or to Lenders on account of the Obligations (as directed by the Required Lenders). If Borrower fails to obtain insurance as required under Section 6.8 or to pay any amount or furnish any required proof of payment to third persons and Collateral Agent or Lenders, Collateral Agent or Lenders may make all or part of such payment or obtain such insurance policies required in Section 6.8, and take any action under the policies Collateral Agent or the Required Lenders deem prudent. On or prior to the first Restatement Effective Date and prior to each policy renewal, Borrower shall furnish to Collateral Agent certificates of insurance or other evidence reasonably satisfactory to Collateral Agent and the Required Lenders that insurance complying with all of the above requirements is in effect.

6.9 Further Assurances. At any time and from time to time Borrower shall execute and deliver such further instruments and take such further action as may reasonably be requested by Collateral Agent or Lenders to make effective the purposes of this Agreement, including the continued perfection and priority of Collateral Agent's security interest in the Collateral for the benefit of the Lenders.

6.10 Subsidiaries. Borrower, upon the Required Lenders' or Collateral Agent's request, shall cause any Subsidiary to provide Collateral Agent, for the benefit of the Lenders, with a guaranty of the Obligations and a security interest in such Subsidiary's assets to secure such guaranty.

6.11 Keeping of Books. Borrower shall keep proper books of record and account, in which full and correct entries shall be made of all financial transactions and the assets and business of Borrower and its Subsidiaries in accordance with GAAP.

7. Negative Covenants. Borrower, until the full and complete payment of the Obligations, covenants and agrees that Borrower shall not (and shall not allow any Subsidiary to):

7.1 Chief Executive Office. Change its name, jurisdiction of incorporation, chief executive office, principal place of business or any of the items set forth in Section 1 of the Disclosure Schedule without thirty (30) days prior written notice to Collateral Agent and Lenders.

7.2 Collateral Control. Subject to its rights under Sections 4.4 and 7.4, remove any items of Collateral (other than (i) clinical trial materials, (ii) laptops and similar equipment maintained by Borrower's employees, (iii) research materials maintained at contract research and storage facilities, and (iv) other Collateral with an aggregate value of not more than $100,000) from Borrower's facility located at the address set forth on the cover page hereof or as set forth on the Disclosure Schedule.

7.3 Liens. Create, incur, allow or suffer, or permit any Subsidiary to create, incur, allow or suffer, any Lien on any of its property, or assign or convey any right to receive income, including the sale of any accounts except for Permitted Liens, or permit any Collateral not to be subject to the first priority security interest granted herein (except for Permitted Liens that are permitted by the terms of this Agreement or by operation of law to have priority to Collateral Agent's Liens), or enter into any agreement, document, instrument or other arrangement (except with or in favor of Collateral Agent, for the benefit of Lenders) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Subsidiary's Intellectual Property, except (a) as otherwise permitted in Section 7.4 hereof and (b) as set forth in the definition of "Permitted Liens" herein.

7.4 Other Dispositions of Collateral. Convey, sell, lease or otherwise dispose of, or permit any Subsidiary to convey, sell, lease or otherwise dispose, of all or any part of the Collateral to any Person (collectively, a "Transfer"), except for: (a) Transfers of inventory in the ordinary course of business; (b) Transfers of worn-out or obsolete equipment made in the ordinary course of business; and (c) Transfers pursuant to Permitted Licenses; (d) sales of assets consented to by the Required Lenders; (e) Transfers in connection with transactions permitted by Sections 7.5, 7.6 and 7.8; (f) Transfers of cash or cash equivalents for uses not prohibited by the terms of this Agreement; (g) Liens permitted by Section 7.3; (i) Investments permitted by Section 7.11; (h) leases, subleases, licenses or sub-licenses of real or personal property granted by Borrower or any Subsidiary to others in the ordinary course of business not interfering in any material respect with the business of Borrower or such Subsidiary; (i) Transfers of Excluded Property and (j) Transfers not otherwise permitted pursuant to this Section; provided that (i) at the time of such Transfer, no Default or Event of Default shall exist or would result from such Transfer, (ii) such Transfer is made for fair market value and the consideration received shall be no less than 75% in cash, and (iii) the aggregate book value of all property disposed of in reliance on this clause (l) shall not exceed $50,000 in any fiscal year of Borrower. Notwithstanding the foregoing, each Lender hereby consents to the disposition of the Purchased Assets as defined in and pursuant to the Asset Purchase, Supply and Support Agreement and upon the effectiveness of the Asset Purchase, Supply and Support Agreement the Purchase Assets (as defined in the Asset Purchase, Supply and Support Agreement) shall no longer (i) be considered as part of the Collateral hereunder and (ii) be subject to any Lien in favor of the Collateral Agent, for the benefit of any the Lenders, hereunder or under the Original Agreement.

7.5 Distributions. (a) Pay any dividends or make any distributions, or permit any Subsidiary to pay any dividends or make any distributions, on their respective Equity Securities; (b) purchase, redeem, retire, defease or otherwise acquire, or permit any Subsidiary to purchase, redeem, retire, defease or otherwise acquire, for value any of their respective Equity Securities (other than repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements or similar arrangements in an aggregate amount not to exceed One Hundred Thousand Dollars ($100,000) in any fiscal year); (c) return, or permit any Subsidiary to return, any capital to any holder of its Equity Securities as such; (d) make, or permit any Subsidiary to make, any distribution of assets, Equity Securities, obligations or securities to any holder of its Equity Securities as such; or (e) set apart any sum for any such purpose; *provided*, however, Borrower may pay dividends payable solely in Borrower's common stock.

7.6 Mergers or Acquisitions. Merge or consolidate, or permit any Subsidiary to merge or consolidate, with or into any other Person or acquire, or permit any Subsidiary to acquire, all or substantially all of the capital stock or assets of another Person; *provided* that (a) any Subsidiary may merge into another Subsidiary and (b) any Subsidiary may merge into Borrower so long as Borrower is the surviving entity.

7.7 Change in Business or Ownership. (a) Engage, or permit any Subsidiary to engage, in any business other than the businesses currently engaged in by Borrower or such Subsidiary, as applicable, or reasonably related thereto or (b) issue in a private placement Equity Securities to venture capital investors that results in one or more of such investors holding twenty-five percent (25%) or more of Borrower's ownership following such issuance unless Borrower identifies to Lenders and Collateral Agent the venture capital investors prior to the execution of a definitive agreement and any such venture capital investors have cleared each Lender's "know your customer" checks.

7.8 Transactions With Affiliates; Creation of Subsidiaries. (a) Enter, or permit any Subsidiary to enter, into any contractual obligation with any Affiliate or engage in any other transaction with any Affiliate except upon terms at least as favorable to Borrower or such Subsidiary, as applicable, as an arms-length transaction with Persons who are not Affiliates of Borrower or (b) create a Subsidiary without providing at least 10 Business Days advance notice thereof to Lenders and, if requested by the Required Lenders, such Subsidiary guarantees the Obligations and grants, the Collateral Agent for the benefit of the Lenders, a security interest in its assets to secure such guaranty, in each case on terms reasonably satisfactory to Collateral Agent and the Required Lenders.

7.9 Indebtedness Payments. (a) Prepay, redeem, purchase, defease or otherwise satisfy in any manner prior to the scheduled repayment thereof any Indebtedness for borrowed money (other than amounts due or permitted to be prepaid under this Agreement) or lease obligations, (b) amend, modify or otherwise change the terms of any Indebtedness for borrowed money or lease obligations so as to accelerate the scheduled repayment thereof or (c) repay any notes to officers, directors or shareholders.

7.10 Indebtedness. Create, incur, assume or permit, or permit any Subsidiary to create, incur or permit, to exist any Indebtedness except Permitted Indebtedness.

7.11 Investments. Make, or permit any Subsidiary to make, any Investment except for Permitted Investments.

7.12 Compliance. (a) Become, or permit any Subsidiary to become, an "investment company" or a company controlled by an "investment company" under the Investment Company Act of 1940, or undertake as one of its important activities, extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Loan for that purpose; (b) become, or permit any Subsidiary to become, subject to any other federal or state law or regulation which purports to restrict or regulate its ability to borrow money; or (c) (i) fail, or permit any Subsidiary to fail, to meet the minimum funding requirements of the Employment Retirement Income Security Act of 1974, and its regulations, as amended from time to time ("ERISA"), permit, or (ii) permit, or permit any Subsidiary to permit, a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; (d) fail, or permit any Subsidiary to fail, to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have Material Adverse Effect.

7.13 Maintenance of Accounts. (a) Maintain any deposit account or securities account except accounts with respect to which Collateral Agent, for the benefit of the Lenders, has obtained a perfected security interest in such accounts through one or more Account Control Agreements and deposit accounts established solely as payroll accounts, provided, however, that any such payroll account over which Collateral Agent does not maintain an Account Control Agreement shall not contain deposits in an amount exceeding one hundred five percent (105%) of the amount necessary to fund the Borrower's payroll obligations for one payroll cycle or (b) grant or allow any other Person (other than Collateral Agent) to perfect a security interest in, or enter into any agreements with any Persons (other than Collateral Agent) accomplishing perfection via control as to, any of its deposit accounts or securities accounts.

7.14 Negative Pledge Regarding Intellectual Property. Create, incur, assume or suffer to exist, or permit any Subsidiary to create, incur, assume or suffer to exist, any Lien of any kind upon any Intellectual Property or Transfer any Intellectual Property, whether now owned or hereafter acquired, other than non-exclusive licenses of Intellectual Property entered into in the ordinary course of business.

8. Events of Default. Any one or more of the following events shall constitute an " Event of Default" by Borrower under this Agreement:

8.1 Failure to Pay. If Borrower fails to pay when due and payable or when declared due and payable in accordance with the Loan Documents: (a) any Scheduled Payment on the relevant Payment Date or on the relevant Maturity Date; or (b) any other portion of the Obligations within five (5) days after receipt of written notice from Lenders that such payment is due.

8.2 Certain Covenant Defaults. If Borrower fails to perform any obligation arising under Sections 6.5 or 6.8, or violates any of the covenants contained in Section 7 of this Agreement.

8.3 Other Covenant Defaults. If Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant, or agreement contained in this Agreement (other than as set forth in Sections 8.1, 8.2 or 8.4 through 8.14), in any of the other Loan Documents and Borrower has failed to cure such default within thirty (30) days of the occurrence of such default. During this thirty (30) day period, the failure to cure the default is not an Event of Default.

8.4 Material Adverse Change . If there occurs a material adverse change in Borrower's business, or if there is a material impairment of the prospect of repayment of any portion of the Obligations owing to Collateral Agent or Lenders or a material impairment of the value or priority of Collateral Agent's security interest in the Collateral for the benefit of the Lenders.

8.5 Intentionally Omitted.

8.6 Seizure of Assets, Etc. (a) If any material portion of Borrower's or any Subsidiary's assets (i) is attached, seized, subjected to a writ or distress warrant, or is levied upon or (ii) comes into the possession of any trustee, receiver or Person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within ten (10) days, (b) if Borrower or any Subsidiary is enjoined, restrained or in any way prevented by court order from continuing to conduct all or any material part of its business affairs, (c) if a judgment or other claim becomes a lien or encumbrance upon any material portion of Borrower's or any Subsidiary's assets or (d) if a notice of lien, levy, or assessment is filed of record with respect to any of Borrower's or any Subsidiary's assets by the United States Government, or any department agency or instrumentality thereof, or by any state, county, municipal, or governmental agency, and the same is not paid within ten (10) days after Borrower receives notice thereof; *provided* that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by Borrower.

8.7 Service of Process. (a) The service of process upon Collateral Agent or any Lender seeking to attach by a trustee or other process any funds of Borrower on deposit or otherwise held by Collateral Agent or any Lender in excess of One Hundred Thousand Dollars ($100,000), (b) the delivery upon Collateral Agent or any Lender of a notice of foreclosure by any Person seeking to attach or foreclose on any funds of Borrower on deposit or otherwise held by Collateral Agent or any Lender in excess of One Hundred Thousand Dollars ($100,000) or (c) the delivery of a notice of foreclosure or exclusive control to any entity holding or maintaining Borrower's deposit accounts or accounts holding securities by any Person (other than Collateral Agent or any Lender) seeking to foreclose or attach any such accounts or securities.

8.8 Default on Indebtedness. One or more defaults shall exist under any agreement with any third party or parties which consists of the failure to pay any Indebtedness of Borrower or any Subsidiary at maturity or which results in a right by such third party or parties, whether or not exercised, to accelerate the maturity of Indebtedness in an aggregate amount in excess of One Hundred Thousand Dollars ($100,000) or a default shall exist under any financing agreement with a Lender or any Lender's Affiliates.

8.9 Judgments. If a judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least One Hundred Thousand Dollars ($100,000) shall be rendered against Borrower or any Subsidiary and shall remain unsatisfied and unstayed for a period of ten (10) days or more except for those that are fully covered by a reputable and financially sound insurer.

8.10 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty, representation, statement, certification, or report made to Collateral Agent or any Lender by Borrower or any officer, employee, agent, or director of Borrower.

8.11 Breach of Warrant. If Borrower shall breach any material term of any Warrant.

8.12 Unenforceable Loan Document. If any Loan Document shall in any material respect cease to be, or Borrower shall assert that any Loan Document is not, a legal, valid and binding obligation of Borrower enforceable in accordance with its terms.

8.13 Involuntary Insolvency Proceeding. (a) If a proceeding shall have been instituted in a court having jurisdiction in the premises (i) seeking a decree or order for relief in respect of Borrower or any Subsidiary in an involuntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, (ii) for the appointment of a receiver, liquidator, administrator, assignee, custodian, trustee (or similar official) of Borrower or any Subsidiary or for any substantial part of its Property or (iii) for the winding-up or liquidation of its affairs, and such proceeding shall remain undismissed or unstayed and in effect for a period of thirty (30) consecutive days or (b) such court shall enter a decree or order granting the relief sought in any such proceeding.

8.14 Voluntary Insolvency Proceeding . If Borrower or any Subsidiary shall (a) commence a voluntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, (b) consent to the entry of an order for relief in an involuntary case under any such law, (c) consent to the appointment of or taking possession by a receiver, liquidator, assignee, trustee, custodian (or other similar official) of Borrower or any Subsidiary or for any substantial part of its Property, (d) shall make a general assignment for the benefit of creditors, (e) shall fail generally to pay its debts for borrowed money as they become due or (f) take any corporate action in furtherance of any of the foregoing.

9. Lender's Rights and Remedies.

9.1 Rights and Remedies. During the period commencing on the Restatement Effective Date and ending on December 31, 2019, each of the Collateral Agent and the Lenders shall forbear from the exercise of any rights and remedies under this Agreement and applicable law based upon the occurrence of any Default or Event of Default unless such Default or Event of Default is based on a Specified Breach, provided that the Collateral Agent shall have the right during the existence of any Event of Default to protect the Collateral in accordance with the terms of Section 9.1(b). On and after January 1, 2020 (or from and after the Restatement Effective Date in connection with any Default or Event of Default based upon a Specified Breach), upon the occurrence and during the continuance of any Default or Event of Default, Collateral Agent shall have the rights, options, duties and remedies of a secured party as permitted by law and, in addition to and without limitation of the foregoing, at the request of the Required Lenders, Collateral Agent shall, on behalf of Lenders, at their election, without notice of election and without demand, do any one or more of the following, all of which are authorized by Borrower:

(a) Acceleration of Obligations. Declare all Obligations, whether evidenced by this Agreement, by any of the other Loan Documents, or otherwise, including (i) any accrued and unpaid interest, (ii) the amounts which would have otherwise come due under Section 2.3(b)(ii) if the Loans had been voluntarily prepaid, (iii) the unpaid principal balance of the Loans and (iv) all other sums, if any, that shall have become due and payable hereunder, immediately due and payable (*provided* that upon the occurrence of an Event of Default described in Section 8.13 or 8.14 all Obligations shall become immediately due and payable without any action by Collateral Agent);

(b) Protection of Collateral. Make such payments and do such acts as Collateral Agent or the Required Lenders considers necessary or reasonable to protect Collateral Agent's security interest in the Collateral on behalf of the Lenders. Borrower agrees to assemble the Collateral if Collateral Agent or the Required Lenders so require and to make the Collateral available to Collateral Agent or Lenders as Collateral Agent may designate. Borrower authorizes Collateral Agent and its designees and agents to enter the premises where the Collateral is located, to take and maintain possession of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any Lien which in Collateral Agent's or the Required Lenders determination appears or is claimed to be prior or superior to the Collateral Agent's security interest for the benefit of the Lenders and to pay all expenses incurred in connection therewith. With respect to any of Borrower's owned premises, Borrower hereby grants Collateral Agent a license to enter into possession of such premises and to occupy the same, without charge, for up to one hundred twenty (120) days in order to exercise, on behalf of the Lenders, any of Collateral Agent's rights or remedies provided herein, at law, in equity, or otherwise;

(c) Preparation of Collateral for Sale. Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Collateral Agent, Lenders and their agents and any purchasers at or after foreclosure are hereby granted a non-exclusive, irrevocable, perpetual, fully paid, royalty-free license or other right, solely pursuant to the provisions of this Section 9.1, to use, without charge, Borrower's Intellectual Property, including labels, patents, copyrights, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any Property of a similar nature, now or at any time hereafter owned or acquired by Borrower or in which Borrower now or at any time hereafter has any rights; *provided* that such license shall only be exercisable in connection with the disposition of Collateral upon Collateral Agent's exercise of its remedies hereunder and that any exercise of remedies under this Section 9.1(c) shall be subject to any rights of third parties in or to such Intellectual Property;

(d) Sale of Collateral. Sell the Collateral at either a public or private sale, or both, by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including Borrower's premises) as Collateral Agent or the Required Lenders determine are commercially reasonable; and

(e) Purchase of Collateral. Credit bid and purchase all or any portion of the Collateral at any public sale.

Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by Borrower.

9.2 Set Off Right. Collateral Agent may, on behalf of the Lenders, set off and apply to the Obligations any and all Indebtedness at any time owing to or for the credit or the account of Borrower or any other assets of Borrower in Collateral Agent's possession or control.

9.3 Effect of Sale. Upon the occurrence and continuation of an Event of Default, to the extent permitted by law, Borrower covenants that it will not at any time insist upon or plead, or in any manner whatsoever claim or take any benefit or advantage of, any stay or extension law now or at any time hereafter in force, nor claim, take nor insist upon any benefit or advantage of or from any law now or hereafter in force providing for the valuation or appraisement of the Collateral or any part thereof prior to any sale or sales thereof to be made pursuant to any provision herein contained, or to the decree, judgment or order of any court of competent jurisdiction; nor, after such sale or sales, claim or exercise any right under any statute now or hereafter made or enacted by any state or otherwise to redeem the property so sold or any part thereof, and, to the full extent legally permitted, except as to rights expressly provided herein, hereby expressly waives for itself and on behalf of each and every Person, except decree or judgment creditors of Borrower, acquiring any interest in or title to the Collateral or any part thereof subsequent to the date of this Agreement, all benefit and advantage of any such law or laws, and covenants that it will not invoke or utilize any such law or laws or otherwise hinder, delay or impede the execution of any power herein granted and delegated to Collateral Agent, but will suffer and permit the execution of every such power as though no such power, law or laws had been made or enacted. Any sale, whether under any power of sale hereby given or by virtue of judicial proceedings, shall operate to divest all right, title, interest, claim and demand whatsoever, either at law or in equity, of Borrower in and to the Property sold, and shall be a perpetual bar, both at law and in equity, against Borrower, its successors and assigns, and against any and all Persons claiming the Property sold or any part thereof under, by or through Borrower, its successors or assigns.

9.4 Power of Attorney in Respect of the Collateral. Borrower does hereby irrevocably appoint Collateral Agent, on behalf of Lenders (which appointment is coupled with an interest) the true and lawful attorney in fact of Borrower, with full power of substitution and in its name to file any notices of security interests, financing statements and continuations and amendments thereof pursuant to the Code or federal law, as may be necessary to perfect or to continue the perfection of Collateral Agent's security interest in the Collateral for the benefit of the Lenders. Borrower does hereby irrevocably appoint Collateral Agent, on behalf of Lenders (which appointment is coupled with an interest) on the occurrence and continuation of an Event of Default, the true and lawful attorney in fact of Borrower, with full power of substitution and in its name: (a) to ask, demand, collect, receive, receipt for, sue for, compound and give acquittance for any and all rents, issues, profits, avails, distributions, income, payment draws and other sums in which a security interest is granted under Section 4 with full power to settle, adjust or compromise any claim thereunder as fully as if Collateral Agent were Borrower itself; (b) to receive payment of and to endorse the name of Borrower to any items of Collateral (including checks, drafts and other orders for the payment of money) that come into Collateral Agent's possession or under Collateral Agent's control; (c) to make all demands, consents and waivers, or take any other action with respect to, the Collateral; (d) in Collateral Agent's or the Required Lenders discretion to file any claim or take any other action or proceedings, either in its own name or in the name of Borrower or otherwise, which Collateral Agent or the Required Lenders may reasonably deem necessary or appropriate to protect and preserve the right, title and interest of Collateral Agent, on behalf of the Lenders, in and to the Collateral; (e) endorse Borrower's name on any checks or other forms of payment or security; (f) sign Borrower's name on any invoice or bill of lading for any account or drafts against account debtors; (g) make, settle, and adjust all claims under Borrower's insurance policies; (h) settle and adjust disputes and claims about the accounts directly with account debtors, for amounts and on terms Collateral Agent or the Required Lenders determine reasonable; (i) transfer the Collateral into the name of Collateral Agent, Lenders or a third party as the Code permits; and (j) to the extent permitted by applicable law, to otherwise act with respect thereto as though Collateral Agent were the outright owner of the Collateral.

9.5 Lender's Expenses. If Borrower fails to pay any amounts or furnish any required proof of payment due to third persons or entities, as required under the terms of this Agreement, then Collateral Agent or Lenders may do any or all of the following: (a) make payment of the same or any part thereof; or (b) obtain and maintain insurance policies of the type discussed in Section 6.8 of this Agreement, and take any action with respect to such policies as Collateral Agent or Lenders deem prudent. Any amounts paid or deposited by Collateral Agent or any Lender shall constitute Lender's Expenses, shall be immediately due and payable, shall bear interest at the Default Rate and shall be secured by the Collateral. Any payments made by Collateral Agent or any Lender shall not constitute an agreement by Collateral Agent or any Lender to make similar payments in the future or a waiver by Collateral Agent or any Lender of any Event of Default under this Agreement. Borrower shall pay all reasonable fees and expenses, including Lender's Expenses, incurred by Collateral Agent or any Lender in the enforcement or attempt to enforce any of the Obligations hereunder not performed when due.

9.6 Remedies Cumulative; Independent Nature of Lender's Rights. Collateral Agent's and each Lender's rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Collateral Agent and Lenders shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No failure on the part of Collateral Agent or Lenders to exercise, and no delay in exercising, any right or remedy hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any such right or remedy preclude any other or further exercise thereof or the exercise of any other right. The Obligations of Borrower to Lenders may be enforced by Lenders or Collateral Agent against Borrower in accordance with the terms of this Agreement and the other Loan Documents and, to the fullest extent permitted by applicable law, it shall not be necessary for Collateral Agent or Lenders, as applicable, to be joined as an additional party in any proceeding to enforce such Obligations.

9.7 Application of Collateral Proceeds. The proceeds and/or avails of the Collateral, or any part thereof, and the proceeds and the avails of any remedy hereunder (as well as any other amounts of any kind held by Collateral Agent or any Lender, at the time of or received by Collateral Agent or any Lender after the occurrence of an Event of Default hereunder) shall be paid to and applied as follows:

(a) First, to the payment of out-of-pocket costs and expenses, including all amounts expended to preserve the value of the Collateral, of foreclosure or suit, if any, and of such sale and the exercise of any other rights or remedies, and of all proper fees, expenses, liability and advances, including reasonable legal expenses and attorneys' fees, incurred or made hereunder by Collateral Agent or any Lender, including Lender's Expenses;

(b) Second, to the payment to Lenders of the amount then owing or unpaid on the Loans for any accrued and unpaid interest, the amounts which would have otherwise come due under Section 2.3(b)(ii), if the Loans had been voluntarily prepaid, the principal balance of the Loans, and all other Obligations with respect to the Loans (*provided*, however, if such proceeds shall be insufficient to pay in full the whole amount so due, owing or unpaid upon the Loans, then *first*, to the unpaid interest thereon ratably, *second*, to the amounts which would have otherwise come due under Section 2.3(b)(ii) ratably, if the Loans had been voluntarily prepaid, *third*, to the principal balance of the Loans ratably, and *fourth*, to the ratable payment of other amounts then payable to any Lender under any of the Loan Documents); and

(c) Third, to the payment of the surplus, if any, to Borrower, its successors and assigns or to the Person lawfully entitled to receive the same.

9.8 Reinstatement of Rights. If Collateral Agent shall have proceeded to enforce any right under this Agreement or any other Loan Document by foreclosure, sale, entry or otherwise, and such proceedings shall have been discontinued or abandoned for any reason or shall have been determined adversely, then and in every such case (unless otherwise ordered by a court of competent jurisdiction), Collateral Agent shall be restored to their former position and rights hereunder with respect to the Property subject to the security interest created under this Agreement.

9.9 Designation of Rights. Notwithstanding anything to the contrary contained in this Agreement, except with respect to a Lender's right to file a proof of claim in an insolvency proceeding, no Lender shall have any right individually to realize upon any of the Collateral or to enforce any guarantee of the Obligations, it being understood and agreed that all powers, rights and remedies under the Loan Documents may be exercised solely by the Collateral Agent on behalf of the Lenders in accordance with the terms thereof. For the avoidance of doubt, no Lender shall have the right to exercise any remedies or rights, including but not limited to (i) setoff any sums payable by Borrower to any Lender, (ii) collect from or obtain performance by third parties obligated on any Collateral, (iii) foreclose on any Collateral (including no strict foreclosures), (iv) collect on any deficiency, (v) accelerate the due date of payments, (vi) obtain or maintain dominion or control over any Collateral, (vii) receive payment for any legal fees or costs incurred in connection with this Agreement or any rights therefrom, (viii) correspond with or take any actions against Borrower or (ix) exercise any other remedies at law (including but not limited to under the Uniform Commercial Code as in effect in the State of New York (the "UCC")), in equity or pursuant to this Agreement or any other Loan Document (collectively and together with any other right or remedy, an "Enforcement Action"). In the event of a foreclosure by the Collateral Agent on any of the Collateral pursuant to a public or private sale or other disposition, the Collateral Agent or any Lender may be the purchaser or licensor of any or all of such Collateral at any such sale or other disposition, and the Collateral Agent, as agent for and representative of the Lenders (but not any Lender or Lenders in its or their respective individual capacities unless the Required Lenders shall otherwise agree in writing) shall be entitled, for the purpose of bidding and making settlement or payment of the purchase price for all or any portion of the Collateral sold at any such public sale, to use and apply any of the Obligations as a credit on account of the purchase price for any collateral payable by the Collateral Agent on behalf of the Lenders at such sale or other disposition. Each Lender will be deemed, by its acceptance of the benefits of the Collateral and of the guarantees (if any) of the Obligations, to have agreed to the provisions of this Section 9.9.

9.10 Subordination. Notwithstanding anything herein to the contrary, the Lien and security interest granted to Collateral Agent pursuant to this Agreement and the exercise of any right or remedy by Collateral Agent hereunder will at all times be senior and prior in all respects to a Lien on such Collateral securing any Obligations to any Lender, and a Lien on Collateral securing any Obligations to any Lender will at all times be junior and subordinate in all respects to a Lien on such Collateral securing any Obligations to the Collateral Agent. The priority of the Liens securing the Obligations to the Collateral Agent and the Lenders will remain in full force and effect irrespective of:

(1) how a Lien was acquired (whether by grant, possession, statute, operation of law, subrogation, or otherwise),

(2) the time, manner, or order of the grant, attachment, or perfection of a Lien,

(3) any conflicting provision of the UCC or other applicable law,

(4) any defect in, or non-perfection, setting aside, or avoidance of, a Lien or any Loan Document or any other agreement,

(5) the modification of any Obligation,

(6) the modification of any Loan Document or any other agreement,

(7) the exchange of a security interest in any Collateral for a security interest in other Collateral,

(8) whether the Borrower become the subject of a bankruptcy or insolvency proceeding or any action or proceeding of the type described in Sections 8.13 or 8.14 hereof or

any other circumstance whatsoever, including a circumstance that might be a defense available to, or a discharge of, the Borrower in respect of the Obligations to the Collateral Agent or any Lender. Each Lender will be deemed, by its acceptance of the benefits of the Collateral and of the guarantees (if any) of the Obligations, to have agreed to the provisions of this Section 9.10.

9.11 Application of Proceeds. Until the discharge of the Obligations to the Collateral Agent and all Lenders, and regardless of whether the Borrower become the subject of a bankruptcy or insolvency proceeding or any action or proceeding of the type described in Sections 8.13 or 8.14 hereof, Collateral or proceeds received in connection with an Enforcement Action or in connection with any an bankruptcy or insolvency proceeding or any action or proceeding of the type described in Sections 8.13 or 8.14 hereof involving the Borrower will be applied

***first*,** to the Collateral Agent for the payment in full to the Collateral Agent for its expenses of collection and enforcement, or of repossession, holding, preparation, and disposition of any Collateral, including attorney fees and expenses,

***second*,** to the Collateral Agent for the payment in full of the other Obligations secured by the Lien on the Collateral, and the Collateral Agent shall distribute such payment to the Lenders (other than any Lender that has consented in writing to waive its pro rata share of such payment) and itself, pro rata based upon their respective shares, if any, of the Obligations with respect to which such payment was received, and

***third,*** to the Collateral Agent for payments to be made in the Collateral Agent's discretion in accordance with applicable law, including the UCC.

Each of the Lenders agrees that, if it should receive any amount hereunder (whether by voluntary payment, by realization upon security, by the exercise of the right of setoff or banker's lien, by counterclaim or cross action, by the enforcement of any right under the Loan Documents, or otherwise) which is applicable to the payment of the principal of, or interest on, the Loans, of a sum which with respect to the related sum or sums received by other Lenders is in a greater proportion than the total of such Obligation then owed and due to such Lender bears to the total of such Obligation then owed and due to all of the Lenders immediately prior to such receipt, then such Lender receiving such excess payment shall promptly transfer such excess amount to the Collateral Agent for distribution as provided hereunder. Each Lender will be deemed, by its acceptance of the benefits of the Collateral and of the guarantees (if any) of the Obligations, to have agreed to the provisions of this Section 9.11.

9.12 Enforcement Action by Lenders. Notwithstanding anything contained herein to the contrary, upon an Event of Default based upon a Specified Breach, if the Required Lenders have not directed the Collateral Agent to take action pursuant to Article 9 within sixty (60) days after the occurrence of such Event of Default, then any Lender shall have the right to direct the Collateral Agent to take such action under Article 9 in accordance with such Lender's instructions and the Collateral Agent shall take such action unless the Collateral Agent (in good faith in its capacity as Collateral Agent) determines that taking such action would not be in the best interest of Lenders in their capacity as such (as a whole). If Collateral Agent, other than as a result of its determination (in good faith in its capacity as Collateral Agent) that taking such action would not be in the best interest of Lenders (as a whole), does not take such action, the Collateral Agent shall resign as Collateral Agent and the Lender requesting such further action shall immediately and automatically be appointed as Collateral Agent and shall take such action as directed by the Lender.

10. Waivers; Indemnification.

10.1 Demand; Protest. Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at any time held by Collateral Agent or Lenders on which Borrower may in any way be liable.

10.2 Lender's Liability for Collateral. So long as Collateral Agent and each Lender complies with its obligations, if any, under the Code, neither Collateral Agent nor any Lender shall in any way or manner be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage thereto occurring or arising in any manner or fashion from any cause other than Collateral Agent's or any Lender's gross negligence or willful misconduct; (c) any diminution in the value thereof; or (d) any act or default of any carrier, warehouseman, bailee, forwarding agency, or other Person whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne by Borrower.

10.3 Indemnification and Waiver. Whether or not the transactions contemplated hereby shall be consummated:

(a) General Indemnity. Borrower agrees upon demand to pay or reimburse Collateral Agent and Lenders for all liabilities, obligations and out-of-pocket expenses, including Lender's Expenses and reasonable fees and expenses of counsel for Collateral Agent and Lenders from time to time arising in connection with the enforcement or collection of sums due under the Loan Documents, and in connection with any amendment or modification of the Loan Documents or any "work-out" in connection with the Loan Documents. Borrower shall indemnify, reimburse and hold Collateral Agent, each Lender, and each of their respective successors, assigns, agents, attorneys, officers, directors, equity holders, servants, agents and employees (each an "Indemnified Person") harmless from and against all liabilities, losses, damages, actions, suits, demands, claims of any kind and nature (including claims relating to environmental discharge, cleanup or compliance), all costs and expenses whatsoever to the extent they may be incurred or suffered by such Indemnified Person in connection therewith (including reasonable attorneys' fees and expenses), fines, penalties (and other charges of any applicable Governmental Authority), licensing fees relating to any item of Collateral, damage to or loss of use of property (including consequential or special damages to third parties or damages to Borrower's property), or bodily injury to or death of any person (including any agent or employee of Borrower) (each, a "Claim"), directly or indirectly relating to or arising out of the use of the proceeds of the Loans or otherwise, the falsity of any representation or warranty of Borrower or Borrower's failure to comply with the terms of this Agreement or any other Loan Document. The foregoing indemnity shall cover, without limitation, (i) any Claim in connection with a design or other defect (latent or patent) in any item of equipment or product included in the Collateral, (ii) any Claim for infringement of any patent, copyright, trademark or other intellectual property right, (iii) any Claim resulting from the presence on or under or the escape, seepage, leakage, spillage, discharge, emission or release of any Hazardous Materials on the premises owned, occupied or leased by Borrower, including any Claims asserted or arising under any Environmental Law, (iv) any Claim for negligence or strict or absolute liability in tort or (v) any Claim asserted as to or arising under any Account Control Agreement or any Landlord Agreement; *provided*, however, Borrower shall not indemnify any Indemnified Person for any liability incurred by such Indemnified Person as a direct and sole result of such Indemnified Person's gross negligence or willful misconduct. Such indemnities shall continue in full force and effect, notwithstanding the expiration or termination of this Agreement. Upon Collateral Agent's or the Required Lenders written demand, Borrower shall assume and diligently conduct, at its sole cost and expense, the entire defense of Collateral Agent and each Lender, each of its members, partners, and each of their respective, agents, employees, directors, officers, equity holders, successors and assigns against any indemnified Claim described in this Section 10.3(a). Borrower shall not settle or compromise any Claim against or involving Collateral Agent or any Lender without first obtaining Collateral Agent's or such Lender's written consent thereto, which consent shall not be unreasonably withheld. For the avoidance of doubt, tax claims are governed by Section 2.4(c) and this Section 10.3(a) shall not apply with respect to taxes other than any taxes that represent losses, claims or damages arising from any non-tax claim.

(b) Waiver. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS AGREEMENT OR ANYWHERE ELSE, BORROWER AGREES THAT IT SHALL NOT SEEK FROM COLLATERAL AGENT OR LENDERS UNDER ANY THEORY OF LIABILITY (INCLUDING ANY THEORY IN TORTS), ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES.

(c) Survival; Defense. The obligations in this Section 10.3 shall survive payment of all other Obligations pursuant to Section 12.8. At the election of any Indemnified Person, Borrower shall defend such Indemnified Person using legal counsel satisfactory to such Indemnified Person in such Person's reasonable discretion, at the sole cost and expense of Borrower. All amounts owing under this Section 10.3 shall be paid within thirty (30) days after written demand.

11. Notices. Unless otherwise provided in this Agreement, all notices or demands by any party relating to this Agreement or any other agreement entered into in connection herewith shall be in writing and (except for financial statements and other informational documents which may be sent by first-class mail, postage prepaid) shall be personally delivered or sent by certified mail, postage prepaid, return receipt requested, by prepaid nationally recognized overnight courier, or by prepaid facsimile to Borrower or to Lenders, as the case may be, at their respective addresses set forth below:

If to Borrower:

Titan Pharmaceuticals, Inc.
400 Oyster Point Blvd., Suite 505
South San Francisco, CA 94080
Attention: Chief Executive Officer
Fax: (650) 244-4956
Ph: (650) 244-4990

If to Molteni:

L. Molteni & C. dei F.lli Alitti Società di Esercizio S.p.A.
Strada Statale 67
Frazione Granatieri
Scandicci (Florence), Italy
Attention: Giuseppe Seghi Recli
Fax No.: +39 055 720057

with a copy to (which shall not constitute notice):

Willkie Farr & Gallagher LLP
787 Seventh Avenue
New York, NY 10019-6099
Fax No.: 212 728 9968
Attn: Mark A. Cognetti, Esq. and David Tarr

Studio Legale Delfino e Associati
Willkie Farr & Gallagher LLP
Via Michele Barozzi, 2
20122 Milan
Attn: Maurizio Delfino

If to Horizon: Horizon Credit II LLC
312 Farmington Avenue
Farmington, CT 06032
Attention: Legal Department
Fax: (860) 676-8655
Ph: (860) 676-8654

The parties hereto may change the address at which they are to receive notices hereunder, by notice in writing in the foregoing manner given to the other.

12. General Provisions.

12.1 Successors and Assigns. This Agreement and the Loan Documents shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties; *provided*, however, neither this Agreement nor any rights hereunder may be assigned by Borrower without the Required Lenders prior written consent, which consent may be granted or withheld in the Required Lenders sole discretion. Each Lender shall have the right without the consent of or notice to Borrower to sell, transfer, assign, negotiate, or grant participations in all or any part of, or any interest in such Lender's rights and benefits hereunder. Collateral Agent and each Lender may disclose the Loan Documents and any other financial or other information relating to Borrower to any potential participant or assignee of any of the Loans; *provided* that such participant or assignee agrees for the benefit of Borrower to protect the confidentiality of such documents and information using the same measures that it uses to protect its own confidential information.

12.2 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

12.3 Severability of Provisions. Each provision of this Agreement shall be severable from every other provision of this Agreement for the purpose of determining the legal enforceability of any specific provision.

12.4 Entire Agreement; Construction; Amendments and Waivers.

(a) Entire Agreement. This Agreement and each of the other Loan Documents, taken together, constitute and contain the entire agreement among Borrower, Collateral Agent and Lenders and supersede any and all prior agreements, negotiations, correspondence, understandings and communications between the parties, whether written or oral, respecting the subject matter hereof. Borrower acknowledges that it is not relying on any representation or agreement made by Collateral Agent, any Lender or any employee, attorney or agent thereof, other than the specific agreements set forth in this Agreement and the Loan Documents.

(b) Construction. This Agreement is the result of negotiations between and has been reviewed by each of Borrower, Collateral Agent and Lenders as of the date hereof and their respective counsel; accordingly, this Agreement shall be deemed to be the product of the parties hereto, and no ambiguity shall be construed in favor of or against Borrower, Collateral Agent or Lenders. Borrower, Collateral Agent and Lenders agree that they intend the literal words of this Agreement and the other Loan Documents and that no parol evidence shall be necessary or appropriate to establish Borrower's, Collateral Agent's or each Lender's actual intentions.

(c) Amendments and Waivers. Any and all discharges or waivers of, or consents to any departures from any provision of this Agreement or of any of the other Loan Documents and any and all amendments and modifications of this Agreement or of any of the other Loan Documents, in each case, shall not be effective without the written consent of Required Lenders and Borrower; *provided* that (x) no such discharge, waiver, consent, amendment or modification affecting the rights or duties of the Collateral Agent under this Agreement or any other Loan Document shall be effective without the written consent of the Collateral Agent and (y) no such discharge, waiver, consent, amendment or modification under this Agreement or any other Loan Document shall: (i) reduce the principal of, or rate of interest specified herein on, any Loan, without the written consent of each Lender directly and adversely affected thereby, (ii) postpone any date scheduled for any payment of principal of, or interest (including for the avoidance of doubt, the Maturity Date) on, any Loan, or reduce the amount of, waive or excuse any such payment, without the written consent of each Lender directly and adversely affected thereby. Any waiver or consent with respect to any provision of the Loan Documents shall be effective only in the specific instance and for the specific purpose for which it was given. No notice to or demand on Borrower in any case shall entitle Borrower to any other or further notice or demand in similar or other circumstances. Any amendment, modification, waiver or consent affected in accordance with this Section 12.4 shall be binding upon Collateral Agent, Lenders and on Borrower.

12.5 Reliance by Lenders. All covenants, agreements, representations and warranties made herein by Borrower shall be deemed to be material to and to have been relied upon by Collateral Agent and Lenders, notwithstanding any investigation by Collateral Agent or Lenders.

12.6 No Set-Offs by Borrower. All sums payable by Borrower pursuant to this Agreement or any of the other Loan Documents shall be payable without notice or demand and shall be payable in United States Dollars without set-off or reduction of any manner whatsoever.

12.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts (including signatures delivered by facsimile or other electronic means), each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement.

12.8 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations remain outstanding. The obligations of Borrower to indemnify Collateral Agent and Lenders with respect to the expenses, damages, losses, costs and liabilities described in Section 10.3 shall survive until all applicable statute of limitations periods with respect to actions that may be brought against Collateral Agent or any Lender have run.

13. Relationship of Parties. Borrower and each Lender acknowledge, understand and agree that the relationship between Borrower, on the one hand, and Lender, on the other, is, and at all times shall remain solely that of a borrower and lender. Any Lender shall not, under any circumstances, be construed to be a partner or a joint venturer of Borrower or any of its Affiliates; nor shall any Lender, under any circumstances, be deemed to be in a relationship of confidence or trust or a fiduciary relationship with Borrower or any of its Affiliates, or to owe any fiduciary duty or any other duty to Borrower or any of its Affiliates. Neither Collateral Agent nor any Lender undertakes or assumes any responsibility or duty to Borrower or any of its Affiliates to select, review, inspect, supervise, pass judgment upon or otherwise inform Borrower or any of its Affiliates of any matter in connection with its or their Property, any Collateral held by Collateral Agent or any Lender or the operations of Borrower or any of its Affiliates. Borrower and each of its Affiliates shall rely entirely on their own judgment with respect to such matters, and any review, inspection, supervision, exercise of judgment or supply of information undertaken or assumed by Collateral Agent or Lenders in connection with such matters is solely for the protection of Collateral Agent and Lenders and neither Borrower nor any Affiliate is entitled to rely thereon.

14. Confidentiality. All information (other than periodic reports filed by Borrower with the U.S. Securities and Exchange Commission and information otherwise publicly disclosed by Borrower) disclosed by Borrower or its representatives to Collateral Agent or Lenders their respective representatives, whether furnished before or after the date hereof and regardless of the manner in which such information is furnished (including disclosures through inspection pursuant to this Agreement and the other Loan Documents) shall be considered confidential if it is marked confidential or designated, in writing, as confidential, or if either Lender knows that such information is material non-public information, including, without limitation, financial information and information regarding Borrower's existing and prospective relationships and transactions with third parties (such information, collectively, the "Confidential Information"). Collateral Agent and Lenders agree to use the same degree of care to safeguard and prevent disclosure of such Confidential Information as Collateral Agent and Lenders use with their own confidential information, but in any event no less than a reasonable degree of care. Neither Collateral Agent nor any Lender shall disclose such Confidential Information to any third party (other than (a) to another party hereto, (b) to Collateral Agent's or each Lender's members, partners, attorneys, governmental regulators (including any self-regulatory authority) or auditors, (c) to Collateral Agent's or each Lender's subsidiaries and affiliates, (d) on a confidential basis, to any rating agency, (e) to prospective transferees and purchasers of the Loans or any actual or prospective party (or its Affiliates) to any swap, derivative or other transaction under which payments are to be made by reference to the Obligations, Borrower, any Loan Document or any payment thereunder, all subject to the same confidentiality obligation set forth herein or (f) as required by law, regulation, subpoena or other order to be disclosed) and shall use such information only for purposes of evaluation of its investment in Borrower and the exercise of Collateral Agent's or each Lender's rights and the enforcement of its remedies under this Agreement and the other Loan Documents. The obligations of confidentiality shall not apply to any information that (i) was known to the public prior to disclosure by Borrower or its representatives under this Agreement, (ii) becomes known to the public through no fault of Collateral Agent or any Lender, (iii) is disclosed to Collateral Agent or any Lender on a non-confidential basis by a third party or (iv) is independently developed by Collateral Agent or any Lender. Notwithstanding the foregoing, Collateral Agent's and each Lender's agreement of confidentiality shall not apply if Collateral Agent or any Lender has acquired indefeasible title to any Collateral or in connection with any enforcement or exercise of Collateral Agent's or any Lender's rights and remedies under this Agreement following an Event of Default, including the enforcement of Collateral Agent's security interest in the Collateral for the benefit of the Lenders.

15. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER . THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK. EACH OF BORROWER, COLLATERAL AGENT AND LENDERS HEREBY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE STATE OF NEW YORK. BORROWER, COLLATERAL AGENT AND LENDERS HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF ANY OF THE LOAN DOCUMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED THEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS.

16. Effect of Amendment and Restatement of the Existing Agreement.

16.1 On the Restatement Effective Date, (i) all Obligations under the Original Agreement shall be amended and modified as provided herein, (ii) the outstanding amount of all Loans (as defined in the Original Agreement) shall be reallocated among the Lenders in accordance with their respective Loan in the amount set forth opposite such Lender's name on Schedule I attached hereto and in order to effect such reallocations, all requisite assignments shall be deemed to be made in amounts from Horizon to Molteni, with the same force and effect as if such assignments were made pursuant to the Original Agreement but without the payment of any related assignment fee, and no other documents or instruments shall be, or shall be required to be, executed in connection with such assignments (all of which such requirements are hereby waived), and (iii) Molteni shall make full cash settlement directly with Horizon with respect to all such assignments and reallocations.

16.2 On the Restatement Effective Date, the Original Agreement shall be amended and restated in its entirety by this Agreement. The parties hereto acknowledge and agree that (i) this Agreement and the other Loan Documents, whether executed and delivered in connection herewith or otherwise, do not constitute a novation of the Obligations existing under the Original Agreement as in effect immediately prior to the Restatement Effective Date, (ii) all such Obligations existing under the Original Agreement are in all respects continuing but as modified as provided in this Agreement, (iii) this Agreement and the other Loan Documents being executed and delivered on the Restatement Effective Date shall not in any way release or impair any Liens created pursuant to the Original Agreement or any other Loan Document (as defined in the Original Agreement) or affect the relative priorities thereof, and the Borrower, on behalf of itself and its Subsidiaries, hereby ratifies and confirms all such Liens, (iv) the execution, delivery and effectiveness of this Agreement shall not operate as a waiver of any right, power or remedy of the Collateral Agent or the Lender under the Original Agreement or the other Loan Documents (as defined in the Original Agreement), nor constitute a waiver of any covenant, agreement or obligation under the Original Agreement or the other Loan Documents (as defined in the Original Agreement), except to the extent that any such covenant, agreement or obligation is no longer set forth herein or is modified hereby or by any of the other Loan Documents executed and delivered on the Restatement Effective Date, (v) any and all references in the Loan Documents to the Original Agreement shall, without further action of the parties, be deemed a reference to the Original Agreement, as amended and restated by this Agreement, and as this Agreement shall be further amended, restated, supplemented or otherwise modified from time to time and (vi) unless any Loan Document has been expressly amended and restated pursuant to this Agreement, any Loan Document as defined in, or executed pursuant to, the Original Agreement shall constitute a Loan Document hereunder.

16.3 Horizon hereby agrees to a non-cash conversion of all of its Loans under the Original Agreement outstanding immediately prior to the effectiveness of this Agreement which have not been acquired by Molteni into Loans (as defined herein) outstanding immediately after the effectiveness of this Agreement.

17. Collateral Agent Succession

17.1 Collateral Agent Resignation, Consent and Appointment. As of the Restatement Effective Date, (a) Horizon TFC hereby resigns as the Collateral Agent under the Original Credit Agreement and shall have no further obligations under the Loan Documents in such capacity; (b) the Lenders hereby appoint Molteni as Collateral Agent under this Agreement and the other Loan Documents; (c) the Borrower hereby consents to the appointment of Molteni as the Collateral Agent; and (e) Molteni hereby accepts its appointment as Collateral Agent.

17.2 Collateral Agent Rights and Obligations. The parties hereto hereby confirm that the Collateral Agent succeeds to the rights and obligations of Horizon TFC under the Original Credit Agreement and the other Loan Documents and becomes vested with all the rights, powers, privileges and duties of the Collateral Agent under each of the Loan Documents, and Horizon TFC is discharged from all its duties and obligations as the Collateral Agent under the Original Credit Agreement and the other Loan Documents, in each case, as of the Restatement Effective Date.

17.3 Assignment of Liens. Horizon and Horizon TFC hereby assign to the Collateral Agent each of the Liens and security interests granted to Horizon and Horizon TFC under the Loan Documents and the Collateral Agent hereby assumes all such Liens and security interests, for its benefit and the benefit of the Lenders. The Collateral Agent is hereby authorized to execute and file any and all documents necessary to effectuate the assignment of any and all Liens and security interests (including, without limitation, amendments under the Uniform Commercial Code, assignments of mortgages and deeds of trust, assignments of security interests in trademarks, patents and copyrights and assignments of control agreements with respect to the Borrower's deposit accounts).

17.4 Post-Effective Date Cooperation. On and after the Restatement Effective Date, Horizon TFC hereby agrees to execute all documents, agreements or instruments (at the expense of the Borrower) as may be reasonably requested by the Collateral Agent to transfer the rights and privileges of Horizon TFC as Collateral Agent (as defined in the Original Agreement) under the Loan Documents (including, without limitation, Horizon' TFCs liens and security interests in the Collateral) to the Collateral Agent and to deliver all Collateral in the possession of Horizon TFC to the Collateral Agent. The Borrower hereby consents to all actions taken by Horizon TFC and the Collateral Agent pursuant to the immediately preceding sentence.

17.5 Continuing Benefit of Credit Agreement. Each of the Borrower and the Lenders, with respect to their applicable indemnification obligations under the Loan Documents, expressly agrees and confirms that each Collateral Agent's and the Collateral Agent's right to indemnification, as set forth in the Loan Documents, shall apply with respect to any and all losses, claims, costs and expenses that such Existing Collateral Agent or Collateral Agent, as applicable, suffers, incurs or is threatened with relating to actions taken or omitted by any of the parties to this Agreement on or prior to the Restatement Effective Time.

17.6 Limitation of Liability of the Collateral Agent. The parties hereto agree that Molteni, in its individual capacity and in its capacity as Collateral Agent, shall bear no responsibility or liability for (i) any actions taken or omitted to be taken by Horizon TFC while it served as the Collateral Agent under the Credit Agreement and the other Loan Documents, or (ii) any event, circumstance, condition, or action, existing on or prior to the Restatement Effective Date, with respect to the Collateral, the Original Credit Agreement, or any other Loan Document, or the transactions contemplated thereby.

17.7 Acknowledgements Regarding Collateral Agent. It is acknowledged and agreed by each of the parties hereto that Molteni, in succeeding to the position of the Collateral Agent under this Agreement and the other Loan Documents, (i) has undertaken no analysis of the Loan Documents or the Collateral and (ii) has made no determination as to (x) the validity, enforceability, effectiveness or priority of any Liens granted or purported to be granted pursuant to the Loan Documents or (y) the accuracy or sufficiency of the documents, filings, recordings and other actions taken to create, perfect or maintain the existence, perfection or priority of the Liens granted or purported to be granted pursuant to the Loan Documents. Molteni shall be entitled to assume that, as of the Restatement Effective Date, all Liens purported to be granted pursuant to the Loan Documents are valid and perfected Liens having the priority intended by the Lenders and the Loan Documents.

17.8 Possessory Collateral. On and after the Restatement Effective Date, all possessory collateral held by Horizon TFC for the benefit of the Lenders shall be deemed to be held by Horizon TFC as agent and bailee for the Collateral Agent for the ratable benefit of the Lenders until such time as such possessory collateral has been delivered to the Collateral Agent. Notwithstanding anything herein to the contrary or the effectiveness of the terms hereof, the Borrower agrees that all of such Liens granted by the Borrower, shall in all respects be continuing and in effect and are hereby ratified and reaffirmed by the Borrower. Without limiting the generality of the foregoing, any reference to Horizon TFC in any publicly filed document, to the extent such filing relates to the liens and security interests in the Collateral assigned hereby and until such filing is modified to reflect the interests of the Collateral Agent, shall, with respect to such liens and security interests, constitute a reference to Horizon TFC as collateral representative of the Collateral Agent. The Collateral Agent agrees to take possession of any possessory collateral delivered to the Collateral Agent following the Restatement Effective Date upon tender thereof by Horizon TFC.

17.9 Fees and Expenses. The Borrower agrees to pay to pay to the Collateral Agent all of its Lender's Expenses.

18. Agency

18.1 Appointment.

(a) Each Lender hereby irrevocably designates and appoints the Collateral Agent as the agent of such Lender under this Agreement and the Loan Documents, and such Lender irrevocably authorizes the Collateral Agent, in such capacity, to enter into the Loan Documents, take such action on behalf of the Lenders under the provisions of this Agreement and the Loan Documents and exercise such powers and perform such duties as are expressly delegated to the Collateral Agent by the terms of this Agreement and the Loan Documents, together with such other powers as are reasonably incidental thereto. Notwithstanding any provision to the contrary elsewhere in this Agreement, the Collateral Agent shall not have any duties or responsibilities, except those expressly set forth herein, or any fiduciary relationship with any Lender, and no implied covenants, functions, responsibilities, duties, obligations or liabilities shall be read into this Agreement or any Loan Document or otherwise exist against the Collateral Agent.

18.2 Exculpatory Provisions. Neither the Collateral Agent nor any other party acting under its direction, or any officer, director, employee, agent or attorney-in-fact of the Collateral Agent (collectively, the "Collateral Agent Parties") shall be (i) liable to any Lender for any action lawfully taken or omitted to be taken by it with due care pursuant to and in accordance with this Agreement or any Loan Document or (ii) responsible in any manner to any Lender for any recitals, statements, representations or warranties made by the Borrower or any Lender, or any officer or other representative of either thereof, contained in this Agreement or any Loan Document or in any instrument, writing, resolution, notice, consent, certificate, statement, opinion, report, direction, affidavit, letter, telecopy, telex or teletype message, statement, order or other document or conversation (each a "Communication") referred to or provided for in, or received by the Collateral Agent under or in connection with, this Agreement or any Loan Document or for the value, validity, effectiveness, genuineness, enforceability or sufficiency of this Agreement or any Loan Document or for any failure of Borrower or Lenders, or any other party to perform its obligations hereunder or thereunder. The Collateral Agent shall not be under any obligation to any Lender to ascertain or to inquire as to the observance or performance of any of the agreements contained in, or conditions of, this Agreement or any Loan Document, or to inspect the properties, books or records of the Borrower.

18.3 Reliance by Collateral Agent; Actions. The Collateral Agent agrees that it shall take any action with respect to the Loan Documents authorized or directed in writing by the Required Lenders unless, in the Collateral Agent's reasonable opinion, such action is contrary to applicable law. The Collateral Agent shall in all cases be fully protected in acting, or in refraining from acting, under this Agreement and the Loan Documents in accordance with this Agreement and the Loan Documents or a written request of the Required Lenders, and such action taken or failure to act pursuant to either of the foregoing, shall be binding upon all the Lenders. The Collateral Agent shall be entitled to rely upon any written notice, statement, certificate, order or other document or any telephone message or other Communication, believed by it to be genuine and correct and to have been signed, sent or made by the proper person, and, with respect to all matters pertaining to this Agreement, the Loan Documents and its duties hereunder and thereunder, upon advice of counsel selected by it.

18.4 Non-Reliance on Collateral Agent and Other Holders.

(a) The Collateral Agent makes no representation or warranty as to the value or condition of the Collateral or any part thereof, or as to the title of the Borrower thereto or as to the security afforded hereby or by any Loan Document, or as to the validity or genuineness of any securities at any time pledged and deposited with the Collateral Agent hereunder, or as to the validity or sufficiency of this Agreement or any Loan Document or as to the validity, attachment, perfection, priority or enforceability of the liens in any of the Collateral created or intended to be created by any of the Loan Documents. The Collateral Agent shall have no responsibility to make or to see to the making of any recording, filing or registration of any instrument or notice (including any tax or securities form and any recording or filing or re-recording or re-filing of any mortgage or Uniform Commercial Code financing or continuation statements or recording or re-recording any documents or instruments at any time in any public office or elsewhere for the purpose of creating, perfecting, maintaining the perfection of or otherwise making effective the lien of any Loan Document or for any other purpose and shall have no responsibility for confirming compliance of the Borrower's insurance with the terms of this Agreement or any of the Loan Documents or for paying any taxes, charges or assessments on or relating to the Collateral or for otherwise maintaining the Collateral.

(b) The Collateral Agent shall have no obligation to enforce any provision of the Loan Documents or to take any other steps in connection with the Collateral or any other collateral, except as otherwise may be expressly provided for in this Agreement or in the Loan Documents. The Collateral Agent shall have no duty to inquire about changes if the Borrower does not inform the Collateral Agent of such changes, the Lenders acknowledging and agreeing that it would not be feasible or practical for the Collateral Agent to search for information on such changes if such information is not provided by the Borrower.

(c) Beyond the exercise of reasonable care in the custody thereof, the Collateral Agent shall have no duty as to any Collateral in its possession or control or in the possession or control of any agent or bailee or any income thereon or as to preservation of rights against prior parties or any other rights pertaining thereto. The Collateral Agent shall be deemed to have exercised reasonable care in the custody of the Collateral in its possession if the Collateral is accorded treatment substantially equal to that which it accords its own property, but in no event less than reasonable care, and shall not be liable or responsible for any loss or diminution in the value of any of the Collateral by reason of the act or omission of any carrier, forwarding agency agent or bailee selected by the Collateral Agent in good faith or selected by the Borrower.

18.5 Indemnification. The Lenders agree to indemnify the Collateral Agent in its capacity as such, ratably according to their respective pro rata share of the aggregate principal amount of the outstanding Notes on the date on which indemnification is sought under this Section (or, if indemnification is sought after the Maturity Date, ratably in accordance with such pro rata share of the Loans immediately prior to such date), from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever, that may at any time (whether before or after the payment of the Notes) be imposed on, incurred by or asserted against the Collateral Agent or any other Collateral Agent Party in any way relating to or arising out of this Agreement, any of the Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by the Collateral Agent or such other Collateral Agent Party under or in connection with any of the foregoing except for any such liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements resulting from the gross negligence or willful misconduct of Collateral Agent, if such actions were authorized by the Lenders. So long as any Lender who declines to authorize any action taken or omitted by the Collateral Agent does so in good faith and not to avoid any of its indemnification obligations set forth in the preceding sentence, if any action taken or omitted to be taken is a result of the authorization of only the Required Lenders, then the indemnification obligations pursuant to this Section 18.5 shall be borne solely and exclusively by the Required Lenders authorizing such action or omission. The agreements in this Section shall survive the payment of the Notes and all other amounts payable hereunder.

18.6 Due Care; Liability.

(a) The parties hereto expressly agree that, in the absence of gross negligence or willful misconduct on the part of the Collateral Agent (as found by a final and nonappealable decision of a court of competent jurisdiction), the Collateral Agent shall be deemed to have exercised due care.

(b) Anything in this Agreement notwithstanding, in no event shall the Collateral Agent be liable for special, indirect, punitive or consequential loss or damage of any kind whatsoever (including but not limited to loss of profit), even if the Collateral Agent or the Lenders have been advised as to the likelihood of such loss or damage and regardless of the form of action.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

BORROWER:

**TITAN PHARMACEUTICALS, INC.**

By: /s/ Sunil Bhonsle

Name: Sunil Bhonsle

Title: Chief Executive Officer

LENDER:

**L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A.**

By: /s/ Giuseppe Seghi Recli
Name: Giuseppe Seghi Recli
Title: Managing Director

[SIGNATURE PAGE TO AMENDED AND RESTATED VENTURE LOAN AND SECURITY AGREEMENT]

COLLATERAL AGENT:

**L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A.**

By: /s/ Giuseppe Seghi Recli
Name: Giuseppe Seghi Recli
Title: Managing Director

[SIGNATURE PAGE TO AMENDED AND RESTATED VENTURE LOAN AND SECURITY AGREEMENT]

LENDER:

**HORIZON CREDIT II LLC**

By: /s/ Robert D. Pomeroy, Jr.
Name: Robert D. Pomeroy, Jr.
Title: Chief Executive Officer

[SIGNATURE PAGE TO AMENDED AND RESTATED VENTURE LOAN AND SECURITY AGREEMENT]

COLLATERAL AGENT (UNDER ORIGINAL AGREEMENT):

**HORIZON TECHNOLOGY FINANCE CORPORATION**

By: /s/ Robert D. Pomeroy, Jr.
Name: Robert D. Pomeroy, Jr.
Title: Chief Executive Officer

**SCHEDULE I**

Lender Loan Amounts

| Lender | Loan Amount | Pro-Rata Percentage |
|---|---|---|
| L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A. | $ 2,400,000 | 60% |
| Horizon Technology Finance Corporation | $ 1,600,000 | 40% |
| **TOTAL** | **$ 4,000,000** | **100%** |

LIST OF EXHIBITS AND SCHEDULES

| | |
|---|---|
| Exhibit A | Disclosure Schedule |
| Exhibit B | Restatement Closing Certificate |
| Exhibit C-1 | Form of Note for Horizon Loan |
| Exhibit C-2 | Form of Note for Molteni Loan |
| Exhibit D | Form of Legal Opinion |
| Exhibit E | Form of Officer's Certificate |

EXHIBIT A

DISCLOSURE SCHEDULE

(Provided separately and will be inserted upon completion.)

EXHIBIT B

**RESTATEMENT CLOSING CERTIFICATE**

The undersigned, being the duly elected and acting _____ of TITAN PHARMACEUTICALS, INC., a Delaware corporation ("Borrower"), does hereby certify to L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A. ("Molteni") and HORIZON CREDIT II LLC ("Horizon", and together with Molteni, "Lenders") in connection with that certain Amended and Restated Venture Loan and Security Agreement dated as of the date hereof by and among Borrower, Lenders and Molteni as Collateral Agent (the "Loan Agreement"; with other capitalized terms used below having the meanings ascribed thereto in the Loan Agreement) that:

1. The representations and warranties made by Borrower in Section 5 of the Loan Agreement and in the other Loan Documents are true and correct as of the date hereof.

2. Other than those events or conditions acknowledged by Lenders and Collateral Agent in Section 3(k) of the Loan Agreement, no Default or Event of Default has occurred under the Original Agreement or the other Loan Documents and is continuing or will exist immediately after giving effect to Loan Agreement.

3. Borrower is in compliance with the covenants and requirements contained in Sections 4, 6 and 7 of the Loan Agreement.

4. All conditions referred to in Section 3 of the Loan Agreement to the making of the Loan to be made on or about the date hereof have been satisfied.

5. No material adverse change in the general affairs, management, results of operations, condition (financial or otherwise) or prospects of Borrower, whether or not arising from transactions in the ordinary course of business, has occurred.

Dated: March 21, 2018

BORROWER:

TITAN PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

(Signature page to Restatement Closing Certificate)

EXHIBIT C-1

**AMENDED AND RESTATED SECURED PROMISSORY NOTE**

$1,600,000 Originally Dated as of: July 27, 2017

Amended and Restated as of: March 21, 2018

FOR VALUE RECEIVED, the undersigned, TITAN PHARMACEUTICALS, INC., a Delaware corporation ("Borrower"), HEREBY PROMISES TO PAY to HORIZON CREDIT II LLC, a Delaware limited liability company ("Lender") the principal amount of One Million Six Hundred Thousand and 00/100 Dollars ($1,600,000) or such lesser amount as shall equal the outstanding principal balance of the Horizon Loan (the "Loan") made to Borrower by Lender pursuant to the Loan Agreement (as defined below), and to pay all other amounts due with respect to the Loan on the dates and in the amounts set forth in the Loan Agreement. Capitalized terms used but not defined herein shall have the meaning ascribed thereto in the Loan Agreement. This Note, together with that certain Secured Promissory Note dated as of the date hereof issued by Borrower to L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A. collectively replace and supersede, in their entirety, that certain Secured Promissory Note (Loan A) and that certain Secured Promissory Note (Loan B) issued by Titan Pharmaceuticals, Inc. to Horizon Technology Finance Corporation on July 27, 2017 (the "Original Notes"). Nothing contained herein shall be deemed a repayment or novation of any Original Note.

Interest on the principal amount of this Note from the date of this Note shall accrue at the Loan Rate or, if applicable, the Default Rate, each as established in accordance with the Loan Agreement (as defined below). Interest shall be computed on the basis of a 360-day year for the actual number of days elapsed. If the funding date is not the first day of the month, interim interest accruing from the Restatement Effective Date through the last day of that month shall be paid on the first calendar day of the next calendar month. Commencing March 21, 2018, through and including December 1, 2019, on the first day of each month (each an "Interest Payment Date") Borrower shall make payments of accrued interest only on the outstanding principal amount of the Loan. Commencing on January 1, 2020, and continuing on the first day of each month thereafter (each, a "Principal and Interest Payment Date" and, collectively with each Interest Payment Date, each, a Payment Date"), Borrower shall make to Lender [STATE NUMBER IN WORDS] ([XX])] equal payments of principal in the amount of [STATE DOLLAR AMOUNT IN WORDS] ($[XX,XXX.XX]) [1] (each, a "Principal Amortization Amount") plus accrued interest on the then outstanding principal amount due hereunder. On the earliest to occur of (i) the Maturity Date, (ii) payment in full of the principal balance of the Loan or (iii) an Event of Default and demand by Lender of payment in full of the Loan, Borrower shall make a payment of Two Hundred Forty-Six Thousand Seven Hundred Thirty-Nine and 00/100 Dollars ($246,739) (the "Final Payment"). If not sooner paid, all outstanding amounts hereunder and under the Loan Agreement shall become due and payable on the Maturity Date.

---

1 Principal Amortization Amount to be inserted.

Principal, interest and all other amounts due with respect to the Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement. The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

This Note is referred to in, and is entitled to the benefits of, the Amended and Restated Venture Loan and Security Agreement dated as of the date hereof (the "Loan Agreement"), among Borrower, Lender, the other lenders party thereto and Molteni as Collateral Agent. The Loan Agreement, among other things, (a) provides for the making of a secured Loan to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid, except as set forth in Section 2.2 and Section 2.3 of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Loan, interest on the Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all fees and expenses, including attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower's obligations hereunder not performed when due.

Any reference herein to Lender shall be deemed to include and apply to every subsequent holder of this Note. Reference is made to the Loan Agreement for provisions concerning optional and mandatory prepayments, Collateral, acceleration and other material terms affecting this Note.

**This Note shall be governed by and construed under the laws of the State of New York. Borrower agrees that any action or proceeding brought to enforce or arising out of this Note may be commenced in the state or federal courts located within the State of New York.**

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

TITAN PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

(Signature page to Secured Promissory Note (Horizon Loan))

EXHIBIT C-2

**SECURED PROMISSORY NOTE**

$2,400,000 Dated: March 21, 2018

FOR VALUE RECEIVED, the undersigned, TITAN PHARMACEUTICALS, INC., a Delaware corporation (" Borrower"), HEREBY PROMISES TO PAY to L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A., a company organized and existing under the laws of Italy ("Lender") the principal amount of Two Million Four Hundred Thousand and 00/100 Dollars ($2,400,000) or such lesser amount as shall equal the outstanding principal balance of the Molteni Loan (the "Loan") made to Borrower by Lender pursuant to the Loan Agreement (as defined below), and to pay all other amounts due with respect to the Loan on the dates and in the amounts set forth in the Loan Agreement. Capitalized terms used but not defined herein shall have the meaning ascribed thereto in the Loan Agreement. This Note, together with that certain Secured Promissory Note dated as of the date hereof issued by Borrower to Horizon Credit II LLC collectively replace and supersede, in their entirety, that certain Secured Promissory Note (Loan A) and that certain Secured Promissory Note (Loan B) issued by Titan Pharmaceuticals, Inc. to Horizon Technology Finance Corporation on July 27, 2017 (the "Original Notes"). Nothing contained herein shall be deemed a repayment or novation of any Original Note.

Interest on the principal amount of this Note from the date of this Note shall accrue at the Loan Rate or, if applicable, the Default Rate, each as established in accordance with the Loan Agreement (as defined below). Interest shall be computed on the basis of a 360-day year for the actual number of days elapsed. If the funding date is not the first day of the month, interim interest accruing from the Restatement Effective Date through the last day of that month shall be paid on the first calendar day of the next calendar month. Commencing March 21, 2018, through and including December 1, 2019, on the first day of each month (each an "Interest Payment Date") Borrower shall make payments of accrued interest only on the outstanding principal amount of the Loan. Commencing on January 1, 2020, and continuing on the first day of each month thereafter (each, a "Principal and Interest Payment Date" and, collectively with each Interest Payment Date, each, a Payment Date"), Borrower shall make to Lender [STATE NUMBER IN WORDS] ([XX])] equal payments of principal in the amount of [STATE DOLLAR AMOUNT IN WORDS] ($[XX,XXX.XX]) [2] (each, a "Principal Amortization Amount") plus accrued interest on the then outstanding principal amount due hereunder. On the earliest to occur of (i) the Maturity Date, (ii) payment in full of the principal balance of the Loan or (iii) an Event of Default and demand by Lender of payment in full of the Loan, Borrower shall make a payment of Four Hundred Sixty Three Thousand Two Hundred Sixty-One and 00/100 Dollars ($463,261) to Lender (the "Final Payment"). If not sooner paid, all outstanding amounts hereunder and under the Loan Agreement shall become due and payable on the Maturity Date.

Principal, interest and all other amounts due with respect to the Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement. The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

---

2 Principal Amortization Amount to be inserted.

This Note is referred to in, and is entitled to the benefits of, the Amended and Restated Venture Loan and Security Agreement dated as of the date hereof (the "Loan Agreement"), among Borrower, Lender, the other lenders party thereto and Molteni as Collateral Agent. The Loan Agreement, among other things, (a) provides for the making of a secured Loan to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid, except as set forth in Section 2.2 and Section 2.3 of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Loan, interest on the Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all fees and expenses, including attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower's obligations hereunder not performed when due.

In the event Lender exercises its right to convert any or all Obligations outstanding under the Molteni Loan into equity pursuant to Section 2.5 of the Loan Agreement, such amount converted into equity in accordance with Section 2.5 (including, for the avoidance of doubt, subject to Section 2.5(c) of the Loan Agreement) shall be deemed to be a payment made under this Note.

Borrower shall cause to be reserved from its authorized but unissued shares of common stock a number of shares of Conversion Stock equal to at least the maximum number of Conversion Shares issuable pursuant to Section 2.5 of the Loan Agreement at any given time.

Any reference herein to Lender shall be deemed to include and apply to every subsequent holder of this Note. Reference is made to the Loan Agreement for provisions concerning optional and mandatory prepayments, Collateral, acceleration and other material terms affecting this Note.

**This Note shall be governed by and construed under the laws of the State of New York. Borrower agrees that any action or proceeding brought to enforce or arising out of this Note may be commenced in the state or federal courts located within the State of New York.**

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

TITAN PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

(Signature page to Secured Promissory Note (Molteni Loan))

EXHIBIT D

ITEMS TO BE COVERED BY OPINION OF BORROWER'S COUNSEL

1. Borrower is a corporation, duly organized, validly existing and in good standing under the laws of the State of Delaware, and is duly qualified and authorized to do business in the State of California.

2. Borrower has the full corporate power, authority and legal right, and has obtained all necessary approvals, consents and given all notices to execute and deliver the Loan Documents and perform the terms thereof.

3. The Loan Documents have been duly authorized, executed and delivered by Borrower.

4. To our knowledge, there is no action, suit, audit, investigation, proceeding or patent claim pending or threatened against Borrower in any court or before any governmental commission, agency, board or authority which might have a Material Adverse Effect.

5. The Shares (as defined in the Warrant) issuable pursuant to exercise or conversion of the Warrant have been duly authorized and reserved for issuance by Borrower and, when issued in accordance with the terms thereof, will be validly issued, fully paid and nonassessable.

6. The shares of Common Stock issuable upon conversion of the Shares have been duly authorized and reserved and, when issued in accordance with the terms of Borrower's Certificate of Incorporation, as amended, will be validly issued, fully paid and nonassessable.

7. The execution and delivery of the Loan Documents are not, and the issuance of the Shares upon exercise of the Warrant in accordance with the terms thereof will not be, inconsistent with Borrower's Certificate of Incorporation, as amended, or Bylaws, do not and will not contravene any law, governmental rule or regulation, judgment or order applicable to Borrower, and do not and will not conflict with or contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other agreement or instrument of which Borrower is a party or by which it is bound or require the consent or approval of, the giving of notice to, the registration or filing with or the taking of any action in respect of or by, any federal, state or local government authority or agency or other person, except for the filing of notices pursuant to federal and state securities laws, which filings will be effected by the time required thereby.

EXHIBIT E

**FORM OF OFFICER'S CERTIFICATE**

TO: L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A., as Collateral Agent

FROM: TITAN PHARMACEUTICALS, INC., as Borrower

The undersigned authorized officer ("**Officer**") of TITAN PHARMACEUTICALS, INC., on behalf of itself and all other Borrowers under and as defined in the Loan Agreement (as defined herein below) (individually and collectively, jointly and severally, "**Borrower**"), hereby certifies that in accordance with the terms and conditions of the Amended and Restated Venture Loan and Security Agreement by and among Borrower, Collateral Agent, and the Lenders from time to time party thereto (the "**Loan Agreement**;" capitalized terms used but not otherwise defined herein shall have the meanings given them in the Loan Agreement),

(a) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below;

(b) There are no Events of Default, except as noted below;

(c) Except as noted below, all representations and warranties of Borrower stated in the Loan Documents are true and correct in all material respects on this date and for the period described in (a), above; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date.

(d) Borrower, and each of Borrower's Subsidiaries, has timely filed all required tax returns and reports, Borrower, and each of Borrower's Subsidiaries, has timely paid all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower, or Subsidiary, except as otherwise permitted pursuant to the terms of Section 5.8 of the Loan Agreement;

(e) No Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Collateral Agent and the Lenders.

Attached are the required documents, if any, supporting our certification(s). The Officer, on behalf of Borrower, further certifies that the attached financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) and are consistently applied from one period to the next except as explained in an accompanying letter or footnotes and except, in the case of unaudited financial statements, for the absence of footnotes and subject to year-end audit adjustments as to the interim financial statements.

**Please indicate compliance status since the last Officer's Certificate by circling Yes, No, or N/A under "Complies" column.**

| | Reporting Covenant | Requirement | Actual | Complies | | |
|---|---|---|---|---|---|---|
| **1)** | Quarterly Financial Reports (with form 10Q) | Within 45 days after the end of each fiscal quarter | | Yes | No | N/A |
| **2)** | Annual (CPA Audited) statements (with form 10K) | Within 180 days after FYE | | Yes | No | N/A |
| **3)** | Annual Financial Projections/Budget (prepared on a monthly basis) | Annually (within 30 days of the earlier of (i) FYE or (ii) BoD approval), and when revised | | Yes | No | N/A |
| **4)** | 8-K Filings | If applicable, within 5 days of filing | | Yes | No | N/A |
| **5)** | Officer's Certificate | Simultaneously with 10-Q and 10-K filings | | Yes | No | N/A |
| **6)** | Total amount of Borrower's cash and cash equivalents at the last day of the measurement period | $_____ | | | | |
| **7)** | Total amount of Borrower's Subsidiaries' cash and cash equivalents at the last day of the measurement period | $_____ | | | | |

**Deposit and Securities Accounts:** ***(Please list all accounts; attach separate sheet if additional space needed)***

| | Institution Name | Account Number | New Account? | | Account Control Agreement in place? | |
|---|---|---|---|---|---|---|
| **1)** | | | Yes | No | Yes | No |
| **2)** | | | Yes | No | Yes | No |
| **3)** | | | Yes | No | Yes | No |
| **4)** | | | Yes | No | Yes | No |

**Other Matters**

If the response to any of the below is "Yes", please provide an explanation of the circumstances giving rise to such "Yes" response on an attachment hereto.

| | | | |
|---|---|---|---|
| **1)** | Have there been any changes in senior management since the last Officer's Certificate? | Yes | No |
| **2)** | Has there been any transfers/sales/disposals/retirement or relocation of Collateral or IP prohibited by the Loan Agreement? | Yes | No |
| **3)** | Have there been any new or pending claims or causes of action against Borrower that involve more than Fifty Thousand Dollars ($50,000.00)? | Yes | No |
| **4)** | Has any IP been abandoned, forfeited or dedicated to the public since the last Officer's Certificate? | Yes | No |
| **5)** | Has any Default or Event of Default occurred since the last Officer's Certificate? | Yes | No |
| **6)** | Has Borrower sold new shares of equity or made adjustments to existing shares of equity? If yes, please provide applicable supporting documentation. | Yes | No |
| **7)** | Has any direct or indirect Subsidiary been formed since the last Officer's Certificate? | Yes | No |
| **8)** | Has any piece of a Borrower's property been subject to a Lien (other than the lien of Collateral Agent for the benefit of the Lenders pursuant to the Loan Agreement) since the date of the last Officer's Certificate? | Yes | No |
| **9)** | Has any Borrower or any Subsidiary incurred any Indebtedness since the date of the last Officer's Certificate? | Yes | No |
| **10)** | Has Borrower or any Subsidiary made any Investment since the date of the last Officer's Certificate? | Yes | No |

**Exceptions:** Please explain any exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions." Attach separate sheet if additional space needed.)

TITAN PHARMACEUTICALS, INC., on behalf of itself and all other Borrowers

By _____

Name: _____

Title: _____

Date: _____

EXHIBIT F

**ASSET PURCHASE, SUPPLY AND SUPPORT AGREEMENT**

**Exhibit 10.2**

**CONFIDENTIAL TREATMENT REQUESTED.
INFORMATION FOR WHICH CONFIDENTIAL TREATMENT HAS BEEN REQUESTED IS OMITTED AND MARKED WITH "[*******]" OR OTHERWISE CLEARLY INDICATED. AN UNREDACTED VERSION OF THIS DOCUMENT HAS ALSO BEEN PROVIDED TO THE SECURITIES AND EXCHANGE COMMISSION.**

# ASSET PURCHASE, SUPPLY AND SUPPORT AGREEMENT

**by and between**

**TITAN PHARMACEUTICALS, INC.**

**and**

**L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A.**

**dated**

**March 21, 2018**

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**TABLE OF CONTENTS CONTINUED**

**THIS ASSET PURCHASE, SUPPLY AND SUPPORT AGREEMENT** (the "**Agreement**") is made as of March 21, 2018 (the "**Effective Date**"), by and between **TITAN PHARMACEUTICALS, INC.**, a corporation organized and existing under the laws of the State of Delaware and having its principal office at 400 Oyster Point Blvd., Suite 505, South San Francisco, CA 94080-1921, United States ("**Titan**"), and **L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A.**, a company organized and existing under the laws of Italy having its principal office at Strada Statale 67, Frazione Granatieri, Scandicci (Florence), Italy, ("**Molteni**").

**RECITALS**

**WHEREAS**, Titan owns the Purchased Assets (as defined herein);

**WHEREAS**, Titan desires to sell to Molteni, and Molteni desires to purchase from Titan, the Purchased Assets, upon the terms and conditions hereinafter set forth;

**WHEREAS**, Molteni desires to manage, with assistance from Titan, the development of the Final Product for use in the Initial Indication and Subsequent Indications (each as defined herein), subject to the terms and conditions of this Agreement;

**NOW, THEREFORE**, in consideration of the foregoing statements and the mutual agreements and covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Titan and Molteni hereby agree as follows:

**1. Definitions**

Unless specifically set forth to the contrary herein, the following terms, where used in the singular or plural, shall have the respective meanings set forth below:

1.1 "**Additional Services**" means, in relation to the Semi-Finished Product, the Release, the kit assembly, the secondary packaging (including serialization) and DEA reporting resulting in the Final Product.

1.2 "**Adverse Experience**" or "AE(s)" means adverse drug experiences, as defined by 21 CFR Section 314.80 in the U.S., and any other Applicable Law in the Territory.

1.3 "**Affiliate**" of a Party means (i) any corporation or business entity of which at least fifty percent (50%) of the securities or other ownership interests representing the equity, the voting stock or general partnership interest are owned, controlled or held, directly or indirectly, by a Party; (ii) any corporation or business entity which, directly or indirectly, owns, controls or holds at least fifty percent (50%) (or the maximum ownership interest permitted by law) of the securities or other ownership interests representing the equity, voting stock or general partnership interest of a Party; (iii) any corporation or business entity of which, directly or indirectly, an entity described in the immediately preceding subsection (ii) controls or holds at least fifty percent (50%) (or the maximum ownership interest permitted by law) of the securities or other ownership interests representing the equity, voting stock or general partnership interest of such corporation or entity; or (iv) any corporation or business entity of which a Party has the right to acquire, directly or indirectly, at least fifty percent (50%) of the securities or other ownership interests representing the equity, voting stock or general partnership interest thereof.

1.4 "**Agreement Term**" has the meaning set forth in Section 13.1.

1.5 "**Ancillary Agreements**" means (a) the short-form patent assignments and short-form trademark assignments to be executed by Titan (or the applicable Affiliates thereof) and Molteni at or after the Closing, providing for the assignment of the Registered IP from Titan to Molteni, in substantially the form of the assignments set forth as Exhibit A hereto (the "**IP Assignment Agreements**"), (b) the Bill of Sale, dated as of the date hereof, by and between Titan and Molteni, in substantially the form set forth as Exhibit B hereto, (c) the Amended and Restated Venture Loan and Security Agreement, dated as of the date hereof, by and among Titan, Molteni and Horizon Technology Finance Corporation, in substantially the form set forth as Exhibit C hereto, (d) the Rights Agreement, dated as of the date hereof, by and between Titan and Molteni, in substantially the form set forth as Exhibit D hereto, and (e) the Warrant, dated as of the date hereof, issued to Molteni by Titan, in substantially the form set forth as Exhibit E hereto.

1.6 "**Applicable Law**" means the laws, rules, and regulations, including any statutes, rules, regulations, guidelines, or other requirements that may be in effect from time to time and apply to the activities contemplated by this Agreement in the Territory.

1.7 "**Applicator**" means the device used for the insertion of Product in a human body as set forth in the Final Product MAA.

1.8 "**Audit Disagreement**" has the meaning set forth in Section 7.6(a)(ii).

1.9 "**Braeburn License**" means the license agreement by and between Titan and Braeburn Pharmaceuticals, Inc., dated December 14, 2012 as amended to date.

1.10 "**Business Day**" means any day that is not (i) a Saturday or a Sunday or (ii) any other day on which banks in New York, New York, United States, the United Kingdom or Italy are permitted or required to be closed.

1.11 "**Calendar Quarter**" means each of the three (3) month periods ending March 31, June 30, September 30 and December 31; provided, however, that (a) the first Calendar Quarter of any particular period shall extend from the commencement of such period to the end of the first complete Calendar Quarter thereafter; and (b) the last Calendar Quarter shall end upon the expiration or termination of this Agreement.

1.12 "**Calendar Year**" means for the first Calendar Year, the period beginning on the Effective Date and ending on December 31, 2018, and for each Calendar Year thereafter, each successive period beginning on January 1 and ending twelve (12) consecutive calendar months later on December 31.

1.13 "**CFR**" means the United States Code of Federal Regulations, as the same shall be in effect from time to time.

1.14 "**Commercialization Plan**" means the plan relating to the Promotion and sale of the Final Product for the Initial Indication and, as applicable, each Subsequent Indication, which shall set forth in reasonable detail at least the following: (a) activities and estimated timelines relating to the Launch of Final Product in the Territory, including a description of the educational, marketing, commercialization and other Promotion activities and materials related to the Final Product (including a summary of sales efforts to be dedicated to the Promotion of the Final Product, including the anticipated number of representatives constituting the Molteni Sales Force and the anticipated number of details and targets of such details); (b) a budget estimating costs to be incurred in performing such activities, in the aggregate, by Calendar Quarter and by Calendar Year; and (c) sales forecasts for the first three (3) Calendar Years commencing in the Calendar Year in which Launch is projected to occur, including forecasted Permitted Deductions. For the avoidance of doubt, the Parties acknowledge and agree that Molteni's failure to achieve any sales forecasts pursuant to subsection (c) herein shall not constitute a breach of this Agreement.

1.15 "**Commercially Reasonable Efforts**" means that degree of skill, effort, expertise, and resources normally used (including the promptness in which such efforts and resources would be applied) consistent with standards generally accepted in the pharmaceutical industry, including with respect to the diligent development, manufacture and commercialization of pharmaceutical products of similar market and profit potential at a similar stage in development or product life as the Final Product.

1.16 "**Competitive Product**" means an implant containing Compound that is substantially similar to the Final Product.

1.17 "**Competitor Product**" means any pharmaceutical product containing buprenorphine for the treatment of the Initial Indication that entails continuous delivery for more than ten (10) days, other than a Final Product introduced in the Territory in accordance with the terms of this Agreement.

1.18 "**Compound**" means the chemical compound known as buprenorphine whose specific chemical name is buprenorphine HCl ((2S)-2-[17-Cyclopropylmethyl-4,5α-epoxy-3-hydroxy-6-methoxy-6α,14-ethano-14α-morphinan-7α-yl]-3,3-dimethylbutan-2-ol hydrochloride) and any related analogues, homologues, derivative and other pharmaceutically active salts that have substantially the same functional effect as buprenorphine.

1.19 "**Contract**" means any contract, agreement, lease, sublease, license, sublicense or other legally binding commitment or arrangement, whether written or oral.

1.20 "**Control**" means, with respect to any material, information, or intellectual property right, that a Party (i) owns or (ii) has a license to, and, in each case, has the ability to grant to the other Party access, a license, or a sublicense (as applicable) to the foregoing on the terms and conditions set forth in this Agreement without violating the terms of any then-existing agreement or other arrangement with any Third Party.

1.21 "**Corporate Transaction**" has the meaning set forth in Section 16.2(a).

1.22 "**Cover**", "**Covered**" or "**Covering**" means, with respect to a product and a Patent Right in a particular country in the Territory, that, in the absence of a (sub)license under, or ownership of, such Patent Right, the making, using, offering for sale, selling or importing of such product in such country would infringe a Valid Claim of such Patent Right.

1.23 "**Data**" means any and all research data, pharmacology data, preclinical data, clinical data, medical chemistry, commercial, marketing, process development, manufacturing and other data or information, including investigator reports (both preliminary and final), statistical analyses, expert opinions and reports, and safety data, in each case generated from clinical or non-clinical studies, research or testing specifically related or directed to the Compound, Semi-Finished Product and/or the Final Product(s), together with all documentation submitted, or required to be submitted, to the FDA, the EMA or another Regulatory Authority in association with an IND, NDA, MAA or similar application for same (excluding any Drug Master Files (DMFs), Chemistry, Manufacturing and Control (CMC) data, or similar documentation).

1.24 "**DEA**" means any Drug Enforcement Agency.

1.25 "**Dossier**" means the complete pharmaceutical registration dossier prepared by Titan in E.U. format suitable to obtain the regulatory approval from the EMA of the MAA for the Final Product for the Initial Indication in the Territory, including all scientific and technical data and documents regarding the Final Product for the Initial Indication, in all its available strengths and presentations.

1.26 "**DPT Agreement**" means the Manufacturing Agreement by and between DPT Laboratories, Ltd. and Titan Pharmaceuticals, Inc. dated August 2, 2013;

1.27 **"Earn-Out Payments"** means any payment contemplated by Section 7.2 herein.

1.28 "**Effective Date**" has the meaning set forth in the Preamble.

1.29 "**EMA**" means the European Medicines Agency and any successor agency having substantially the same functions and authority.

1.30 "**Encumbrance**" means any mortgage, lien (statutory or otherwise), license, pledge, security interest, charge, hypothecation, restriction, claim of ownership, preference, encroachment, right of first refusal, title defect, covenant not to sue, release of claims or other encumbrance.

1.31 "**EVA**" means the excipient ethylene vinyl acetate copolymer incorporated in the Product.

1.32 "**Expanded Label**" means a label permitting Molteni to market the Final Product in the Territory for use in a broad population of opioid dependents, independent of their abuse history and their pre-treatment status with Compound without restrictions on retreatment or implantation site.

1.33 "**FDA**" means the United States Food and Drug Administration and any successor agency having substantially the same functions and authority.

1.34 "**Final Product**" means Semi-Finished Product after the performance by Molteni of the Additional Services for use in the Initial Indication and/or any Subsequent Indications and which is expected to be marketed under the Trademark or other name acceptable to a Regulatory Authority in the Territory if Probuphine® is determined to be not acceptable.

1.35 "**First Commercial Sale**" means the date on which Molteni or its Affiliate or sublicensee first sells the Final Product to a Third Party in the Territory for monetary value after Regulatory Approval has been obtained in such jurisdiction (including, without limitation, sale in an individual state or similar sub-national political subdivision in which Marketing Authorization has been achieved).

1.36 "**Force Majeure**" means, with respect to a Party, any fire, flood, earthquake, explosion, storm, blockage, embargo, war, acts of war (whether war be declared or not), terrorism, insurrection, riot, civil commotion, strike, lockout or other labor disturbance, failure of public utilities or common carriers, act of God or act, omission or delay in acting by any Governmental Authority.

1.37 "**Fully Burdened Cost**" shall mean all reasonable and documented costs and expenses incurred by or on behalf of Titan directly attributable to, or reasonably allocable to, the applicable activities or services being provided by Titan hereunder, determined in accordance with GAAP, including (i) out-of-pocket costs (including amounts payable by Titan to Third Parties), and (ii) costs for Titan's internal personnel, valued at Titan's then current full time equivalent rate as evidenced by appropriate documentation.

1.38 "**GAAP**" means generally accepted accounting principles in the United States, consistently applied.

1.39 "**Governmental Authority**" means any domestic or foreign entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including any governmental authority, agency, department, board, commission, court, tribunal, judicial body or instrumentality of any union of nations, federation, nation, state, municipality, county, locality or other political subdivision thereof.

1.40 "**Improvements**" means all modifications, alterations, improvements, enhancements, and inventions, patentable or otherwise, made, created, developed, discovered, conceived or reduced to practice by or on behalf of a Party and/or any of its Affiliates during the Agreement Term, that have application or relate to the Semi-Finished Product or the Final Product, including developments in the manufacture, formulation, ingredients, preparation, presentation, means of delivery or administration, dosage, Indication, methods of use or packaging and/or sale of Products, including a process for manufacturing the Semi-Finished Product or the Final Product, an intermediate used in such process, a formulation of the Semi-Finished Product or the Final Product, or a use or Indication of the Semi-Finished Product or the Final Product.

1.41 "**IND**" means an Investigational New Drug application, as described in 21 CFR Section 312.23, obtained for purposes of conducting clinical trials in accordance with the requirements of the United States Federal Food Drug and Cosmetic Act, 21 U.S.C. Section 355, and the regulations promulgated thereunder, including all supplements and amendments thereto, relating to the use of Compound or a Product.

1.42 **"Indication"** means any human disease or condition, or sign or symptom of a human disease or condition.

1.43 "**Initial Indication**" means the use of a Final Product for the treatment of opiate or opioid addiction.

1.44 "**Intellectual Property Related Documentation**" means each of the following in paper, digital or other form: (a) all letters patent relating to the Transferred Patent Rights; (b) all assignment agreements relating to the Transferred Intellectual Property; (c) the prosecution files and dockets relating to any of the Registered IP, including all written communications provided to or received from any Governmental Authority, original granted patents, trademark certificates of registration, and patent or trademark prosecution files held by prosecuting attorneys, in each case relating thereto (d) all documents and materials evidencing dates of invention, including dates of conception and reduction to practice, in respect of the Transferred Patent Rights, (e) litigation files to the extent relating to actions, suits or proceedings brought or considered to be brought for infringement or misappropriation of the Transferred Intellectual Property; (f) infringement claim charts for the Transferred Patents Rights prepared by or for the Titan or any Affiliate thereof (if any); and (g) all books, records, files, ledgers or similar documents used by Titan or any Affiliate thereof to track, organize or maintain the Transferred Intellectual Property, including the Dossier.

1.45 "**Joint Inventions**" has the meaning set forth in Section 9.1.

1.46 "**Joint Patents**" means a patent or patent application claiming a Joint Invention.

1.47 "**Key Country**" means any of the following: United Kingdom, Italy, Germany, or France.

1.48 "**Know-How**" means any non-public information, ideas, Data, inventions, works of authorship, trade secrets, technology, or materials, including formulations, molecules, assays, reagents, compounds, compositions, human or animal tissue, samples or specimens, and combinations or components thereof, whether or not proprietary or patentable, and whether stored or transmitted in oral, documentary, electronic or other form, including all Regulatory Documents.

1.49 "**Launch**" means the First Commercial Sale in the Territory.

1.50 "**Law(s)**" means all laws, statutes, rules, regulations, ordinances and other pronouncements having the binding effect of law of any Governmental Authority.

1.51 "**Liabilities**" means any debts, liabilities, obligations, commitments, claims or complaints, whether absolute or contingent, accrued or unaccrued, asserted or unasserted, known or unknown, fixed or contingent, matured or unmatured, determined or determinable or otherwise, whether arising under any Law, Order, Contract or otherwise, and whether or not the same would be required to be reflected in financial statements or disclosed in the notes thereto.

1.52 "**LIBOR**" means the London Interbank Offered Rate for deposits in United States dollars having a maturity of one (1) month published by the British Bankers' Association, as adjusted from time to time on the first London Business Day of each month. If at any time the LIBOR is no longer available, or ceases to exist, the Parties shall endeavor to establish an alternate rate of interest to the LIBOR that gives due consideration to the then prevailing market convention for determining a rate of interest for similar loans to similar borrowers in the United States at such time, and the Parties shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable.

1.53 "**Losses**" means any and all damages of any kind whatsoever (including all incidental, consequential, statutory and treble damages), awards, deficiencies, settlement amounts, defaults, assessments, fines, dues, penalties, judgments (including penalties imposed by any Governmental Authority), costs, fees, liabilities, obligations, taxes, liens, losses, lost profits and expenses (including court costs, interest and reasonable fees of attorneys, accountants and other experts) and other monetary obligations arising out of or resulting from claims or judgments, arbitral awards, including amounts paid in settlement of claims, judgments, legal (including judicial, arbitral and administrative) proceedings and the like, incurred or otherwise payable to Third Parties.

1.54 "**MAA**" means a marketing authorization application (comparable to an NDA in the U.S.) filed with the requisite Regulatory Authority in the Territory, such as the EMA, including all supporting documentation and data submitted for such application to be accepted for review, and requesting approval for commercialization of Final Product in the Territory.

1.55 "**MAA Transfer Date**" means the date on which the MAA is accepted and approved by the EMA at the conclusion of the centralized procedure.

1.56 "**Manufacturing Facility**" means the facility of Titan's contract manufacturer, DPT Laboratories, Ltd., located at 5300 Research Plaza, Brooks City Base, San Antonio, TX USA 78235 as provided in the DPT Agreement and identified in the MAA to manufacture Semi-Finished Product.

1.57 "**Marketing Authorization**" means the required national registration and pricing approval for the Final Product for the Initial Indication issued by the relevant Regulatory Authorities in the Territory.

1.58 "**Marketing Distributor**" means a Third Party to whom Molteni or an Affiliate has granted a right (a license) to distribute, market, sell and/or promote the Final Product in the Territory.

1.59 "**Molteni**" has the meaning set forth in the Preamble.

1.60 "**Molteni Indemnified Parties**" has the meaning set forth in Section 14.1(a).

1.61 "**Molteni Inventions**" has the meaning set forth in Section 9.1.

1.62 "**Molteni Sales Force**" means the professional fully trained sales force retained by Molteni to support its obligations under this Agreement.

1.63 "**NDA**" means a New Drug Application, including all supplements and amendments thereto, filed with United States FDA pursuant to Section 505 of the United States Federal Food Drug and Cosmetic Act, 21 U.S.C. Section 355 to apply for FDA approval to market a drug.

1.64 "**Net Sales**" means

(a) with respect to the Primary Territory, the gross Ex-factory sales amount invoiced for all commercial sales to Third Parties by Molteni and/or its Affiliates, sublicensees or Marketing Distributor(s) within the Primary Territory for the sale of the Final Product, reduced by the following deductions actually allowed or reserved in accordance with GAAP (collectively, "**Permitted Deductions**") up to a maximum of twenty percent (20%) of such gross Ex-factory sales amount:

(i) discounts actually granted and returns credited;

(ii) payments by any distributor to Molteni other than for the final sale of the Final Product to the end customer; and

(iii) sales taxes, value-added taxes, excise taxes, tariffs and duties, including government compulsory deduction on sales (i.e. payback mechanism) and other rebates and taxes directly related to the sale of the Final Product in the Territory; and

(b) with respect to the Secondary Territory, the amount paid to Molteni and/or its Affiliates by its Marketing Distributor(s) for the sale of the Final Product within the Secondary Territory, reduced by the deductions described in subclauses (i) and (iii) of Permitted Deductions.

Sales or other transfers between Molteni, its Affiliates or its or their sublicensees and any dispositions of such Final Product for pre-clinical or clinical testing required in connection with or in furtherance of obtaining Regulatory Approval of the Final Product, in each case, shall be excluded from the computation of Net Sales and no payments will be payable to Titan on such sales or transfers, but Net Sales shall include the subsequent sales to Third Parties by such Affiliates. For the sake of clarity, to the extent any distributor is also an Affiliate or sublicensee of Molteni, any payments from such distributor to Molteni shall not be included in Net Sales.

Any of the Permitted Deductions shall be taken as a deduction in the Calendar Quarter in which the payment is accrued by such entity and there shall be no double-counting in determining Permitted Deductions. For purposes of determining Net Sales, a Final Product shall be deemed to be sold when invoiced. No more than one royalty payment shall be due with respect to a sale of a particular Final Product. In the event that Molteni, its Affiliates, sublicensees or Marketing Distributors sells the Final Product as part of a bundle or group sale with other products not covered by this Agreement, and Molteni, its Affiliates, sublicensees or Marketing Distributors provides a discount, allowance or rebate to the purchaser of the Final Product based on the aggregate amount invoiced for all products sold, such discount, allowance or rebate shall be allocated to each of the products *pro rata* based on the gross amount invoiced for each such product less all other Permitted Deductions specifically related to each such product.

1.66 "**Order**" means any writ, judgment, edict, decree, injunction, ruling, order or other binding obligation, pronouncement or determination of any Governmental Authority having the force of Law.

1.67 **"Party"** means Titan or Molteni, as applicable.

1.68 **"Patent Rights"** means any of the following, whether existing now or in the future: (i) patents and patent applications (including provisional applications); (ii) all patent applications filed either from such patents or patent applications or from an application claiming priority from either of these, including continuations, continuations-in-part, divisionals, converted provisionals, continued prosecution applications, and substitute applications; (iii) any patents issued (A) based on or claiming priority to any such patent applications in (i) and (ii), or (B) which are subject to a terminal disclaimer with any such patent applications in (i) and (ii); (iv) any and all extensions or restorations by existing or future extension or restoration mechanisms, including adjustments, revalidations, renewals, reissues, re-examinations and extensions (including any supplementary protection certificates and the like) of the foregoing patents or patent applications in (i), (ii) and (iii); (v) any similar rights, including rights provided by multinational treaties or conventions, so-called pipeline protection, or any importation, revalidation, confirmation or introduction patent or registration patent or patents of addition to any of such foregoing patents or patent applications; and (vi) any other patents and patent applications that dominate the foregoing patents.

1.69 "**Permitted Deductions**" has the meaning set forth in Section 1.64.

1.70 "**Person**" means any individual, partnership, limited partnership, limited liability company, joint venture, syndicate, sole proprietorship, corporation, unincorporated association, trust, trustee, executor, administrator or other legal personal representative, or any other legal entity, including a Governmental Authority.

1.71 **"Phase IV Clinical Trials"** means a human clinical trial for a Final Product commenced after receipt of EMA approval for either the Initial Indication or Subsequent Indications and that is conducted within the parameters of the EMA Approval for such Final Product. Phase IV Clinical Trials may include epidemiological studies, modeling and pharmacoeconomic studies, investigator sponsored clinical trials of such Final Product and post-marketing surveillance studies.

1.72 "**Primary Territory**" means European Union, Switzerland, Norway, Iceland, Liechtenstein, Bosnia, Serbia, Montenegro, Macedonia and Albania, it being understood that the United Kingdom and Northern Ireland shall continue to be included in the Primary Territory even in the event they no longer belong to the European Union.

1.73 "**Product**" means a subdermal implant consisting of Compound and EVA developed and/or provided by Titan or its designee.

1.74 **"Product Label(ing)"** means (a) the full prescribing information for a product approved by the applicable Regulatory Authority in the Territory, and (b) all labels and other written, printed or graphic information included in or placed upon any container, wrapper package insert used with or for the Final Product in the Territory.

1.75 "**Product MAA**" means the MAA owned by Titan, and applied for by FGK Representative Service GmbH (Titan's appointed applicant pursuant to EC Directive 2001/83/EC for the Product MAA), ("**FGK")** as of the Effective Date relating to Probuphine® (No. H0004743), together with the Dossier and all amendments, supplements and updates thereto.

1.76 **"Product Trademark(s)"** means the Trademark and all related domain names, and/or any other confusingly similar trademarks, trade dress rights (including packaging design), logos, slogans, domain names and designs used as indicia of origin, whether or not registered in a country or Territory. Titan House Marks are excluded from this definition.

1.77 **"Promotion"** means those activities normally undertaken by a pharmaceutical company to implement promotion plans and strategies aimed at encouraging the appropriate use of a particular prescription pharmaceutical product under a common trademark, up to the point of offering a product for sale. When used as a verb, "Promote" means to engage in such activities.

1.78 **"Promotional Materials"** means all written, printed or graphic material, other than Product Labeling, packaging, or trade dress, intended for use by Molteni, its Affiliates, sublicensees or Marketing Distributors during Promotion of a Final Product under this Agreement, including visual aids, file cards, premium items, clinical studies, reprints, business cards, identification tags and any other promotional support items or advertisements provided in accordance with the terms of the Commercialization Plan.

1.79 **"Proprietary Information"** means any and all Know-How, scientific, clinical, regulatory, marketing, financial, technical, non-technical, commercial or other confidential information or data of a confidential nature, whether communicated in writing, orally or by any other means, that is under the protection of one Party and is provided by that Party to the other Party in connection with this Agreement, but excluding, for the avoidance of doubt, in the case of Titan, the Transferred Know-How.

1.80 **"Prosecution and Maintenance"** shall mean, with respect to a Patent Right, the preparing, filing, prosecuting and maintenance of such Patent Right, as well as re-examinations, reissues, requests for Patent Right term extensions and the like with respect to such Patent Right, together with the conduct of interferences, the defense of oppositions and other similar proceedings with respect to the particular Patent Right; and "Prosecute and Maintain" shall have the correlative meaning.

1.81 **"Recall"** has the meaning set forth in Section 4.2(e).

1.82 **"Regulatory Approval"** means with respect to a pharmaceutical or biological product or medical device in a country or regulatory jurisdiction, any and all approvals, licenses, permits, certifications, registrations or authorizations from the relevant Regulatory Authority in such regulatory jurisdiction that is specific to such product and necessary for the marketing and commercial sale of such product in such country or regulatory jurisdiction (including pricing and/or reimbursement approval in any country in which pricing and/or reimbursement approval is required by Applicable Laws), including the approval of a MAA by the EMA.

1.83 **"Regulatory Authority"** means, in a particular country or regulatory jurisdiction, any applicable Governmental Authority involved in granting Regulatory Approval and/or, to the extent required in such country or regulatory jurisdiction, pricing or reimbursement approval of a product in such country or regulatory jurisdiction, including the EMA and any successor thereto, and any national regulatory authority in any EU country.

1.84 **"Regulatory Documents"** means all dossiers, filings, applications, modifications, amendments, notifications, supplements, revisions, reports, submissions, authorizations, registrations, and approvals, including any IND or NDA, and any reports or amendments necessary to maintain Regulatory Approvals.

1.85 "**Release**" means the quality control assessment, upon receipt from Titan, and the European release activities to be performed on the Semi-Finished Products by Molteni as required by Applicable Laws and regulations in order to market the Final Product within the Territory.

1.86 **"SEC"** has the meaning set forth in Section 12.3.

1.87 "**Secondary Territory**" means (a) Algeria, Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco (including Western Sahara), Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, Yemen; and (b) Russia, Ukraine, Belarus, Armenia, Georgia, Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan and Uzbekistan.

1.88 "**Semi-Finished Products**" means the Product including all pharmaceutical components, applicator and related technology, prior to the performance by Molteni of the Additional Services.

1.89 **"Specifications"** means the respective specifications for the Final Product as set forth in the Product MAA, as such may be modified from time to time in such Product MAA and pursuant to Section 4.2(a)(ix).

1.90 "**Steering Committee**" has the meaning set forth in Section 3.1(a).

1.91 "**Steering Primary Contact**" has the meaning set forth in Section 3.1(c).

1.92 **"Subsequent Indication"** means the use of a Final Product for the treatment of any Indication that is not the Initial Indication.

1.93 **"Territory"** means the Primary Territory and the Secondary Territory.

1.94 **"Third Party Claims"** has the meaning set forth in Section 14.2.

1.95 **"Third Party(ies)"** means a person or entity who or which is not a Party, Affiliate, or sublicensee of a Party.

1.96 **"Third Party Manufacturer(s)"** means Third Parties that may during the Agreement Term be engaged by a Party to perform services or supply facilities or goods in connection with any part of the manufacture, testing and/or packaging of the Compound, Product, Semi-Finished Product, or the Final Product, including pursuant to the DPT Agreement.

1.97 **"Titan"** has the meaning set forth in the Preamble.

1.98 **"Titan Indemnified Parties"** has the meaning set forth in Section 14.1(a).

1.99 **"Titan House Marks"** means the trademarks, trade names, domain names, or other names, logos or marks used or registered by Titan to identify itself set forth on Schedule 1.99.

1.100 **"Titan Inventions"** has the meaning set forth in Section 9.1.

1.101 **"Titan Territory"** means the world, excluding the Territory.

1.102 "**Trademark**" means (a) the trademark Probuphine® registered in the name of Titan or one of its Affiliates in the Territory (as set forth in Schedule 8.2(a)), (b) the trademark Proneura® registered in the name of Titan or one of its Affiliates in the Territory (as set forth in Schedule 8.2(a)), and (c) any and all common law rights or other related rights to the foregoing in the Territory.

1.103 **"Transferred Intellectual Property"** means Transferred Patent Rights, the Product Trademarks, the Transferred Know-How, and all rights to intellectual property and propriety rights of Titan or any Affiliate thereof to the extent embodied in the Intellectual Property Related Documentation.

1.104 **"Transferred Know-How"** means all unpatented information and data in the Territory that are as of the Effective Date or become during the Agreement Term Controlled by Titan, including discoveries, Improvements, processes, formulas, inventions, know-how and trade secrets, to the extent necessary or useful for the development, manufacture, and/or commercialization of a Semi-Finished Product or Final Product in the Territory. Transferred Know-How does not include any Patent Rights, Regulatory Documents or Regulatory Approvals in the Titan Territory. Transferred Know-How also includes all marketing authorizations and marketing approvals granted by Regulatory Authorities (e.g., approved MAAs and related applications and other forms of marketing authorization) to Titan for the marketing of Final Products in the Territory.

1.105 **"Transferred Patent Rights"** means all Patent Rights in the Territory that are as of the Effective Date or become during the Agreement Term Controlled by Titan and that Cover, or would be reasonably necessary for, the making, having made, use, offer for sale, sale or importation of the Final Products or claim any Improvements made by Titan, and in any event, those Patent Rights listed on Schedule 1.105 hereto (collectively, the listed patent and patent applications with any continuations and divisional applications claiming priority thereto and patents issuing thereupon are the "**Transferred Core Patents**").

1.106 **"Valid Claim"** means, on a country-by-country basis, a claim of an issued or finally granted and unexpired Patent Rights included within the Transferred Patent Rights that has not been admitted by a Party to be or otherwise caused to be invalid or unenforceable through reissue, disclaimer, revocation, or otherwise, or held invalid or unenforceable by a Governmental Authority of competent jurisdiction from whose judgment no appeal is allowed or timely taken.

Each defined term used in the Agreement but not set forth above is defined in the body of this Agreement as indicated below.

| | |
|---|---|
| Acquiring Entity | 2.8(b) |
| Agreement | Preamble |
| Agreement Term | 13.1 |
| Assumed Liabilities | 2.3(a) |
| Audit Disagreement | 7.6(a)(ii) |
| Bank Account | 7.1(a) |
| Binding Forecast | 6.5 |
| Closing | 2.4(a) |
| Closing Date | 2.4(a) |
| Closing Payment | 7.1(a) |
| Corporate Transaction | 16.2(a) |
| Effective Date | Preamble |
| Excluded Liabilities | 2.3(b) |
| Joint Inventions | 9.1 |
| KOLs | 3.1(b)(v) |
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| Launch Forecast | 6.4(a) |
| Molteni | Preamble |
| Molteni Indemnified Parties | 14.1(a) |
| Molteni Inventions | 9.1 |
| Non-Conforming | 6.10(e) |
| Non-Conformity | 6.10(e) |
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| Purchase Order | 6.6 |
| Purchase Price | 6.3 |
| Purchased Assets | 2.1 |
| Recall | 4.2(e) |
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| SEC | 12.3 |
| Services | 8.3(a) |

| | |
|---|---|
| Steering Committee | 3.1(a) |
| Steering Primary Contact | 3.1(c) |
| Step-In Date | 13.7 |
| Step-Out Date | 13.7 |
| Step-Out Notice | 13.7 |
| Step-Out Plan | 13.7 |
| Subject Transaction | 2.8(b) |
| Territory Copyrighted Works | 5.2(b) |
| Third Party Claims | 14.2 |
| Third Party Patent Right | 7.3(a) |
| Third Party Patent Right Notice | 7.3(a) |
| Titan | Preamble |
| Titan Indemnified Parties | 14.1(a) |
| Titan Inventions | 9.1 |

**2. Sale of Purchased Assets**

2.1 **Purchase and Sale of Purchased Assets**. Upon the terms and subject to the conditions of this Agreement, at and effective as of the Closing, Titan shall (or shall cause the applicable Affiliate thereof to) sell, transfer, convey, assign and deliver to Molteni, and Molteni shall purchase and accept from Titan (or such Affiliate thereof), all of the following assets, properties and rights (collectively, the "**Purchased Assets**"), in each case free and clear of any Encumbrances:

(a) the Transferred Intellectual Property;

(b) the Product MAA;

(c) all Intellectual Property Related Documentation owned by, in the possession or control of, or that can be reasonably obtained by, Titan, its Affiliates or their respective representatives;

(d) any and all other rights and privileges relating to the Transferred Intellectual Property, or arising therefrom, including (i) the right to register or apply in any and all countries and regions in Molteni's name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates and improvements, in each case in respect of the Transferred Patent Rights, (ii) the right to prosecute, maintain and defend such Transferred Intellectual Property before any public or private agency, office, registrar or other applicable Governmental Authority or other Person, (iii) the right to claim priority based on the filing dates of any of the Transferred Intellectual Property under any applicable treaty, Law or otherwise, (iv) any and all causes of action and enforcement rights, whether currently pending, filed, threatened or otherwise, for or in respect of the Transferred Intellectual Property, (v) without limiting the foregoing, the right to sue and recover damages, other compensation and/or equitable relief (including injunctive relief) for past, present or future infringements in respect of the Transferred Intellectual Property, and (vi) the right to fully and entirely stand in the place of the Titan or any Affiliate thereof in all matters related to the Transferred Intellectual Property;

(e) all deferred and prepaid charges, fees, recoverable deposits, advances and expenses paid by or on behalf of any Titan or any Affiliate thereof in respect of the other Purchased Assets; and

(f) all goodwill relating to the Purchased Assets.

2.2 **Non-Transferable Purchased Assets**.

(a) To the extent that any Purchased Asset may not be assigned to Molteni as contemplated hereby without the approval, consent or waiver of another Person and such approval, consent or waiver has not been obtained prior to the Closing, unless Molteni shall otherwise determine in writing, this Agreement shall not constitute an agreement to assign the same if an attempted assignment would constitute a breach thereof or be unlawful. If any such approval, consent or waiver shall not have been obtained prior to the Closing, unless otherwise determined in writing by Molteni, Titan shall, and shall cause its Affiliates to, (a) assist and cooperate with Molteni in order for Molteni to obtain all necessary approvals, consents and waivers to the assignment and transfer thereof, and (b) until any such approval, consent or waiver is obtained and the related Purchased Asset is transferred and assigned to Molteni, (i) provide to Molteni the benefits of such Purchased Asset, including provision of the consideration and other economic benefits received in respect of such Purchased Asset, which consideration shall be held in trust for the benefit of, and shall be promptly delivered to, Molteni and (ii) as directed by Molteni, continue to perform its obligations under, and enforce, at the request of and for the account of Molteni, any rights of Titan or its Affiliates arising under any such Purchased Asset. For any such Purchased Asset that is not assigned to Molteni at the Closing, during the period in which Titan or any Affiliate thereof continues to hold or own or operate such Purchased Asset (including by being a counterparty to any Contract), Titan shall not, and shall not permit any Affiliate thereof to, without the prior written consent of Molteni, take any material action in respect of such Purchased Asset (including amending or waiving any material rights or terms thereof, as applicable). Once the applicable consent for the assignment or transfer of any such Purchased Asset not assigned or transferred at the Closing is obtained, Titan shall, and shall cause its Affiliates to, assign and transfer such asset to Molteni at no additional cost.

( b ) To the extent that any Transferred Intellectual Property cannot be assigned Molteni, until such Transferred Intellectual Property can be assigned to Molteni, Titan hereby grants to Molteni an exclusive (even as to Titan and its Affiliates), irrevocable, perpetual, fully-paid up, royalty-free right and license (with the right to freely grant sublicenses to multiple tiers of sublicensees) in the Territory, under such Transferred Intellectual Property to import, use, Promote, market, distribute, offer for sale, sell or otherwise make use of the Transferred Intellectual Property for any purpose.

2.3 **Liabilities**.

( a ) **Assumed Liabilities**. Upon the terms and subject to the conditions of this Agreement, at the Closing, Titan shall assign to Molteni, and Molteni shall assume from Titan and agree to pay and discharge when due, all Liabilities arising due to actions or omissions taken (or not taken) by Molteni in respect of the Purchased Assets following the Closing Date (collectively, but excluding the Excluded Liabilities, the "**Assumed Liabilities**").

(b) **Excluded Liabilities**. Notwithstanding anything to the contrary in this Agreement or any Ancillary Agreement, neither Molteni nor any of its Affiliates shall assume, nor shall they be or become responsible for, any Liabilities of Titan or any of its Affiliates, other than the Assumed Liabilities (all such Liabilities other than the Assumed Liabilities being referred to herein as the "**Excluded Liabilities**"), and the Excluded Liabilities shall remain the sole obligation and responsibility of Titan and its Affiliates. For the avoidance of doubt, the Excluded Liabilities include all Liabilities of Titan and its Affiliates (i) in respect of or otherwise relating to the Purchased Assets that arise at any time (including after the Closing) from any actions, omissions or any state of facts or circumstances that were taken (or not taken) or that existed on or prior to the Closing Date, including (A) any such Liabilities arising at any time (including after the Closing) from the ownership, use or exploitation of the Purchased Assets by Titan or its Affiliates on or prior to the Closing Date, (B) prosecution costs with any intellectual property offices related to the Transferred Intellectual Property associated with the ownership or exploitation by or through the Titan or its Affiliates, in each case that are attributable to periods occurring on or prior to the Closing Date, and (ii) Liabilities arising under any Contracts to which Titan or any Affiliate thereof is or was a party or otherwise bound, including in respect of the performance or non-performance thereunder that is or was required thereunder.

2.4 **Closing**.

(a) **Closing**. The closing of the transactions contemplated by this Agreement (the "**Closing**") shall take place at the New York City office of Willkie Farr & Gallagher LLP, at 10:00 a.m. local time, on the date hereof (the date on which the Closing occurs is referred to as the "**Closing Date**"). The Closing shall be deemed to have occurred at 12:00 a.m., Eastern time, on the Closing Date, such Molteni shall be deemed the owner of the Purchased Assets on and after the Closing Date.

(b) **Titan Closing Deliveries**. At the Closing, Titan shall deliver (or cause to be delivered) the following to Molteni:

(i) each of the Ancillary Agreements (other than the IP Assignment Agreements) to which Titan or any Affiliate of Titan is a party, validly executed by a duly authorized representative of Titan and each such Affiliate thereof; and

(ii) a receipt acknowledging receipt of the Closing Payment in satisfaction of Molteni's obligations pursuant to Section 7.1(a), validly executed by a duly authorized representative of Titan.

(c) **Molteni Closing Deliveries.** At the Closing, Molteni shall deliver (or cause to be delivered) the following:

(i) to Titan, each of the Ancillary Agreements to which Molteni or any Affiliate thereof is a party, validly executed by a duly authorized representative of Molteni and such Affiliates; and

(ii) to the Bank Account, the Closing Payment in accordance with the terms set forth in Section 7.1(a).

(d) **Post-Closing Deliveries**. Within ten (10) Business Days of Closing, Titan shall deliver (or cause to be delivered) the following:

(i) originals or copies of all of the Intellectual Property Related Documentation; and

(ii) each of the IP Assignment Agreements to which Titan or any Affiliate of Titan is a party, validly executed by a duly authorized representative of Titan and each such Affiliate thereof; and

(iii) a current electronic copy of a docketing report for the Registered IP accurately setting forth any and all dates relevant to the prosecution or maintenance of the Registered IP, including information relating to deadlines, payments and filings for the Registered IP, and the names, business, business addresses, business email addresses, and business phone numbers of all prosecution counsel and agents.

2.5 **Transfer of Product MAA**. On the MAA Transfer Date, Titan shall instruct FGK to submit a transfer-of-marketing-authorization application to the EMA transferring ownership and all responsibilities of the marketing authorization for the Final Product to Molteni. Upon Titan's request, Molteni shall reasonably assist in the preparation and submission of said transfer-of-marketing-authorization application. Molteni shall be responsible for the cost of the preparation and submission of said transfer-of-marketing-authorization application.

2.6 **Access to Information**. Subject to the terms and conditions of this Agreement, Titan shall provide to Molteni all Data obtained by Titan related to the Compound, Semi-Finished Product and Final Product, subject to any consents or conditions required of any Third Party Manufacturers (provided, that Titan shall use commercially reasonable efforts to obtain any such necessary consents or perform any such necessary conditions), and data and information with respect to pharmacovigilance related to same, including all existing and future clinical / pharmacoeconomic data and/or trials regarding the same directly or indirectly generated/performed by, in the possession of, or accessible by Titan, including without limitation pursuant to the Braeburn License and/or from any subsequent licensee, as soon as Data is available to Titan, and Titan shall cooperate in good faith to provide Molteni access to and reasonable assistance with all intellectual property and other Proprietary Information as may be required for Molteni to exercise the rights and licenses explicitly granted and to perform its obligations hereunder.

2.7 **Retained Rights; Grant Back License; No Implied Licenses; Limitations**. Titan shall be permitted to develop, manufacture and have manufactured the Semi-Finished Product in the Territory (a) solely for the purpose of developing and manufacturing Semi-Finished Product for sale, offer for sale, use or distribution in, and importation into, the Titan Territory in accordance with this Agreement, and (b) for the purpose of assisting Molteni with development of the Final Product in accordance with Article 4. Molteni shall be permitted to develop, manufacture and have manufactured the Semi-Finished Product in the Titan Territory solely for the purpose of developing and manufacturing Final Product for sale, offer for sale, use or distribution in, and importation into, the Territory in accordance with this Agreement. In addition, (x) all rights not specifically granted to Molteni herein are reserved and retained by Titan, including all other rights in the Titan Territory, and (y) all rights not specifically granted to Titan herein are reserved and retained by Molteni, including all other rights in the Territory. Nothing in this Agreement shall be deemed to constitute the grant of any license or other right to either Party, to or in respect of any product, patent, trademark, Proprietary Information, trade secret or other data or any other intellectual property of the other Party, except as expressly set forth herein.

2.8 **Non-Competition**.

( a ) Prior to the fifth anniversary of the approval of the MAA, Molteni will not Promote, market, commercialize, dispose of, or sell, itself or through its Affiliates or sublicensees, any Competitor Product in the Territory. Thereafter, if Molteni markets any Competitor Products in the Territory, it shall pay Titan the payments set forth in Section 7.2(b). During the Agreement Term, Titan will not, and will not enter in to any additional arrangements to, Promote, market, commercialize, dispose of, or sell, directly or indirectly, or permit its Affiliates to Promote, market, commercialize, dispose of, or sell any Competitor Product in the Territory, or acquire, or permit its Affiliates to acquire, directly or indirectly any rights or interest in or to any Competitor Product that is being Promoted, marketed or sold in the Territory.

( b ) Notwithstanding the foregoing, nothing in this Section 2.8 shall prohibit any Acquiring Entity of a Party or any of its respective Affiliates or sublicensees from continuing, furthering or performing (i) any activities in which it was engaged prior to the effective date of a Subject Transaction or (ii) any activities relating to products developed by an Acquiring Entity (or any other Third Party) subject to the exclusive rights granted to Molteni herein and without accessing or practicing technology or information made available to Molteni under this Agreement; provided that, such Subject Transaction occurs no less than six (6) months following Launch. For purposes of this Section 2.8(b), (x) "**Subject Transaction**" shall mean a transfer to a Third Party of all or substantially all of a Party's or an Affiliate of such Party's assets to which this Agreement relates, or the merger or consolidation with, or acquisition of, a Party or an Affiliate of such Party by a Third Party and (y) "**Acquiring Entity**" shall mean such Third Party described in clause 2.8(b)(x).

2.9 **Restrictive Covenants**.

( a ) Subject to Section 2.7, during the Agreement Term, Molteni shall not, either directly or indirectly, (i) sell or otherwise dispose of the Products, Semi-Finished Products or Final Products to any Third Party outside the Territory or (ii) knowingly sell or otherwise dispose of the Products, Semi-Finished Products or Final Products to any Third Party within the Territory for the purpose of sale or other disposition to any Third Party outside the Territory. If Molteni knows or becomes aware that a Third Party to whom Molteni sells or otherwise disposes of the Products, Semi-Finished Products or Final Products is engaged in the sale or distribution of the Products, Semi-Finished Products or Final Products for use outside the Territory, then Molteni shall (A) within three (3) Business Days after gaining knowledge of notify Titan thereof and provide all non-confidential information in Molteni's possession that Titan may reasonably request concerning such activities and (B) take all reasonable steps (including cessation of sales to such customer) necessary to prevent such sale or other disposition for use outside the Territory. All inquiries or orders received by Molteni for the Product, Semi-Finished Products or Final Products for final delivery outside the Territory shall be referred to Titan. Molteni shall use Commercially Reasonable Efforts to cause each of its Marketing Distributors and any sublicensees to comply with the obligations of Molteni under this Section 2.9(a) and in the event that the sublicensee fails to do so upon reasonable notice, then Molteni shall terminate such sublicense.

(b) Subject to Section 2.7, during the Agreement Term, Titan shall not, either directly or indirectly, (i) commercialize, sell or otherwise dispose of Products, Semi-Finished Products or Final Products to any Third Party in the Territory or (ii) knowingly sell or otherwise dispose of Products, Semi-Finished Products or Final Products to any Third Party outside the Territory for the purpose of sale or other disposition to any Third Party in the Territory. If Titan knows or becomes aware that a Third Party to whom Titan sells or otherwise disposes of Products, Semi-Finished Products or Final Products is engaged in the sale or distribution of Products, Semi-Finished Products or Final Products for use in the Territory, then Titan shall (A) within three (3) Business Days after gaining knowledge of notify Molteni thereof and provide all non-confidential information in Titan's possession that Molteni may reasonably request concerning such activities and (B) take all reasonable steps (including cessation of sales to such Third Party) necessary to prevent such sale or other disposition for use in the Territory. All inquiries or orders received by Titan for Product, Semi-Finished Products or Final Products for final delivery in the Territory shall be referred to Molteni. Titan shall use Commercially Reasonable Efforts to cause each of its licensees (other than Molteni) to comply with the obligations of Titan under this Section 2.9(b).

(c) Titan shall not, and shall cause its Affiliates not to, directly or indirectly, take any actions or omit to take any actions (including the commencement or threatening of any action, suit, claim, investigation, legal or administrative proceeding) that is intended to or that would reasonably be likely to (assuming that such action or proceeding achieves the relief or judgment being sought therein) have the effect of invalidating, rendering unpatentable or unenforceable or otherwise limiting, terminating or adversely affecting any of the Transferred Intellectual Property, it being understood and agreed that the foregoing prohibition shall preclude Titan or any of its Affiliates from, directly or indirectly, cooperating with, assisting or facilitating any other Person that is seeking or attempting to invalidate, render unpatentable or unenforceable or otherwise limit, terminate or adversely affect any of the Transferred Intellectual Property.

2.10 **Further Assurances**. Each Party shall, and shall cause any applicable Affiliate thereof to, at any time or from time to time after the Closing, at the request and expense of the other, execute and deliver to the other all such instruments and documents or further assurances as the other may reasonably request, in each case that are consistent with the terms of this Agreement, in order to vest in Molteni all of Titan's and its respective Affiliates' right, title and interest in and to the Purchased Assets as contemplated hereby, including execution, acknowledgment, and recordation of other such papers, and using commercially reasonable efforts to obtain the same from the respective inventors, as necessary or desirable for fully perfecting and conveying unto Molteni the benefit of the transactions contemplated hereby. Effective upon the Closing, Titan hereby irrevocably appoints Molteni and its successors, agents and assigns as its true and lawful attorney, in its name, place and stead, with power of substitution, to (a) execute, acknowledge, deliver, swear to, file and record any IP Assignment Agreement, or (b) otherwise take any action necessary to vest in Molteni all of Titan's and its respective Affiliates' right, title and interest in and to the Purchased Assets as contemplated hereby. The foregoing power of attorney is a special power of attorney coupled with an interest and is irrevocable.

## 3. Steering Committee

### 3.1 Composition and Purpose.

(a) **Members**. Effective as of the Effective Date, the Parties shall establish a joint committee (the "**Steering Committee**") composed of four (4) individual members, two (2) of whom shall be appointed by Titan and two (2) of whom shall be appointed by Molteni. The members of the Steering Committee as of the Effective Date shall be as set forth on Schedule 3.1. Either Party may replace either or both of its members on the Steering Committee at any time upon written notice to the other Party. A Party may designate a substitute to temporarily attend and perform the functions of such Party's designated member at any meeting of the Steering Committee. The Steering Committee shall be chaired by a representative of Molteni. The chairperson shall appoint a secretary of the Steering Committee, who shall be a representative of Titan.

(b) **Purpose**. The purpose of the Steering Committee is to monitor the development and commercialization of the Final Product and any development activities relating to Final Product undertaken by the Parties, and to provide the Parties a formal setting within which to periodically report to each other, exchange information, and confer. Without limiting the generality of the foregoing, the Steering Committee shall:

(i) Share all the clinical information relating to the Final Products, including those related to the pharmacovigilance activities, and any new planned or ongoing clinical trial relating to the Final Product, as further described in Section 2.6;

(ii) Review sales performance under this Agreement with respect to the Final Product in the Territory and the Titan Territory and, as relevant, sales performance of related products that include the Compound throughout the world;

(iii) Exchange best practices among the different geographic areas;

(iv) Share annual sales targets;

(v) Review/approve investigator initiated studies, publication strategies, press releases and conference participations by Key Opinion Leaders ("**KOLs**"); and

(vi) Share plans for additional launches within the Territory, which plans will be subject to change in Molteni's sole discretion.

Notwithstanding the above, the Steering Committee will have solely the role described in this Article 3 and as otherwise expressly set forth in this Agreement. The Steering Committee will have no authority to approve or direct any Party to take any action, approve or withhold approval for any plan, budget, timeline or strategies, amend, modify or waive compliance with this Agreement, create new obligations for a Party not specified in this Agreement, or alter, increase or expand, or waive compliance by a Party with, such Party's obligations under this Agreement.

(c) **Primary Contact**. Titan and Molteni each shall appoint a person (a "**Steering Primary Contact**") to be the primary contact between the Parties with respect to development and to coordinate related correspondence between the Parties. The Steering Primary Contact of each Party as of the Effective Date is set forth on Schedule 3.1. Each Party shall notify the other in writing as soon as practicable upon changing its Steering Primary Contact. The Steering Primary Contact of each Party will be one of its members on the Steering Committee.

( d ) **Good Faith Consideration**. Each Party shall consider in good faith the views, positions and recommendations of the other Party on any issue that is addressed by the Steering Committee.

3.2 **Meetings**. The chairperson of the Steering Committee shall call meetings as reasonably requested by one of the Parties; provided, however, that (a) prior to the Marketing Authorization, the Steering Committee shall meet each Calendar Quarter (with an initial meeting to be within six (6) months after the Effective Date of this Agreement), and (b) following Marketing Authorization, the Steering Committee shall meet at least two (2) times per year (every six (6) months), unless in each case, the Parties agree otherwise. Meetings may be held in person, by telephone, or by video conference call, and the location of each meeting shall alternate between the Parties' headquarters or such other location as may be mutually agreed upon by the Parties. On advance written notice and consent of the other Party, additional participants may be invited by any member to attend meetings where appropriate; provided that, Molteni may, at its discretion, invite Final Product licensees to participate as non-members of the Steering Committee. Each Party shall be responsible for all travel and related costs and expenses of its members and said invited participants to participate or attend Steering Committee meetings. Any Proprietary Information disclosed in, or in connection with, any Steering Committee meeting by a Party shall remain Proprietary Information of the disclosing Party.

3.3 **Minutes of Committee Meetings**. Minutes of each Steering Committee meeting shall be the responsibility of the chairperson and distributed as a draft within a reasonable time for review following the meeting. The minutes will be finalized by mutual consent.

3.4 **Disbanding of Committee**. The Parties shall have the right to disband the Steering Committee upon mutual agreement. Additionally, to the extent not disbanded pursuant to the preceding sentence, the Steering Committee shall be automatically disbanded effective upon termination of this Agreement.

**4. Development and Regulatory Matters.**

4.1 **Development**.

(a) After the MAA Transfer Date, Molteni shall provide the Steering Committee with a written semiannual report summarizing Molteni's activities and progress related to the development of the Final Product in the Territory, including conduct of Phase IV Trials and clinical trials in Subsequent Indications.

(b) Prior to the MAA Transfer Date, Titan shall take all actions reasonably necessary and appropriate to obtain EMA Approval for the Initial Indication, including supporting the MAA submitted to the EMA under the centralized procedure on November 6, 2017.

(c) Upon execution of the Binding Term Sheet, Titan provided Molteni with a complete copy of the MAA in e-CTD format. Prior to approval of the MAA, Titan shall provide Molteni free of charge with any updates of the same MAA in e-CTD format, as soon as available to Titan. The Parties agree that any changes, updates or additions to the MAA made pursuant to or in furtherance of this Agreement shall belong to Molteni after the MAA Transfer Date.

4.2 **Regulatory Matters**.

(a) **Prior to the MAA Transfer Date**:

(i) Molteni shall own all Regulatory Documents relating to the Final Product in the Territory;

(ii) Titan shall be responsible for all relevant registration and application costs associated with obtaining EMA approval for the Product MAA for the Initial Indication, with Molteni being responsible for any remaining costs;

(iii) Titan shall have the authority and responsibility for the timely preparation, filing, prosecution, and maintenance of all Regulatory Documents relating to a Final Product in the Territory, including the MAA and any reports or amendments to the MAA required for the ongoing review by the EMA; provided, that Titan shall keep Molteni fully informed of the progress and consult with Molteni and incorporate and execute on Molteni's input. It remains understood that if new clinical trials and data (such as pre-approval and post authorizations studies) are required to obtain regulatory approvals for the Final Product in the Territory, Titan shall have no obligation to conduct or fund such trials and/or generate these data unless such trials are performed by or on behalf of Titan, in which case Titan shall provide such data to Molteni as set forth in Section 2.6, and provided, however, that Titan shall remain obligated to provide any such trials and/or data to which Titan has rights pursuant to the Braeburn License and/or with any subsequent licensee as set forth herein. Subject to the requirements set forth in this section, Molteni shall have no obligation to conduct or fund trials and/or generate data. The label pursued with the EMA shall permit Molteni to market the Final Product in the Territory for use in a population of opioid dependents, independent of their abuse history (the "**Label**");

(iv) Titan, via FGK, shall remain the primary contact with Regulatory Authorities and shall be solely responsible for all communications with Regulatory Authorities that relate to any MAA or analogous application relating to a Final Product in the Territory; provided, that Molteni shall be permitted to review and comment on such communications;

(v) Molteni shall reasonably assist Titan throughout the MAA review process with the EMA subject to the distribution of costs as set forth herein;

(vi) Titan shall provide advance notice to Molteni of any planned meetings, discussions, or other communications with Regulatory Authorities relating to Final Products. Molteni shall have the right, but not the obligation, to participate with respect to such meetings, discussions, or other communications; provided that, in providing any such assistance, subject to Applicable Law, Molteni shall not contact a Regulatory Authority without the prior approval of Titan and, if contacted by a Regulatory Authority with respect to Final Product, shall refer such contact to Titan;

(vii) If contacted by a Regulatory Authority with respect to a Final Product, Titan shall promptly notify Molteni of such contact, and provide Molteni with any related official correspondence received from a Regulatory Authority, including, as applicable, minutes of any meetings or telephone conferences and/or discussions between Titan or FGK and the Regulatory Authority. Molteni shall have a right to participate in and provide comments, to be considered in good faith by Titan, with respect to any subsequent meetings, discussions, or other communications with respect to such contact;

(viii) To the extent Molteni reasonably believes that a filing or submission relating to Final Products in the Territory is required by Law, Molteni shall notify Titan. If Titan decides not to prepare such filing or submission, Titan shall promptly notify Molteni of such decision and Molteni shall be entitled to prepare such filing or submission, to be filed or submitted by Titan; provided that Molteni shall use good faith efforts to include any comments of Titan in such filing or submission; and

(ix) Changes to the Specifications shall be made only by mutual prior agreement of the Parties, except as required by Law. The Parties shall determine whether any such changes require any supplements to the Product MAA, and each Party shall provide the other Party with notice of any such changes as soon as practicable. If any such changes are required by Law, Titan shall provide to Molteni a draft of any such proposed change, including any submission to the applicable Regulatory Authority, at least thirty (30) Business Days prior to Titan's submission of the same and giving prompt and reasonable consideration to any comments Molteni may have; provided that, if and to the extent required by Law, Titan is required to make any such changes or file any such submission in less than thirty (30) Business Days, Titan will promptly notify Molteni of any such requirement.

(b) **After the MAA Transfer Date**. After the MAA Transfer Date:

(i) Molteni shall continue to own and control all Regulatory Documents relating to a Final Product in the Territory;

(ii) Molteni will be solely responsible for the timely preparation, filing, prosecution, and maintenance of all Regulatory Documents relating to a Final Product in the Territory, including MAAs for Final Products and any reports or amendments necessary to maintain Regulatory Approvals, and for seeking any revisions of the conditions of each Regulatory Approval;

(iii) Molteni shall have sole responsibility and discretion for all local medical affairs and public affairs activities in the Territory. Titan shall be regularly involved and consulted about all local clinical trials and it retains a prohibition right for all label-modifying trials or trials that is reasonably likely to have an impact on Titan Territories possibly initiated by Molteni, in which case the Parties will work together in good faith to address any potential conflict;

(iv) Molteni will be the primary contact with the Regulatory Authorities and shall be solely responsible for all communications with Regulatory Authorities relating to a Final Product in the Territory;

(v) Molteni may file any submissions that are intended to change or modify Final Product Labeling or prescribing information approved by the applicable Regulatory Authority for, or the Indications of, Final Product in the Territory provided that, except as required by Law, Molteni provides to Titan a draft of such submission at least ten (10) Business Days prior to planned submission to the applicable Regulatory Authority. As stated in Section 4.2(b)(iii), Titan retains a prohibition right for all label modifications that are reasonably likely to have an impact on Titan Territories, subject to good faith resolution between the Parties;

(vi) To the extent Titan reasonably believes that a filing or submission relating to Final Products in the Territory is required by Law, Titan shall notify Molteni. If Molteni decides not to prepare such filing or submission, it shall promptly notify Titan of such decision and Titan shall be entitled to prepare such filing or submission, at Titan's sole cost and expense, to be filed or submitted by Molteni; provided that Titan shall use good faith efforts to include any comments of Molteni in such filing or submission; and

(vii) Subject to the terms herein, each Party shall permit the other Party to access, and shall provide the other Party on a timely basis with the right to cross-reference and for Molteni to use in exercising its rights and performing its obligations hereunder with respect to Final Product in the Territory and for Titan to use in connection with the development and commercialization of products including the Semi-Finished Product in the Titan Territory, any and all Regulatory Documents relating to the Compound Product or Final Product, owned or controlled by or accessible to the applicable Party, subject to any consents or conditions required of any Third Party Manufacturer (provided, that Titan shall use commercially reasonable efforts to obtain any such necessary consents or perform any such necessary conditions). At the request of the other Party and to the extent legally permitted and in accordance with the terms of this Agreement, each Party shall notify the FDA, EMA or the appropriate Regulatory Authorities, as applicable, of the other Party's right to reference such Regulatory Documents in regulatory submissions filed by the other Party in accordance with this Agreement.

(c) **Regulatory Cooperation**. Each Party shall promptly inform the other Party (and, to the extent reasonably possible, within twenty four (24) hours) of its receipt of any information that: (i) raises any concern regarding the safety of a Compound, a Final Product or a Product; (ii) concerns suspected or actual tampering, counterfeiting or contamination or other similar problems with respect to a Compound, a Final Product or a Product; (iii) is reasonably likely to lead to a Recall or market withdrawal of a Product or Final Product; or (iv) concerns any ongoing or potential investigation, inspection, detention, seizure or injunction by a Regulatory Authority involving a Compound, a Final Product or a Product. If the MAA is not accepted and approved by the EMA before September 30, 2019, then (x) the Parties will promptly meet and discuss in good faith how such approval can be obtained as soon as possible, and (y) Titan shall reasonably cooperate with Molteni and take all commercially reasonable steps requested by Molteni to assist Molteni in obtaining such acceptance and approval. Titan shall reasonably cooperate with Molteni and take all commercially reasonable steps requested by Molteni to assist Molteni in obtaining EMA approval to permit Molteni to market the Final Product in the Territory under the Expanded Label.

(d) **Adverse Experiences**. The reporting of Adverse Experiences shall be governed by Article 11.

(e) **Recalls and Other Corrective Action**. Molteni shall make all decisions with respect to any recall, market withdrawal or other corrective action ("**Recall**") related to a Final Product in the Territory. At Molteni's request, Titan shall provide reasonable assistance in conducting any such Recall, including providing all pertinent records that Molteni may reasonably request to assist in effecting such action, subject to reimbursement of Titan's Fully Burdened Costs associated with providing such cooperation, and any other documented, direct, out-of-pocket costs incurred (paid or accrued) by Titan with respect to such Recall shall be borne by Molteni. If any Regulatory Authority in the Territory issues or requests a Recall of the Final Product, or if either Party determines that an event, incident or circumstance has occurred that may indicate the need for a Recall in the Territory, the Party notified of such Recall, or the Party that desires such Recall, will advise the other Party thereof by telephone or fax within twenty-four (24) hours of (i) its receipt of notice from a Regulatory Authority requiring or requesting a Recall or (ii) such Party's determination that a Recall is indicated, and, without limiting Molteni's rights to make all decisions with respect to such Recall in the Territory in the first sentence of this Section 4.2(e), the Steering Committee shall convene a joint telephonic meeting to discuss such Recall request within twenty-four (24) hours of such notification.

(f) Throughout the Agreement Term, Titan shall provide Molteni with full access to all existing and future clinical / pharmacoeconomic data and/or trials regarding and/or relating to the Final Product or the Compound directly or indirectly generated/performed by, in the possession of, or accessible by Titan, subject to any consents or conditions required of any Third Party Manufacturer (provided, that Titan shall use commercially reasonable efforts to obtain any such necessary consents or perform any such necessary conditions), including without limitation pursuant to the Braeburn License and/or from any subsequent licensee, as soon as available to it (as set forth in Section 2.6), it being understood that Titan has no obligation to conduct or fund any future trials or generate any future data pursuant to this Agreement.

## 5. Commercialization of Final Products

5.1 **General**.

( a ) Subject to the terms and conditions of this Agreement, Molteni shall during the Agreement Term use Commercially Reasonable Efforts to commercialize and Promote the Final Products in the Territory for the Initial Indication and any Subsequent Indications, and to perform its obligations under this Agreement.

( b ) Molteni will manage, in its sole discretion, all local premarketing, marketing and sales activities. Molteni will set local prices in each country within the Territory according to the Molteni's sole discretion in consideration of market conditions. Titan will reasonably assist Molteni, at Molteni's request, in all premarketing activities regarding the Final Product, including initial training, KOLs advisory board management, and scientific presentations at main congresses, with the possible participation of US based KOLs. The documented Third Party costs of such activities shall be borne by Molteni. Molteni shall be responsible for the conduct and cost of any Health Technology Assessment or other studies required for pricing and reimbursement purposes.

( c ) Without limiting the generality of the foregoing, and in accordance with the Commercialization Plan, Molteni shall (i) commence the submission process for obtaining Marketing Authorization in at least one of the Key Countries within sixty (60) days after the MAA Transfer Date and commence the submission process for obtaining Marketing Authorization in the remaining Key Countries within one hundred eighty (180) days after the MAA Transfer Date and use its Commercially Reasonable Efforts to obtain such Marketing Authorizations as soon as practicable thereafter, and (ii) shall use Commercially Reasonable Efforts to Launch the Final Product for the Initial Indication in each Key Country within four (4) months following the date of Marketing Authorization in that country;

( d ) In connection with this Section 5.1 use of Commercially Reasonable Efforts includes Molteni expending, in connection with such Launch of a Final Product, such amounts as are commercially reasonable in connection with the marketing and Promotion of the Final Product in the Territory including devoting marketing and sales resources and other personnel to such commercialization as is commercially reasonable in the industry.

5.2 **Commercialization Plan and Promotional Materials and Activities**.

( a ) Molteni will prepare an initial Commercialization Plan, a summary of which will be provided to Titan no later than two hundred seventy (270) days after the Effective Date. Molteni shall also provide to Titan (i) updates of the Commercialization Plan at least sixty (60) days prior to the estimated Launch of the Final Product for the Initial Indication and, if applicable, each Subsequent Indication, and thereafter on an annual basis or as necessary to reflect any significant amendments to the summary Commercialization Plan last provided to Titan under this Section 5.2(a), (ii) updated information regarding the expected and actual date of Launch for the Initial Indication and each Subsequent Indication, and (iii) any sales or tracking reports received by Molteni from Third Parties with respect to the Final Product.

(b) Molteni shall own all right, title and interest in and to the copyrights in all marketing, sales, advertising or Promotional Materials relating to the Final Product in the Territory, as well as the Product Label in the Territory (" **Territory Copyrighted Works**"). To the extent Titan has or retains any rights in such Territory Copyright Works, Titan hereby irrevocably assigns to Molteni all right, title and interest in such Territory Copyrighted Works. Titan shall execute all documents and take all actions as are reasonably requested by Molteni to vest title to such Territory Copyrighted Works in Molteni. At all times, Molteni shall be responsible, at its expense, for searching, clearing and filing applications for registration of all such Territory Copyrighted Works.

(c) Molteni shall be solely responsible for preparing all submissions with Regulatory Authorities regarding approval of all Promotional Materials that require such approval; provided that prior to the MAA Transfer Date, Titan via its appointed applicant pursuant to EC Directive 2001/83/EC for the Product MAA, namely FGK Representative Service GmbH, shall be responsible for filing all such submissions.

( d ) After the MAA Transfer Date, Molteni shall be responsible for responding to medical questions or inquiries from members of the medical and paramedical professions and consumers regarding the Final Product in the Territory, including the distribution of standard medical information letters resulting from the marketing activities of the Molteni Sales Force and Marketing Distributors. Titan shall refer all such medical inquiries that it receives relating to the Final Product in the Territory to Molteni. Subject to Section 4.2(b)(v), Molteni shall provide copies of the responses given all in accordance with Laws, including regulations and policies of the EMA or the applicable Regulatory Authority, to Titan to the extent not prohibited by Applicable Law and redacted as necessary to protect any confidential and personally identifiable information. Titan shall, at Molteni's request, from time to time, assist Molteni with the formulation of responses to such inquiries, including the content of any "Frequently Asked Questions." If mutually agreed by the Parties, the Parties shall establish a centralized database to document and track medical inquiries. Titan shall provide information and access to data, records and reports reasonably requested by Molteni to fulfill its obligations under this Section 5.2(d).

## 6. Manufacturing, Supply and Additional Services

6 . 1 **Manufacturing Responsibility**. Subject to Section 6.2, Titan or its designee shall have the exclusive right to manufacture and supply all Semi-Finished Product required for development and commercialization of the Final Product in the Territory. Subject to Section 6.2, Molteni shall purchase all of its requirements of Semi-Finished Product for use in the Territory exclusively from Titan.

6 . 2 **Third Party Manufacturers**. Molteni shall be entitled, in its sole discretion, to include into the MAA and/or Dossier and register Molteni itself or another European contract manufacturing organization as an additional manufacturing site for the Semi-Finished Product at any time:

(a) following the fifth ($5^{th}$) anniversary of the execution of the Agreement,

(b) if Titan has materially breached in the performance of any of its material representations or obligations hereunder with respect to the Services contemplated by this Section 6 (including Section 8.3(a) herein), and has not cured such breach within sixty (60) days (or, if such breach cannot be cured within such sixty (60) day period, if Titan does not commence and diligently continue actions to cure such breach during such sixty (60) day period and does not ultimately cure such breach within ninety (90) days after notice) after notice of such breach is provided by Molteni to Titan for other cases of breach; or

(c) if Titan fails to, or as a result of bankruptcy, insolvency (in the bankruptcy sense) or similar proceedings, will not reasonably be able to, meet its obligations to timely or completely fill at least sixty percent (60%) of Molteni's Purchase Orders for a period of fifteen (15) days,

(d) if Titan fails to, or as a result of bankruptcy, insolvency (in the bankruptcy sense) or similar proceedings, will not reasonably be able to, meet its obligations to timely or completely fill at least ninety percent (90%) of Molteni's Purchase Orders for a period of ninety (90) days, or

(e) if the Purchase Price increases by more than maximum increase allowed as calculated pursuant to Section 6.3,

then, in each case, Molteni shall be released from any exclusivity obligation to order Semi-Finished Product from Titan, and Molteni shall be free to purchase Semi-Finished Product directly from DPT and/or engage additional manufacturing sites. Molteni may offset any costs associated with such the preceding clause against any payments due to Titan hereunder. For the sake of clarity, Titan shall be obligated to provide Semi-Finished Product to Molteni at Molteni's request for the Agreement Term.

6.3 **Price**. As consideration for the supply of the Semi-Finished Product in the Territory, Molteni shall pay to Titan the price specified in Schedule 6.3 hereto (the "**Purchase Price**"). The Purchase Price shall remain fixed and binding through December 31, 2019. Thereafter, any variation of the Purchase Price shall be adequately documented by Titan and provided to Molteni and, in any event, cannot exceed the annual cost increases incurred by Titan (i) under the DPT Agreement and (ii) associated with the acquisition of the API.

6.4 **Forecasts**.

(a) **Forecasts Prior to Launch**. Not later than nine (9) months prior to the estimated Launch of the Final Product in the first country in the Territory, Molteni shall provide Titan a written nonbinding forecast of its estimated requirements for Semi-Finished Product for the six (6) consecutive Calendar Quarters commencing with the Calendar Quarter in which such Launch is estimated to occur, broken down on a quarterly basis. Not less than six (6) months prior to the estimated Launch of the Final Product in such country, Molteni shall provide Titan with an updated nonbinding forecast (the "**Launch Forecast**") of its estimated requirements of Semi-Finished Product for each such six (6) Calendar Quarters, broken down on a quarterly basis.

(b) **Forecasts After Launch**. Within thirty (30) days after the initial Launch of the Final Product in the Territory and thereafter on a monthly basis, Molteni shall provide Titan with an updated rolling nonbinding forecast of its estimated requirements of Semi-Finished Product, broken down on a monthly basis, for six (6) consecutive calendar quarters.

6 . 5 **Firm Commitment**. The quantities set forth for the first four (4) months of each Launch Forecast or rolling forecast shall be considered binding (the "**Binding Forecast**") for Semi-Finished Products, regardless of receipt of Molteni's actual purchase order. Subject to the foregoing, each forecast provided by Molteni shall supersede any previous forecast.

6 . 6 **Purchase Orders**. At least one hundred sixty-four (164) days prior to the desired delivery date, Molteni shall submit a firm, binding, non-cancelable purchase order of its requirements for Semi-Finished Product ("**Purchase Order**") specifying requested delivery dates for each Purchase Order. Within ten (10) days of receipt of each Purchase Order, Titan shall provide confirmation in writing of the Purchase Order and delivery date(s) requested by Molteni. The minimum amount of Semi-Finished Product per Purchase Order shall be equal to a full batch as per the minimum batch size figure equal to 6,000 rods/implants. Other than terms respecting quantity, delivery date(s), shipment method and destination(s), no modification or amendment to this Agreement shall be effected by or result from the receipt, acceptance, signing or acknowledgement of Purchase Orders or other business forms containing terms or conditions in addition to or different from the terms and conditions set forth in this Agreement, and in the event of a conflict between the terms of any Purchase Order and this Agreement, this Agreement shall control. Titan will use best efforts to supply Molteni on or prior to the designated delivery date the quantities of Semi-Finished Product designated in such Purchase Order; provided, however, that Titan shall not be obligated to satisfy the aggregate portion of any Purchase Order that would exceed the aggregate Binding Forecast.

6 . 7 **Terms of Shipment and Delivery**. Titan shall deliver the Semi-Finished Products at Titan's designated Manufacturing Facility to the custody of the carrier provided by Molteni, Free Carrier (FCA) (Incoterms 2010). Costs for the delivery of the Semi-Finished Products from Titan to Molteni shall be borne by Molteni. The Semi-Finished Product shall have at least eighty percent (80%) remaining shelf life upon the date of delivery to Molteni.

6 . 8 **Payment Terms**. Molteni shall settle invoices received from Titan with respect to the Purchase Price within thirty (30) days from the date of delivery and acceptance of the Semi-Finished Product to Molteni or Molteni's designee or, for amounts in dispute pursuant to Section 7.6, within ten (10) days from the date the dispute is resolved. Molteni shall pay to Titan the amounts specified in the invoice, by wire transfer of immediately available funds to an account designated by Titan.

6.9 **Additional Services**. Subject to the terms and conditions of this Agreement including Titan's delivery of Semi-Finished Product pursuant to the terms herein, Molteni shall be responsible for performing, directly or indirectly, the Additional Services to produce the Final Product required for development and commercialization of the Final Product in the Territory. All costs associated with the Additional Services shall be borne by Molteni. Molteni shall be responsible for producing the Final Product in the Territory, including but not limited to assembling a completed kit that includes the Semi-Finished Product and all required Product Labeling and secondary packaging for sale and use in the Initial Indication and/or any Subsequent Indications. For clarity, Molteni is responsible for the Product Labeling in each country in the Territory. Molteni shall be responsible for all activities to be performed on the Final Products as required by Applicable Laws and regulations in order to Release, market and sell the Final Product for the Initial Indication and/or any Subsequent Indications within the Territory, subject to Titan's obligations to comply with Applicable Law in producing and providing the Semi-Finished Product.

6.10 **Pharmaceutical Responsibilities**.

(a) Changes. Subject to the terms herein, any changes or modifications to the Specifications, test methods, manufacturing process, Manufacturing Facilities and validation thereof that result from any requirements of any Regulatory Authority in the Territory shall be subject to the approval by Titan, solely to the extent such changes would materially and negatively impact Titan's rights or obligations in the Titan Territory, which approval Titan agrees not to unreasonably withhold (subject to its agreements with its Third Party Manufacturers) and, if so approved, all costs thereof (including any testing, qualification, scale-up, and regulatory filings) will be borne by Molteni in addition to, and not as a part of the Purchase Price. Titan will work with Molteni in good faith to resolve any conflict including in relation to the DPT Agreement.

(b) Quality Responsibilities. In order to facilitate the Release of the Final Product in the Territory, Titan shall provide to Molteni all analytical methods regarding the quality assessment of the Semi-Finished Product (including the specification of the relevant laboratory equipment), as requested by applicable European regulators or as reasonably requested by Molteni to facilitate the Release. Molteni shall be responsible for all testing and quality assessments as required by Applicable Laws and regulations necessary for Release of the Final Product in the Territory.

(c) Regulatory Support and Regulatory Audits. Titan is committed to meeting the European requirements for commercialization of the Final Product in the Territory and shall provide Molteni and/or any competent Regulatory Authorities access to documents and information regarding the manufacturing of the Semi-Finished Product and it shall allow inspections of all facilities it owns or Controls involved in the manufacturing process of the Semi-Finished Product and/or the Compound and to aid Molteni in obtaining all necessary licensing and Regulatory Approval.

(i) Qualification. The Manufacturing Facilities shall pass inspection by the EMA or any other Regulatory Authority in the Territory; and any costs incurred by Titan that are associated with such inspection, or responding to such inspection, by the EMA or any other Regulatory Authority in the Territory shall be the sole responsibility of Titan. Molteni shall have the right once annually, through one or more representatives during normal business hours, and upon at least ninety (90) days' written notice to Titan on times to be mutually agreed with the Third Party Manufacturers, to inspect, directly or through its consultants, and audit the Manufacturing Facilities in order to ensure Titan's compliance with its obligations under this Agreement.

(ii) Governmental Inspections, Requests and Communications. Molteni shall advise Titan of any written inquiries or notifications relating to any inspection requests or activities by any Regulatory Authority in the Territory in regard to Semi-Finished Product. Titan shall furnish to Molteni within two (2) Business Days of its receipt a copy of all written reports by such Regulatory Authority that may reasonably be expected to adversely affect manufacturing and supply to Molteni of Semi-Finished Product.

(d) Acceptance. Titan or its designee will analyze and conduct quality control testing of each lot of Semi-Finished Product in accordance with the Specifications as are summarized on Schedule 6.9. Titan will send to Molteni a certificate of analysis and a certificate of compliance simultaneously with each shipment of Semi-Finished Product. Molteni shall inspect such shipment either prior to delivery from Titan's Manufacturing Facilities, or once the Semi-Finished Products arrive at Molteni's warehouse in Scandicci – Florence or another facility designated by Molteni, at Molteni's discretion, Molteni will perform a visual incoming inspection, as well as any other quality control activities necessary to Release the Semi-Finished Product. Molteni shall have the right to reject any batch containing Non-Conforming (as defined below) Semi-Finished Products or parts thereof within sixty (60) Business Days of said delivery or said arrival. If Molteni has not notified Titan of rejection (which notification shall include Molteni's basis for rejection) within such period, such Semi-Finished Product shall be deemed to have been accepted. Any disagreement as to whether the Semi-Finished Product conforms to the Specifications shall be determined in accordance with Section 6.10(f).

(e) Non-Conforming Semi-Finished Product. Subject to Section 6.10(f), if Molteni finds damage, a deficiency in the quantity of the Semi-Finished Product, or non-conformity with the Specifications (hereafter referred to as a "**Non-Conformity**" or "**Non-Conforming**"), Molteni will notify Titan in writing as set forth in Section 6.10(d). At its option Molteni may require that Titan (i) supply an equal quantity of replacement Semi-Finished Product to Molteni at no cost to Molteni and by a deadline indicated by Molteni, and dispose of the Non-Conforming Semi-Finished Products at Titan's cost, except that Molteni shall follow any reasonable written instructions from Titan to dispose of such Non-Conforming Semi-Finished Product in another manner at Titan's cost, or (ii) cancel the relevant portion of the Purchase Order and Molteni will have no further obligation, including payment, in relation to such Non-Conforming material. In the event that Molteni notifies Titan of a Non-Conformity following the payment of the invoice of the relevant Semi-Finished Product, Titan shall issue to Molteni a credit note within ten (10) days from the receipt of the relevant request by Molteni.

(f) Independent Testing. In the event of a disagreement between the Parties regarding whether the Semi-Finished Product conforms to the Specifications, the Parties will attempt to reach a mutually acceptable resolution of the dispute. If they are unable to do so after a reasonable period of time (such period not to exceed twenty (20) days from the date of original notification), the Parties shall cause a mutually agreeable qualified independent Third Party to review records, test data and to perform comparative tests and/or analyses on samples of the alleged Non-Conforming Semi-Finished Product, as relevant. The independent party's results and determination shall be final and binding. Unless otherwise agreed by the Parties in writing, the out-of-pocket costs associated with such Third Party testing and review shall be borne by the Party that was incorrect about whether the Semi-Finished Product conforms to the Specifications.

(g) Titan's Obligations. Titan shall not be subject to the obligations as set forth in Section 6.10(e) to the extent that any such damage, deficiency or Non-Conformity of the Semi-Finished Product is due to Molteni's actions after the delivery by Titan and receipt by Molteni or its designee.

6.11 **Records**. Titan or its designees will maintain complete and accurate records and documentation of all validation data, stability testing data, batch records, quality control and testing relating to Semi-Finished Product and the manufacture, testing and shipment thereof for a period as required by Law and as requested by Molteni.

6.12 **Audit of Purchase Price**. Upon the written request of Molteni and not more than once in each Calendar Year after December 31, 2019, Titan shall permit an independent certified public accounting firm mutually acceptable to the Parties, to have access during normal business hours at times mutually convenient to the Parties and upon reasonable notice to Titan to such of the records of Titan as may be reasonably necessary to verify the accuracy of any variation of the Purchase Price as set forth in Section 6.3.

(a) If such accounting firm concludes that the Titan variation of Purchase Price was lower than charged during such period, Titan shall pay the additional funds within sixty (60) days of the date Molteni delivers to Titan such accounting firm's written report so concluding. The fees charged by such accounting firm shall be paid by Molteni; provided, however, that if an error in favor of Molteni in the calculation of the Purchase Price of more than five percent (5%) of Titan's calculation of the Purchase Price for the period being reviewed is discovered, then the fees and expenses of the accounting firm shall be paid by Titan.

(b) Upon the expiration of twenty-four (24) months following the end of any Calendar Year, the calculation of Titan's variation of the Purchase Price payable with respect to such year shall be binding and conclusive upon Molteni, and Titan shall be released from any liability or accountability with respect to possible overcharges of Titan's variation of the Purchase Price for such year.

## 7. Payments and Statements

7.1 **Closing and Milestone Payments**. In consideration for the transactions contemplated by this Agreement, including the Closing:

(a) **Closing Payment**. Molteni shall pay Titan at the Closing by wire transfer of immediately available funds to an account designated by Titan to Molteni in writing (the "**Bank Account**"), a non-refundable, non-creditable up-front fee of €$2,000,000 (Euros two million) (the "**Closing Payment**").

(b) **Milestone Payments**. Subject to the terms of this Agreement, until December 31, 2032, Molteni shall pay to Titan, by wire transfer of immediately available funds to the Bank Account, the applicable non-refundable, non-creditable, one-time milestone payment after achievement of each milestone event as set forth below. Titan shall notify Molteni in writing within five (5) Business Days of achievement of the first and second milestone event listed in the table below and the corresponding milestone payment shall be due within ten (10) Business Days of receipt by Molteni of such notice. Each other milestone payment listed in the table below shall be due within ten (10) Business Days after achievement of the corresponding milestone event.

| Milestone Event: | Milestone Payment: |
|---|---|
| (i) Issuance by the EMA of marketing authorization for the Final Product for the Initial Indication | €1,000,000 (euros one million) |
| (ii) Approval by the EMA of the Expanded Label for use with the Final Product | **[*******]** |
| (iii) Approval of the reimbursement price in each of the Key Countries. For the sake of clarity, such milestone payment shall only be due and payable one time for each Key Country. | **[*******]**for an aggregate of €2,000,000 (euros two million) |
| (iv) Issuance by the EMA of marketing authorization for the Final Product for each Subsequent Indication provided that marketing the Final Product for the Subsequent Indication would, in the absence of the license set forth herein, infringe Valid Claims of the Transferred Patent Rights. For the sake of clarity, such milestone payment shall be due and payable by Molteni one time for each Subsequent Indication. | **[*******]** |

Notwithstanding the foregoing, (x) in the event that if the milestone event set forth in clause (i) does not occur on or prior to September 30, 2019, the milestone payments provided in clauses (i) and (iii) shall each be reduced by fifty percent (50%), and (y) in the event that if the milestone event set forth in clause (i) does not occur on or prior to March 31, 2020, then Molteni shall no longer be liable for the milestone payments in clauses (i) and (iii).

Notwithstanding anything to the contrary contained herein, with respect to each milestone event set forth in clauses (i) – (iv) above, no contingent milestone payment shall be payable in respect thereto if the event giving rise to the payment thereunder does not occur on or prior to December 31, 2032.

7.2 **Earn-Out Payments**.

( a ) Subject to the terms of this Agreement, with respect to each Calendar Year of the Agreement Term ending on or before March 31, 2033, Molteni shall pay Titan Earn-Out Payments on annual Net Sales of the Final Product in the Primary Territory in each Calendar Year at the following rates:

| | From (€) | To (€) | Earn-Out Payment (%) on Net Sales |
|---|---|---|---|
| Tier 1 | 0 | [*******] | [*******]% |
| Tier 2 | [*******] | [*******] | [*******]% |
| Tier 3 | [*******] | [*******] | [*******]% |
| Tier 4 | [*******] | [*******] | [*******]% |
| Tier 5 | [*******] | [*******] | [*******]% |
| Tier 6 | [*******] | Beyond | [*******]% |

By way of example, **[*******]**total annual Net Sales of the Final Product in the Primary Territory shall be subject to Earn-Out Payments equal to **[*******]** at **[*******]**% and **[*******]**at **[*******]**%, for a total payment for such year of **[*******]**.

( b ) Subject to the terms of this Agreement, with respect to each calendar year of the Agreement Term ending on or before March 31, 2033, Molteni shall pay Titan an Earn-Out Payment of **[*******]**of Net Sales of any Competitor Product sold by or on behalf of Molteni, its Affiliates, or any licensees in the Territory.

( c ) Subject to the terms of this Agreement, with respect to each Calendar Year of the Agreement Term ending on or before March 31, 2033, Molteni shall pay Titan an Earn-Out Payment of twenty percent (20%) on annual Net Sales of the Final Product in the Secondary Territory in each Calendar Year.

7.3 **Third Party Patent Rights and Earn-Out Stacking**.

( a ) If, during the Agreement Term, Molteni identifies the need for a license to a Patent Right in the Territory not Controlled by Titan that Molteni in good faith reasonably believes is necessary for Molteni, its Affiliates or any sublicensee to exercise its rights hereunder (a "**Third Party Patent Right**"), prior to entering into an agreement with respect to a license to such Third Party Patent Right, Molteni shall notify Titan (a "**Third Party Patent Right Notice**"). Upon receipt of the Third Party Patent Right Notice, Titan shall notify Molteni whether it agrees or objects to Molteni's need for such Third Party Patent Right, no later than ten (10) Business Days following Titan's receipt of the Third Party Patent Right Notice. In the event Titan agrees with the need for such Third Party Patent Right, Titan and Molteni shall coordinate and act in good faith to enter into a commercially reasonable license agreement or agreements with such Third Party granting Molteni license to such Third Party Patent Rights in the Territory. In the event Titan objects to the need for such Third Party Patent Right, Titan shall indemnify and hold Molteni harmless for any Losses (including attorneys' fees and related costs) relating to such Third Party rights.

(b) If in accordance with this Section 7.3 Molteni, in its reasonable discretion, determines that it reasonably requires Third Party rights in order to exercise its rights and/or meet its obligations pursuant to this Agreement, the parties agree to discuss in good faith a reduction of Earn-Out Payments to account for such Third Party license fees as may be due and payable by Molteni.

7.4 **Reports and Payments**.

( a ) Within thirty (30) days after the end of each Calendar Quarter following Launch that begins or ends during the Agreement Term, Molteni shall furnish to Titan a written report showing:

( i ) all Net Sales during (A) such Calendar Quarter, including a reconciliation to Net Sales and a breakdown of all estimated Permitted Deductions from the gross amount invoiced to arrive at Net Sales, and (B) the Calendar Year to date through the end of such Calendar Quarter; and

(ii) a calculation of Earn-Out Payments for such Calendar Quarter.

( b ) Each such report shall be accompanied by payment of the Earn-Out Payments due under Section 7.2 and subject to the terms herein.

( c ) Molteni shall keep and shall require its Affiliates and its licensees to keep commercially reasonable, complete and accurate records in connection with the purchase, use and/or sale by or for it of the Final Products hereunder, consistent with industry practice and in reasonable detail designed to permit accurate verification of all payment obligations set forth in this Article 7.

(d) Without limiting any Party's remedies hereunder, in the event payments required to be made under this Section 7.4 or any other provision of this Agreement are not made on or prior to the required payment date, the amount of the late payment shall bear interest at the per annum rate of two percent (2%) over the then-current thirty (30)-day LIBOR rate, or the maximum rate allowable by Law, whichever is lower.

(e) Except as otherwise defined herein, all financial calculations by either Party under this Agreement shall be calculated in accordance with GAAP. All payments due by one Party to the other Party under this Agreement shall be payable in United States dollars pursuant to Section 7.4(f). In addition, all calculations herein shall give pro-rata effect to and shall proportionally adjust (by giving effect to the number of applicable days in such Calendar Quarter) for any Calendar Quarter that is shorter than a standard Calendar Quarter or any Calendar Year (or twelve month period) that is shorter than four consecutive full Calendar Quarters or twelve (12) consecutive months, as applicable.

(f) Currency Exchange. For the purpose of converting the local currency in which any Earn-Out Payments or other payments arise into US dollars, the rate of exchange to be applied shall be the rate of exchange in effect on the last Business Day of the Calendar Quarter to which the payment relates as reported in the Wall Street Journal (New York Edition).

7.5 **Taxes**. Titan alone shall be responsible for paying any and all taxes (other than taxes on Molteni's income) levied on account of, or measured in whole or in part by reference to, any payments it receives under this Agreement, including all recordation, transfer, documentary, stamp, conveyance or other similar taxes. Molteni shall deduct or withhold from such payments any taxes that it is required Law to deduct or withhold. Notwithstanding the foregoing, if Titan is entitled under any applicable tax treaty to a reduction of rate of, or the elimination of, applicable withholding tax, it may deliver to Molteni or the appropriate Governmental Authority (with the reasonable assistance of Molteni, at Titan's expense, to the extent that this is reasonably required and is expressly requested in writing) the forms (completed in a manner satisfactory to Molteni) necessary to reduce the applicable rate of withholding or to relieve Molteni of its obligation to withhold tax, and Molteni shall apply the reduced rate of withholding, or dispense with withholding, as the case may be; provided, that (a) Molteni has received evidence, in a form satisfactory to Molteni, of Titan's delivery of all applicable forms (and, if necessary, its receipt of appropriate governmental authorization) at least fifteen (15) days prior to the time that the payments are due, and (b) Titan shall indemnify and hold Molteni harmless for any Losses (including attorneys' fees and related costs) relating to such reductions. If, in accordance with the foregoing, Molteni withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount and send to Titan proof of such payment as soon as reasonably practicable following that payment.

7.6 **Audits**.

(a) **Independent Audit**.

(i) During the Agreement Term, each of Titan and Molteni, upon the prior written notice to the other Party and at a mutually agreeable time, but in no event more than once in any twelve (12) month period, shall permit an independent certified public accounting firm of recognized standing, selected by the other Party and reasonably acceptable to Molteni or Titan, as applicable, to have access during normal business hours to the records of such Party as may be reasonably necessary to verify, in the case of Molteni, the accuracy of the reports under Section 7.4 and in the case of Titan, the calculation of any Fully Burdened Cost; provided however, that any audit conducted under this Section 7.6 may only be for any year ending not more than thirty-six (36) months prior to the date of such request. The accounting firm shall disclose to the auditing Party only whether the reports are correct or incorrect, the specific details concerning any discrepancies (including, if applicable, the accuracy of the calculation of Net Sales, and the resulting effect of such calculations on the amounts payable by either Party under this Agreement), but no other information shall be disclosed to such auditing Party.

(ii) If there is a dispute between the Parties following any audit performed pursuant to Section 7.6(a)(i), either Party may refer the issue (an "**Audit Disagreement**") to a second independent certified public accounting firm of recognized standing for resolution. In the event an Audit Disagreement is submitted for resolution by either Party, the Parties shall comply with the following procedures:

(A) The Party submitting the Audit Disagreement for resolution shall provide written notice to the other Party that it is invoking the procedures of this Section 7.6(a)(ii).

(B) Within five (5) Business Days of the giving of such notice, the Parties shall jointly select a recognized mutually acceptable accounting firm to act as an independent expert to resolve such Audit Disagreement.

(C) The Audit Disagreement submitted for resolution shall be described by the Parties to such independent expert, which description may be in written form, within ten (10) Business Days of the selection of such independent expert.

(D) Such independent expert shall render a decision on the matter as soon as practicable.

(E) The decision of such independent expert shall be final and binding as to any Audit Disagreement and shall not be subject to Article 15 unless such Audit Disagreement involves alleged fraud, breach of this Agreement, or construction or interpretation of any of the terms and conditions hereof.

(b) If, pursuant to Section 7.6(a)(i) or 7.6(a)(ii), as applicable, an accounting firm concludes that amounts were miscalculated during a year, the audited Party shall pay the additional payments plus interest as set forth in Section 7.4(d) above on the amount of such additional payments, within thirty (30) days of the date the auditing Party delivers to the audited Party such accounting firm's written report so concluding. In the event such accounting firm concludes that amounts were miscalculated by the audited Party during such period, the auditing Party shall repay the audited Party the amount of such overpayment plus interest as set forth in Section 7.4(d) above on the amount of such overpayment, within thirty (30) days after the date the auditing Party delivers to the audited Party such accounting firm's written report so concluding. The fees charged by such accounting firm shall be paid by the auditing Party; provided, however, that, if an error in favor of the auditing Party of more than five percent (5%) of the payments due hereunder for the period being reviewed is discovered, then the fees and expenses of the accounting firm shall be paid by the audited Party.

(c) Each Party shall treat all financial information subject to review under this Section 7.6 in accordance with the confidentiality provisions of Article 12.

7.7 **Set-Off**. In addition to any other rights or remedies that Molteni may have under this Agreement or any Ancillary Agreement, Molteni may, and is hereby authorized to, at any time and from time to time, without notice to Titan (any such notice being expressly waived by Titan) and to the fullest extent permitted by Law, set-off and apply any and all amounts payable by Molteni hereunder against amounts owed by Titan to Molteni. Molteni agrees to report any amounts set-off against amounts owed to Titan in the written report furnished to Titan pursuant to Section 7.4.

## 8. Representations and Warranties

8.1 **General Representations**. Each Party hereby represents and warrants to the other Party as of the Effective Date and Closing Date as follows:

( a ) Such Party is an entity duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation or formation, is qualified to do business and is in good standing as a foreign entity in each jurisdiction in which the conduct of its business or the ownership of its properties requires such qualification and failure to have such would prevent it from performing its obligations under this Agreement and the Ancillary Agreements;

( b ) The execution, delivery and performance by such Party of this Agreement and the Ancillary Agreements have been duly authorized by all necessary corporate action and does not and will not (i) violate any provision of any Law, rule, regulation, order, writ, judgment, injunction, decree, determination or award presently in effect having applicability to it or any provision of its charter or bylaws or other organizational or governing documents; or (ii) conflict with or constitute a default under any other agreement to which such Party is a party;

(c) This Agreement and the Ancillary Agreements have been duly executed and are legal, valid and binding obligations of such Party, enforceable against it in accordance with the terms and conditions hereof, except as enforceability may be limited by (i) any applicable bankruptcy, insolvency, reorganization, moratorium or similar law affecting creditor's rights generally, or (ii) general principles of equity, whether considered in a proceeding in equity or at Law;

( d ) Such Party is not under any obligation to any person or entity, contractual or otherwise, that is in conflict with the terms of this Agreement or any Ancillary Agreement, nor will such Party undertake any such obligation during the Agreement Term;

( e ) Such Party has obtained all authorizations, consents and approvals, governmental or otherwise, necessary for the execution and delivery of this Agreement and the Ancillary Agreements, and to otherwise perform such Party's obligations under this Agreement and the Ancillary Agreements;

( f ) Neither Party, nor any of its Affiliates, are a party to, or are otherwise bound by, any oral or written contract that will result in any Third Party obtaining any interest in, or that would give to any Third Party any right to assert any claim in or with respect to, any of such Party's or the other Party's rights under this Agreement or any Ancillary Agreement;

(g) Neither Party, or, to the knowledge of such Party, any Third Party acting by or on behalf of such Party in connection with the manufacture, development or commercialization of the Compound, Product, Semi-Finished Product or any Final Product has been debarred or is subject to debarment, and neither Party shall knowingly engage or use any Third Party in connection with the of the manufacture, development or commercialization of the Compound, Product, Semi-Finished Product or any Final Product that has been debarred; each Party agrees to notify the other Party in writing promptly if it, or if it has knowledge that, any of its licensors or any entity acting on its behalf in any capacity in connection with the manufacture, development or commercialization of the Compound, Product, Semi-Finished Product or any Final Product, is debarred or becomes the subject of any threatened or pending action, suit, claim, investigation, legal or administrative proceeding relating to debarment; and

(h) Such Party shall perform its obligations hereunder in accordance with all Laws.

8.2 **Additional Representations and Warranties of Titan as of the Effective Date and the Closing Date**. Titan represents and warrants to Molteni that as of the Effective Date and as of the Closing Date:

(a) Schedule 8.2(a) sets forth, for each patent, patent application, trademark registration and trademark application included in the Transferred Intellectual Property (the "**Registered IP**"), a true and complete list of (i) the title of such Registered IP, (ii) the name or names of the registered and beneficial owner of such Registered IP, (iii) in the case of patents and patent applications, the inventor or inventors of such Registered IP, together with a list of any assignment agreements entered into by such inventor or inventors in respect of such Registered IP, (iv) the jurisdiction of issuance, application or registration of such Registered IP, and (v) the patent number and application or publication number, or trademark registration number and application number for such Registered IP, as applicable.

(b) Other than Encumbrances in favor of Molteni as collateral agent under the Amended and Restated Venture Loan and Security Agreement of even date herewith, Titan exclusively owns the Purchased Assets in the Territory; and the Purchased Assets are not subject to any Encumbrance. The Transferred Intellectual Property in the Territory constitutes all of the Patent Rights and Know-How Controlled by Titan which are necessary and sufficient for Molteni to develop, manufacture, commercialize and Promote the Final Product in the Territory;

(c) Titan has not entered into any agreements, either oral or written, with any Third Party relating to the development, commercialization, manufacture or Promotion of the Product, Semi-Finished Product or any Final Product in or for the Territory, including any agreement granting rights under the Transferred Intellectual Property in the Territory, that are in conflict with the rights granted to Molteni under this Agreement;

(d) Titan has not received any written notice from any Third Party asserting or alleging that the development, manufacture, use or sale of the Product, Product, Semi-Finished Product or any Final Product infringed, violated or misappropriated any rights of such Third Party in the Territory and, the development, manufacture, use or sale of the Product, Semi-Finished Product or any Final Product has not infringed, violated or misappropriated any rights of any Third Party in the Territory;

(e) Other than reviews by the EMA, and non-final grant and examination proceedings of the Transferred Patents before the European Patent Office in the ordinary course of business, there are no pending legal suits or proceedings involving the Transferred Intellectual Property or the Product Semi-Finished Product or any Final Product; and to Titan's knowledge, there are no threatened legal suits or proceedings in the Territory involving the Transferred Intellectual Property or the Product, Semi-Finished Product or any Final Product;

(f) Molteni's use, importation, transportation, promotion, marketing, distribution, offering to sell, selling or otherwise disposing of or offering to dispose of the Final Product in the Territory, will not, in either case, infringe, violate or misappropriate any Patent Rights or other intellectual property or proprietary rights of any Third Party, except to the extent that such infringement, violation or misappropriation arises from Molteni's failure to comply with the terms of this Agreement, Applicable Laws (other than the underlying infringement, violation or misappropriation itself) and Regulatory Approvals;

( g ) Neither Titan nor any of its Affiliates has commenced or threatened to commence, and no Person has commenced or threatened to commence on behalf of Titan or its Affiliates (including by putting a Third Party on notice of actual or potential infringement, violation or misappropriation, and have not invited any Third Party to enter into a license for the Transferred Intellectual Property), any action, suit, claim, investigation, legal or administrative proceeding against any other Person asserting the infringement by such Person or any Affiliate thereof of the Transferred Intellectual Property or claims set forth therein or otherwise relating to the Transferred Patent Rights.

( h ) No claim or demand has been asserted in writing against Titan alleging trademark infringement or misappropriation resulting from the use and/or registration of the Product Trademarks in existence as of the Effective Date;

(i) The claims included in the issued Transferred Patent Rights Covering the Final Products are valid and in full force and effect, and the Registered IP is otherwise subsisting and enforceable. All fees required to be paid to the applicable Governmental Authority prior to the Effective Date to prosecute or maintain the Registered IP in the Territory have been filed and have been paid. To Titan's knowledge, there is no prior art, intellectual property or conduct that it believes could reasonably render the Transferred Patents Rights invalid or unenforceable. To Titan's knowledge, no disclosure, publication, offer for sale, public use or demonstration of any subject matter claimed in a Transferred Patents Right, or any obvious variant thereof, was made prior to the effective patent application filing date applicable to such claimed subject matter. There has been no assertion or claim made by any Person asserting invalidity, misuse or unenforceability of any of the Transferred Intellectual Property or challenging the right of Titan or its Affiliates to use, transfer, or otherwise have exclusive ownership of any of the Transferred Intellectual Property;

( j ) No person, other than former or current employees of Titan who are obligated in writing to assign his/her inventions to Titan, is an inventor of any of the inventions claimed in the Transferred Patents Rights Covering the Final Product held by Titan and filed or issued as of the Effective Date, except for those Third Party inventors of those inventions that fall within any such Transferred Patent Rights Covering the Final Products owned by Titan as to which Titan has obtained an assignment as of the Effective Date. All inventors of any inventions included within the Transferred Patent Rights owned by Titan that are existing as of the Effective Date have assigned or have a contractual obligation to assign or license their entire right, title and interest in and to such inventions and the corresponding Patent Rights to Titan. No present or former employee or consultant of Titan has any financial interest (other than salary, bonus or options or capital stock in Titan) in or to the Transferred Intellectual Property. No present or former employee or consultant of Titan owns or has any proprietary interest (other than salary, bonus or options or capital stock in Titan), direct or indirect, in the Transferred Intellectual Property;

(k) Titan has used commercially reasonable efforts to maintain the Transferred Know-How as confidential and, to Titan's knowledge, no breach of such confidentiality has been committed by any Third Party;

(l) The development of the Final Product that has been conducted prior to the Effective Date by Titan, and to Titan's knowledge, all of its Third Party independent contractors, has been performed in compliance with all Laws;

(m) (i) All Regulatory Documents filed with respect to the Product, Semi-Finished Product and/or Final Product were, at the time of filing, true, complete and accurate in all material respects and (ii) no adverse event information is known by Titan that is materially different in terms of the incidence, severity or nature of such adverse events than any which were filed as safety updates to the Regulatory Documents for the Final Product;

(n) There are no Contracts in effect (including license or similar Contracts) that were entered into by or on behalf of Titan or any Affiliate thereof and that relate to or otherwise affect the Transferred Intellectual Property, including any such Contract relating to employment or consulting services or the acquisition or transfer of title to, or use or license of, any Transferred Intellectual Property by any Person. Without limiting the foregoing, neither Titan nor its Affiliates has entered into, and Molteni will not be subject to, any covenant not to sue or similar restrictions on the enforcement of the Transferred Intellectual Property as a result of any prior transaction, action or Contract related to or otherwise affecting the Transferred Intellectual Property, and there is no obligation imposed by a standards-setting organization on Titan or any Affiliate thereof to license any of the Transferred Intellectual Property, whether on particular terms or conditions or otherwise;

(o) To Titan's knowledge, neither it, its licensors, licensees, or any of its or their respective officers, employees, or agents (i) has made an untrue statement of material fact or fraudulent statement to EMA or any other Regulatory Authority with respect to the development of the Product, Semi-Finished Product or any Final Product or (ii) failed to disclose a material fact required to be disclosed to the EMA or any other Regulatory Authority with respect to the development of the Product, Semi-Finished Product or any Final Product; and

(p) All information, documentation and other materials furnished or made available by Titan to Molteni during Molteni's period of due diligence prior to the Effective Date or during the Agreement Term are and will be true, complete, and correct in all material respects.

8.3 **Titan Covenants**.

(a) Titan shall use commercially reasonable efforts to perform the Services in a timely professional and workmanlike manner using reasonable skill and care by competent and trained personnel.

(b) Titan shall not take any action or agree to any obligation with any Person, contractual or otherwise, that is in conflict with the terms of this Agreement.

8.4 **Disclaimer of Additional Warranties**. EXCEPT AS SET FORTH HEREIN, EACH PARTY HEREBY EXPRESSLY DISCLAIMS ANY WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, EVEN IF EITHER PARTY HAS BEEN ADVISED OF SUCH PURPOSE.

8.5 **Limitation of Liability**. EXCEPT IN CIRCUMSTANCES OF GROSS NEGLIGENCE, FRAUD OR WILLFUL MISCONDUCT BY A PARTY, A BREACH OF ARTICLE 12, OR FOR CLAIMS OF A THIRD PARTY WHICH ARE SUBJECT TO INDEMNIFICATION UNDER ARTICLE 14, NEITHER PARTY SHALL BE LIABLE TO THE OTHER WITH RESPECT TO ANY SUBJECT MATTER OF THIS AGREEMENT, WHETHER UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY, FOR ANY INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS, LOSS OF USE, DAMAGE TO GOODWILL, OR LOSS OF BUSINESS AND WITH RESPECT TO TITAN AS THE PARTY SEEKING DAMAGES, LOST MILESTONES OR LOST ROYALTIES).

## 9. Patent Matters

9.1 **Ownership.** As between the Parties, Molteni shall have and retain all right, title and interest in or Control over, as applicable, all Transferred Patent Rights, inventions, discoveries, and Transferred Know-How concerning the Semi-Finished Product. As between the Parties, except as otherwise provided in and subject to the terms of this Agreement, (a) Titan shall have and retain all rights, title and interest in all inventions, discoveries and know-how relating to Semi-Finished Products, including formulations thereof, or methods of making or using same, or Improvements thereof, that are made, conceived, reduced to practice or generated, solely by Titan's employees, agents, or other persons acting under its authority during the Agreement Term ("**Titan Inventions**"); (b) Molteni shall have and retain all rights, title and interest in all inventions, discoveries and know-how relating to the Final Products, including formulations thereof, or methods of making or using same, or Improvements thereof, that are made, conceived, reduced to practice or generated, singly by Molteni's employees, agents, or other persons acting under its authority during the Agreement Term (" **Molteni Inventions**"); and (c) the Parties shall jointly own all right, title and interest in all inventions, discoveries and know-how relating to the Semi-Finished Products and the Final Products, including formulations thereof, or methods of making or using same, or Improvements thereof, that are made, conceived, reduced to practice or generated jointly during the Agreement Term by Titan's employees, agents, or other persons acting under Titan's authority and Molteni's employees, agents, or other persons acting under Molteni's authority (" **Joint Inventions**"). Titan shall notify Molteni promptly of the existence of any Titan Inventions, and Molteni shall notify Titan promptly of the existence of any Molteni Inventions. For the avoidance of doubt, subject to and solely in accordance with the rights and licenses granted under and the terms and conditions of this Agreement, during the Agreement Term, (i) Molteni shall have the exclusive (even as to Titan) right to use, practice and otherwise exploit any and all Titan Inventions and Joint Inventions in relation to the Final Product in the Territory, and to otherwise freely use the Joint Inventions other than in connection with the Final Product in the Titan Territory, (ii) Titan reserves the right to use, practice or otherwise exploit any and all Titan Inventions and/or Joint Inventions other than in relation to the Final Product in the Territory, and (iii) neither Party shall have any obligation to account to the other Party for profits, or to obtain any approval of the other Party to license, assign or otherwise exploit Joint Inventions in the Territory, by reason of joint ownership thereof, and each Party hereby waives any right it may have under the Laws of any jurisdiction to require any such approval or accounting. Subject to the preceding sentence, Titan grants to Molteni during the Agreement Term an exclusive right and license (with the right to grant sublicenses through multiple tiers of sublicensees), under the Titan Inventions, (i) to import the Semi-Finished Product and to use, Promote, market, distribute, offer for sale, sell or otherwise make use of the Final Products in the Territory, and (ii) to make and have made the Final Product for sale, distribution and/or use in the Territory.

9.2 **Maintenance and Prosecution.**

( a ) Molteni shall have the sole right, but not the obligation, to prepare, file, Prosecute and Maintain the Transferred Intellectual Property. Titan shall reasonably cooperate in all respects with Molteni in the conduct thereof and assist in all reasonable ways (including providing, and obtaining, from the respective inventors, prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, powers of attorney, specifications, declarations or other papers). The Parties will share equally any relevant cost incurred in connection with actions; provided, that any fees required to be paid by Molteni hereunder shall be reduced by an amount equal to any such costs borne by Molteni.

( b ) Molteni has the first right, but not the obligation, to prepare, file, Prosecute and Maintain the Joint Patents, at its own expense. Should Molteni undertake such efforts in relation to the Joint Patents, Molteni will provide to Titan a copy of all proposed filings at least five (5) Business Days in advance of the filing date and will consider in good faith the requests and suggestions of Titan with respect to filing and prosecuting the Joint Patents and will keep Titan informed of progress with regard to the preparation, filing, Prosecution and Maintenance of Joint Patents. In the event that Molteni desires to abandon any Joint Patent, Molteni will provide reasonable prior written notice to Titan of such intention to abandon (which notice will, in any event, be given no later than thirty (30) days prior to the next deadline for any action that may be taken with respect to such Joint Patent). In the event Molteni decides not to Prosecute or Maintain a Joint Patent, or to let any Joint Patent expire or go abandoned, Titan shall have the right, but not the obligation, at its sole expense, to Prosecute and Maintain such patent application or patent as owner thereof and, at Titan's election and at its expense.

9.3 **Third Party Infringement**.

(a) If (i) either party believes that a Joint Patent or any Transferred Intellectual Property is being infringed, violated or misappropriated by a Third Party in the Territory, or (ii) if a Third Party alleges that any Transferred Intellectual Property is invalid or unenforceable or claims that a Final Product, or its use, development, manufacture or sale infringes such Third Party's intellectual property rights in the Territory, the Party possessing such belief or awareness of such claims shall promptly provide written notice to the other Party and provide it with all details of such infringement or claim, as applicable, that are known by such Party.

(b) Molteni shall have the sole right (but not the obligation) to be responsible for the initiation and prosecution of any legal, defense or enforcement action in connection with any infringement of (i) the Transferred Intellectual Property or (ii) the Joint Patents in the Territory. Titan shall join any such proceedings where reasonably requested to do so by Molteni. Titan shall reasonably cooperate in all respects with Molteni in the conduct thereof and assist in all reasonable ways (including providing, and obtaining, from the respective inventors, prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, powers of attorney, specifications, declarations or other papers). The Parties will share equally any relevant cost incurred in connection with such suit or action; provided, that any fees required to be paid by Molteni hereunder shall be reduced by an amount equal to any such costs borne by Molteni. Any recovery, damages or settlement derived from such suit or action shall be retained in its entirety by Molteni.

(c) For clarity, under no circumstance shall Molteni be held liable for damages payable by Titan to any Third Party in relation thereto and Titan shall indemnify and hold Molteni harmless with respect thereto.

(d) If a Transferred Patent Right in effect as of the Effective Date for the Final Product and/or any of the material claims therein ceases to be valid as a result of litigation on an alleged infringement of applicable intellectual property and no other material Valid Claim exists in said country and a Competitive Product is being marketed in said country by a Third Party, then Molteni shall cease to pay any Earn Out Payments as to such country.

9.4 **Patent Term Extensions**. The Parties shall cooperate with each other in obtaining patent term extensions or restorations or supplemental protection certificates or their equivalents in any country in the Territory where applicable and where desired by either Party. Any expenses incurred by the Parties in connection with the foregoing shall be borne equally by the Parties; provided, that Molteni may offset any such costs against any payments due to Titan hereunder.

## 10. Trademark Matters

10.1 **General**. It is the intent of the Parties that Molteni will use the Product Trademarks on and in connection with the marketing, sale, advertising and/or Promotion of Final Products in the Territory; provided, that Molteni shall not be obligated to use any of the Product Trademarks to the extent Molteni otherwise determines in its sole discretion.

10.2 **Use of Product Trademarks**. All packaging materials, package inserts, labels, labeling, and marketing, sales, advertising and Promotional Materials relating to the Final Products and distributed in the Territory shall use the Product Trademark as determined in Molteni's sole discretion.

10.3 **Avoidance of Confusion**.

( a ) The Parties hereby acknowledge and agree that, as between the Parties, upon the Closing, Molteni is the sole and exclusive owner of all right, title, and interest in the Product Trademarks and has the sole and exclusive right to use, register, apply to register, license and authorize others to use the Product Trademarks in the Territory, including with other words and/or designs, or on or in connection with goods and/or services in the Territory. Titan shall not use, apply for, register, license, or authorize others, including without limitation any of its Affiliates, to use the Product Trademarks or any confusingly similar mark on similar goods and/or services in the Territory, including with other words and/or designs, or on or in connection with advertising, marketing, promoting, distributing, importing, or selling similar goods and/or services in the Territory. Notwithstanding anything to the contrary, and the Parties agree that the Titan may use any foreign equivalents, translations or counterparts of the Trademark in the Titan Territory.

( b ) The Parties mutually believe that the continued use and registration of the Product Trademarks in the Territory in connection with the goods and/or services relating to Titan's and Molteni's businesses in accordance with the terms of this Agreement is not likely to cause confusion. In the event that actual confusion should arise, or either Party reasonably believes that a likelihood of confusion may arise, in connection with the Parties' respective uses of the Product Trademarks in the Territory, the Parties will fully cooperate in an effort to eliminate such confusion and to avoid the possibility of such a likelihood of confusion.

( c ) For the avoidance of doubt, the Parties acknowledge and agree that, Molteni may establish websites at top level domain names using the Product Trademarks, and make use of the Product Trademarks in social media, in the Territory, all of which may be viewed by individuals in the Titan Territory, and that Molteni's use of the Product Trademarks on the Internet in top level domains or in country code domains corresponding to the Territory shall not be deemed a use of the Product Trademarks in the Titan Territory. Likewise the Parties acknowledge and agree that Titan may establish websites at top level domain names using the Product Trademarks, and make use of the Product Trademarks in social media, in the Territory, all of which may be viewed by individuals in the Territory, and that Titan's use of the Product Trademarks on the Internet in top level domains or in country code domains corresponding to the Titan Territory shall not be deemed a use of the Product Trademarks in the Territory.

**11. Adverse Experiences/ Pharmacovigilance and Drug Safety**

11.1 **Prior to MAA Transfer Date.** Prior to the MAA Transfer Date, Titan shall be responsible for the timely filing with the applicable Regulatory Authority of all Adverse Experience reports in the Territory in accordance with Applicable Law.

1 1 . 2 **Titan's Responsibility.** At all times, all activities connected to global drug safety, pharmacovigilance and global safety labeling relating to the Product are Titan's responsibility. In this respect, prior to the MAA Transfer Date, the Parties shall execute a separate pharmacovigilance agreement in compliance with applicable European Laws and regulations. In addition, the Parties shall exchange any information relating to alerts, batch recall or manufacturing deficiencies as soon as they became aware of such, in each case, subject to Applicable Law.

11.3 **Following MAA Transfer Date.**

( a ) Following the MAA Transfer Date, all activities related to local drug safety and pharmacovigilance in the Territory, including timely filing with the applicable Regulatory Authority of all Adverse Experience reports in the Territory, shall be Molteni's responsibility and subject to Applicable Law.

(b) Molteni shall report all material and adverse events, including Adverse Experience reports, to Titan to ensure global coordination of adverse events. The Parties shall exchange any information relating to alerts, batch recall or manufacturing deficiencies as soon as they became aware of such, in each case, subject to Applicable Law.

(c) Such exchange shall provide for the exchange of all safety information between the Parties sufficient to enable each Party to comply with its legal obligations to report to the applicable Regulatory Authority, include any measures necessary for each Party to comply with Laws applicable to such Party. Each Party shall promptly provide the other Party with copies of all such reports, analyses, summaries and all submissions to the FDA or any other Regulatory Authority. The Adverse Experience procedures utilized in the preparation and filing of such reports will incorporate the provisions set forth in Section 11.4 (Reporting).

11.4 **Reporting**. Prior to Launch, Molteni will establish a toll-free phone number for patients, physicians and others to report Adverse Experiences. The costs of such reporting and of all services provided by any Third Party contractor in connection with Adverse Experiences hereunder shall be borne by Molteni. Molteni or a Third Party contractor will timely collect reasonable information about the Adverse Experiences, initiate and conduct reasonably required investigations, interact with Titan if physical or other testing of a Final Product appears to be reasonably required, determine the nature of the Adverse Experience based on data and reports it has obtained, and issue any reports, analyses or summaries of its activities as may be required by Law. Copies of all such reports, including reports filed by Titan with the applicable Regulatory Authority, will be promptly provided to Molteni.

11.5 **Correspondence**. All safety related reports and correspondence shall be addressed to such safety representative as may be designated by Molteni and Titan.

## 12. Confidentiality and Publicity

12.1 **Non-Disclosure and Non-Use Obligations**. All Proprietary Information disclosed by one Party to the other Party hereunder shall be maintained in confidence and shall not be disclosed to any Third Party or used for any purpose except as expressly permitted herein without the prior written consent of the Party that disclosed the Proprietary Information to the other Party during the Agreement Term and thereafter. The foregoing non-disclosure and non-use obligations shall not apply to the extent that such Proprietary Information:

(a) is known by the receiving Party at the time of its receipt, and not through a prior disclosure by the disclosing Party or subject to any confidentiality obligation, as documented by business records;

(b) is or becomes properly in the public domain or knowledge without breach by either Party or such Party's Affiliates or their respective employees, officers, directors, agents or representatives; or

(c) is subsequently disclosed to a receiving Party by a Third Party who, to the knowledge of the receiving Party, is lawfully able do so and, to the knowledge of the receiving Party, is not under an obligation of confidentiality to the disclosing Party.

12.2 **Permitted Disclosure of Proprietary Information**. Notwithstanding Section 12.1, a Party receiving Proprietary Information of another Party may disclose such Proprietary Information:

(a) to governmental or other regulatory agencies in order to obtain Patent Rights pursuant to this Agreement, or to gain approval to conduct clinical trials or to market Final Products, but such disclosure may be made only to the extent reasonably necessary to obtain such Patent Rights or authorizations and in accordance with the terms of this Agreement or as otherwise requested by the FDA or another Regulatory Authority;

(b) in connection with the performance of this Agreement and solely on a need-to-know basis, to Affiliates; potential or actual collaborators (including potential sublicensees); potential or actual investment bankers, accountants, investors, lenders, or acquirers; or employees, independent contractors (including consultants and clinical investigators) or agents, each of whom prior to disclosure must be bound by written obligations of confidentiality and non-use no less restrictive than the obligations set forth in this Article 12 or to counsel for such Party; provided, however, that the receiving Party shall (i) undertake reasonable precautions to safeguard and protect the confidentiality of the Proprietary Information; (ii) remain responsible for any failure by any Person who receives Proprietary Information pursuant to this Article 12 to treat such Proprietary Information as required under this Article 12; and (iii) take all reasonable measures to restrain the receiving Party and any such Persons from prohibited or unauthorized disclosure or use in violation of this Article 12; or

(c) if required to be disclosed by Law or court order, provided that notice is promptly delivered to the non-disclosing Party in order to provide an opportunity to challenge or limit the disclosure obligations.

If and whenever any Proprietary Information is disclosed in accordance with this Section 12.2, such disclosure shall not cause any such information to cease to be Proprietary Information except to the extent that such disclosure results in an authorized public disclosure of such information (other than in breach of this Agreement). Where reasonably possible and subject to Section 12.3, the receiving Party shall promptly notify the disclosing Party of the receiving Party's intent to make such disclosure pursuant to Sections 12.2(a)–12.2(c) sufficiently prior to making such disclosure so as to allow the disclosing Party adequate time to take whatever action it may deem appropriate to protect the confidentiality of the information, and the receiving Party shall cooperate with the disclosing Party in such efforts.

12.3 **Disclosure of Agreement to Governmental Authority**. Without limiting any of the foregoing, it is understood that the Parties or their Affiliates may make disclosure of this Agreement and the terms hereof in any filings required by the United States Securities and Exchange Commission and any successor agency having substantially the same functions (the "**SEC**"), other Governmental Authority or securities exchange, may file this Agreement as an exhibit to any filing with the SEC, other governmental authority or securities exchange, and may distribute any such filing in the ordinary course of its business; provided however, that the Party seeking such previously undisclosed disclosure first provides the other Party a copy of the proposed disclosure, and provided further that (except to the extent that the Party seeking disclosure is required to disclose such information in its entirety to comply with Applicable Law) if the other Party demonstrates to the reasonable satisfaction of the Party seeking disclosure, within two (2) Business Days of such Party's providing the copy, that the public disclosure of previously undisclosed information will materially adversely affect the development and/or commercialization that are the subject of this Agreement, the Party seeking disclosure will remove from the disclosure such specific previously undisclosed information as the other Party shall reasonably request to be removed, or otherwise provide a good faith reason to the other Party why such disclosure was not removed. Notwithstanding the foregoing, with respect to an SEC filing that includes this Agreement or any amendment hereto, the Party seeking the disclosure shall provide the other Party two (2) Business Days to review such disclosure and propose redactions to the Agreement to be filed with the SEC, which proposed redactions shall be applied except to the extent such redactions are rejected by the SEC, in which case the Parties will work together in good faith to resolve.

12.4 **Publications**. Titan and Molteni each acknowledge the other Party's interest in publishing its results related to the Final Products to obtain recognition within the scientific community and to advance the state of scientific knowledge. Each Party also recognizes the mutual interest in obtaining valid patent protection and in protecting business interests and trade secret information. Accordingly, neither Party shall submit for written or oral publication any manuscript, abstract or the like relating to the Final Products without the prior consent of the other Party, not to be unreasonably withheld or delayed. Any Party proposing to submit such publication shall deliver the proposed publication or an outline of the oral disclosure at least ten (10) Business Days prior to planned submission or presentation (twenty-four (24) hours for a meeting abstract). At the reasonable request of the other Party, the submission of such publication may be reasonably delayed as necessary for any issues of patent protection to be addressed. In the absence of any such request, upon expiration of the applicable period referred to in this Section 12.4 the publishing Party shall be free to proceed with the publication or presentation even if consent is not affirmatively provided. If the other Party requests reasonable modifications to the publication necessary to prevent disclosure of trade secret, Proprietary Information or proprietary business information prior to submission of the publication or presentation, the publishing Party shall so edit such publication. The contribution of each Party, if any, shall be noted in all publications or presentations by acknowledgment or co-authorship, whichever is appropriate.

12.5 **Other Public Statements**.

(a) The parties will agree on the content of any press release relating to this Agreement, and neither party shall make public the parties' relationship, or any of the terms herein except as required by applicable securities or regulatory laws (as set forth in Section 12.3) without the prior written consent of the other party.

(b) Except as set forth in this Agreement or as required by Law, neither Party shall make any press release or other announcement to the general public or other disclosure to a Third Party relating to the Final Products without the prior written consent of the other Party, which consent shall include agreement upon the nature and text of such announcement or disclosure and shall not be unreasonably withheld or delayed. Each Party agrees to provide to the other Party a copy of any public announcement as soon as reasonably practicable under the circumstances prior to its scheduled release. Each Party shall have the right to expeditiously (but in any event within forty-eight (48) hours of receipt) review and recommend changes to any press release or announcement regarding this Agreement or the subject matter of this Agreement; provided, however that such right of review and recommendation shall only apply for the first time that specific information is to be disclosed, and shall not apply to the subsequent disclosure of substantially similar information that has previously been disclosed unless there have been material developments relating to the Final Products since the date of the previous disclosure.

12.6 **No Rights to Use Name of Other Party**. Except as provided herein, neither Party shall use the name, trademark, trade name or logo of the other Party in any publicity, promotion, news release or disclosure relating to this Agreement or its subject matter, without the prior express written permission of the other Party, except as may be required by Law.

## 13. Term

13.1 **Term.** This Agreement shall be effective as of the Effective Date and shall extend for a period that shall remain in force for the Final Product and country in the Territory on a country-by-country basis (the "**Agreement Term**") as to each country until the later of (i) termination of any applicable data exclusivity period, (ii) the expiration of the last Valid Claim of Patent Rights Covering the Final Product in each country, or (iii) fifteen (15) years from the execution of the Agreement; provided, that clause (iii) shall terminate for any country in the Territory when any Competitive Product enters the market.

13.2 **Expiration**. Upon expiration of the Agreement Term, Molteni will no longer be liable for any Earn-Out Payments or milestone payments.

13.3 **Reserved.**

13.4 **Rights Not Affected**. All rights and licenses granted pursuant to this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the Bankruptcy Code licenses of rights to "intellectual property" as defined under Section 101(35A) of the Bankruptcy Code. The Parties agree that Molteni and Titan shall retain and may fully exercise all of their respective rights, remedies and elections under the Bankruptcy Code. The Parties further agree that, in the event of the commencement of a bankruptcy or reorganization case by or against a Party under the Bankruptcy Code, the other Party shall be entitled to all applicable rights under Section 365 (including 365(n)) of the Bankruptcy Code. Upon rejection of this Agreement by Titan or a trustee in bankruptcy for Titan, pursuant to Section 365(n) Molteni may elect (a) to treat this Agreement as terminated by such rejection or (b) to retain its rights (including any right to enforce any exclusivity provision of this Agreement, but excluding any other right under non-bankruptcy law to specific performance of this Agreement) to intellectual property (including any embodiment of such intellectual property to the extent protected by applicable non-bankruptcy law as such rights existed immediately before such bankruptcy case commenced) under this Agreement and under any agreement supplementary to this Agreement for the duration of this Agreement and any period for which this Agreement could have been extended by Molteni as of right, subject, however, to the continued payment of all amounts owing under Section 7.2 of this Agreement, all of which amounts shall be deemed to be royalties for purposes of Section 365(n) of the Bankruptcy Code. For the avoidance of doubt, other than those payments paid by Molteni to Titan pursuant to Section 7.2, no other amounts payable under this Agreement shall be deemed royalties for purposes of Section 365(n) of the Bankruptcy Code. If, following rejection of this Agreement, Molteni wishes to retain its rights hereunder, then upon Molteni's written request to the trustee in bankruptcy or to Titan, the trustee or Titan, as applicable, shall (i) provide to Molteni any intellectual property (including any embodiment of such intellectual property) held by the trustee or Titan and shall provide to the Molteni a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property and (ii) not interfere with the rights of Molteni to such intellectual property as provided in this Agreement or any agreement supplementary to this Agreement, including any right to obtain such intellectual property (or such embodiment or duplicates thereof) from a Third Party.

13.5 **Reserved.**

13.6 **Survival**. Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing prior to such expiration or termination, including all accrued payment obligations arising under Articles 6 and 7. In addition to any other provisions of this Agreement that, by their terms continue after the expiration of this Agreement, Articles 1 (Definitions), 15 (Dispute Resolution) and 16 (Miscellaneous), Sections 2.10 (Further Assurances), 7.4 (Reports and Payments), 7.5 (Taxes), 7.6 (Audits), 8.4 (Disclaimer of Additional Warranties), 8.5 (Limitation of Liability), 9.1 (Ownership of Inventions), 9.2 (Prosecution and Maintenance of Joint Patents), 13.4 (Rights Not Affected), and this 13.6 (Survival) shall survive the expiration or termination of this Agreement. Additionally, the provisions of Articles 12 and 14 shall survive the expiration or termination of this Agreement. In addition, any other provisions required to interpret and enforce the Parties' rights and obligations under this Agreement shall also survive, but only to the extent required for the full observation and performance of this Agreement. Any expiration or early termination of this Agreement shall be without prejudice to the rights of any Party against the other accrued or accruing under this Agreement prior to termination. Except as expressly set forth herein, the rights to terminate as set forth herein shall be in addition to all other rights and remedies available under this Agreement, at Law, or in equity, or otherwise.

13.7 **Step-in Rights**. In the event (a) of a material disruption to any of the services to be performed by Titan under this Agreement, including those services contemplated by Article 4, Article 6 and Article 11 hereunder (the " **Services**") (including a disruption due to Force Majeure), (b) of repeated Services performance failures (provided that Molteni gives notice to Titan of such repeated Services performance failures and Molteni's intent to exercise its step in rights and provides Titan with a reasonable period, not to exceed thirty (30) days, to cure such Services performance failures), (c) Titan states that it is unable to perform, or refuses to perform, any Services, or (d) Molteni is directed, or required, by a Law or Governmental Authority to step in, Molteni may, in each case, step in and supervise or perform, or designate a Third Party to step in and supervise or perform, Titan's performance of the impacted Services, until such time that Titan can demonstrate the ability to resume the performance of such Services (the date Molteni steps-in, the "**Step-In Date**"). Titan shall be liable for Molteni's costs and expenses incurred as a result of exercising its rights under this Section. Molteni's exercise of its rights under this Section shall not constitute a waiver by Molteni of any rights it may have (including Molteni's rights in Sections 6.2, 7.7 and 16.5) before, on or after the Step-In Date. Titan shall cooperate with Molteni in respect of such step-in including by providing access to resources and any other assistance and information reasonably requested by Molteni. If Molteni exercised its step-in rights, Molteni may elect to cease exercising its right to step-in at any time by giving notice to Titan ("**Step-Out Notice**"). Within three (3) Business Days after the Step-In Date, Titan shall develop a plan to demonstrate to Molteni how it shall resume the proper performance of the applicable Services ("**Step-Out Plan**"), and shall provide such Step-Out Plan to Molteni for approval. Approval by Molteni of the Step-Out Plan shall not constitute a waiver by Molteni of any rights it may have if Titan is unable to perform any of its obligations in accordance with the terms of this Agreement after the Step-Out Date. The Step-Out Plan and delivery of the Services shall remain Titan's responsibility. Following receipt and review of any Step-Out Plan, Molteni shall either (a) confirm the date for resumption of the affected Services by Titan as being the date set out in the Step-Out Notice or (b) revise the date to reflect the time to implement the Step-Out Plan and the state of readiness of Titan; which date shall be no later than thirty (30) days after the resumption of the Services by Titan. The date notified by Molteni under clause (a) or clause (b) shall be the "**Step-Out Date**". Once Molteni has notified Titan of a Step-Out Date, Titan shall devote all necessary resources to implement the Step-Out Plan such that delivery of the affected Services by Titan is restored to the level of service set forth in Section 8.3(a), and that the affected Services are delivered in accordance with all other provisions of this Agreement from the Step-Out Date. During any step-in period, the Parties shall meet at least weekly to discuss progress toward remedying the event which gave rise to exercise of the step-in right, including deciding whether or not Titan can resume performance of the affected Services.

## 14. Indemnification and Insurance

14.1 **Indemnity**.

(a) **Parties**. For purposes of this Article 14, "**Titan Indemnified Parties**" refers to Titan, its Affiliates and the officers, directors, employees, shareholders, agents and successors and assigns of Titan and its Affiliates, and "**Molteni Indemnified Parties**" refers to Molteni, its Affiliates and officers, directors, employees, shareholders, members, partners, agents and successors and assigns of Molteni and its Affiliates.

(b) **Limitations**. In no event shall either Party be liable for or have any obligation to compensate or indemnify the other Party's indemnified Parties for any indirect or consequential damages claimed by such other Party other than in connection with their respective indemnification obligations set forth in this Article 14, including the loss of opportunity, loss of use, or loss of revenue or profit, in connection with or arising out of this Agreement or breach thereof.

14.2 **Molteni Indemnification**. Molteni shall indemnify, defend and hold harmless to the fullest extent permitted by Law the Titan Indemnified Parties from and against from and against any and all Losses incurred by any of them in connection with any and all suits, investigations, claims or demands of Third Parties (collectively, "**Third Party Claims**") in connection with, arising from or occurring as a result of: (a) the material breach by Molteni of any of its obligations under this Agreement; (b) the material breach or inaccuracy in any material respect of any representation or warranty made by Molteni in this Agreement; (c) other than in accordance with this Agreement (including to the extent related to or caused by Titan's performance of its obligations pursuant to Article 4, Article 6 or Article 11 hereunder), the manufacturing, use, marketing, sale, promotion, packaging, labeling, storage or distribution of the Final Products in the Territory by Molteni, its Affiliates or any of its or their respective sublicensees or Marketing Distributors, including any death, personal injury or other product liability arising out of or related to the Final Products, and excluding any claims by a Third Party that the manufacturing, use, marketing, sale, promotion, packaging, labeling, storage or distribution of the Final Products in the Territory by Molteni infringes, misappropriates or otherwise violates any patent or other intellectual property or proprietary right of such Third Party; (d) any Assumed Liability or (e) the gross negligence, fraud or willful misconduct of any Molteni Indemnified Party in performing any activities in connection with this Agreement, in each case except for those Losses for which Titan has an obligation to indemnify any Molteni Indemnified Parties pursuant to Section 14.3, as to which Losses each Party shall indemnify each of the Titan Indemnified Parties or Molteni Indemnified Parties, as applicable, for the applicable Losses to the extent of its responsibility, relative to the other Party, for the facts underlying the applicable Third Party Claim.

14.3 **Titan Indemnification**. Titan shall indemnify, defend and hold harmless to the fullest extent permitted by Law the Molteni Indemnified Parties from and against from and against any and all Losses incurred by any of them in connection with any and all Third Party Claims in connection with, arising from or occurring as a result of: (a) the material breach by Titan of any of its obligations under this Agreement; (b) the material breach or inaccuracy in any material respect of any representation or warranty made by Titan in this Agreement; (c) claims relating to the manufacturing, use, marketing, sale, promotion, packaging, labeling, storage or distribution of Semi-Finished Products, including any death, personal injury or other product liability arising out of or related to the Semi-Finished Products; (d) the gross negligence, fraud or willful misconduct of any Titan Indemnified Party in performing any activities in connection with this Agreement; (e) any claims by a Third Party that the manufacturing, use, marketing, sale, promotion, packaging, labeling, storage or distribution of the Final Products in the Territory by Molteni infringes, misappropriates or otherwise violates any patent or other intellectual property or proprietary right of such Third Party, except to the extent that such infringement, violation or misappropriation arises from Molteni's failure to comply with the terms of this Agreement, Applicable Laws (other than the underlying infringement, violation or misappropriation itself) and Regulatory Approvals; (f) any Excluded Liability; or (g) any claim by any upstream licensor of Titan, in each case except for those Losses for which Molteni has an obligation to indemnify any Titan Indemnified Parties pursuant to Section 14.2, as to which Losses each Party shall indemnify each of the Molteni Indemnified Parties or Titan Indemnified Parties, as applicable, for the applicable Losses to the extent of its responsibility, relative to the other Party, for the facts underlying the applicable Third Party Claim.

14.4 **Indemnification Procedure**. Each Party shall promptly notify the other Party in writing of any Third Party Claim. Concurrent with the provision of notice pursuant to this section, the indemnified Party shall provide to the other Party copies of any complaint, summons, subpoena or other court filings or correspondence related to such Third Party Claim and will give such other information with respect thereto as the other Party shall reasonably request. The indemnifying Party and indemnified Party shall meet to discuss how to respond to such Third Party Claim. Failure to provide prompt notice shall not relieve any Party of the duty to defend or indemnify except to the extent such failure materially prejudices the defense of any matter. Each Party agrees that it will take reasonable steps to minimize the burdens of the litigation on witnesses and on the ongoing business of the indemnified Parties, including making reasonable accommodations to witnesses' schedules when possible and seeking appropriate protective orders limiting the duration and/or location of depositions. The indemnified Party shall have the right to participate, at its own expense and with counsel of its choice, in the defense of any Third Party Claim or suit that has been assumed by the indemnifying Party; provided however, that the indemnifying Party shall have no obligations with respect to any Losses resulting from the indemnified Party's settlement of such Third Party Claim without the prior written consent of the indemnifying Party.

14.5 **Settlement of Indemnified Claims**. The indemnifying Party under Section 14.2 or 14.3, as applicable, shall have the sole authority to settle any indemnified Third Party Claim without the consent of the other Party; provided, however, that an indemnifying Party shall not, without the written consent of the other Party, as part of any settlement or compromise (a) admit to liability or fault on the part of the other Party; (b) agree to an injunction against the other Party; or (c) settle any matter or consent to any final judgment in a manner that (i) separately apportions fault to the other Party, (ii) requires a monetary payment by the other Party, or (iii) negatively affects the other Party's rights in and to any of its intellectual property. The Parties further agree that as part of the settlement of any indemnified Third Party Claim, an indemnifying Party shall obtain a full, complete and unconditional release from the claimant on behalf of the indemnified Parties.

14.6 **Insurance**.

(a) **By Titan**. Titan shall maintain in full force at its expense, commencing as of the Effective Date and for a period of three (3) years after any expiration of termination of this Agreement, a Commercial General Liability Insurance policy or policies (including coverage for Product Liability, Contractual Liability, Bodily Injury, Property Damage and Personal Injury), with minimum limits of US$5,000,000 (five million dollars) per occurrence and in the aggregate and shall name Molteni as an additional insured on such policy against any and all claims for bodily injury, personal injury and property damage. Such insurance shall insure against all liability arising out of Titan's (i) manufacture, use, sale, distribution, or marketing of the Products in the Titan Territory and (ii) manufacture of Semi-Finished Products in the Territory.

(b) **By Molteni**. Molteni shall maintain in full force at its expense, commencing prior to the MAA Transfer Date and for a period of three (3) years after any expiration of termination of this Agreement, a Commercial General Liability Insurance policy or policies (including coverage for Product Liability, Contractual Liability, Bodily Injury, Property Damage and Personal Injury), with minimum limits of US$20,000,000 (twenty million dollars) per occurrence and in the aggregate and shall name Titan as an additional insured on such policy against any and all claims for bodily injury, personal injury and property damage. Such insurance shall insure against all liability arising out of Molteni's manufacture, use, sale, distribution, or marketing of the Products and Final Products in the Territory.

(c) **Obligations**. During the Agreement Term, each Party shall not permit such insurance to be reduced (other than by payment of Third Party Claims), expired or canceled without reasonable prior written notice, unless outside of the control of the Party, to the other Party. Upon request each Party shall provide Certificates of Insurance to the other Party evidencing the coverage specified herein. Except as expressly stated herein, a Party's liability to the other is in no way limited to the extent of the Party's insurance coverage.

## 15. Dispute Resolution

15.1 **Disputes**. The Parties recognize that disputes as to certain matters may from time to time arise during the Agreement Term which relate to either Party's rights and/or obligations hereunder. It is the objective of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. To accomplish this objective, the Parties agree to follow the procedures set forth in this Article 15 to resolve any controversy or claim arising out of, relating to or in connection with any provision of this Agreement, if and when a dispute arises under this Agreement.

15.2 **Internal Resolution**. With respect to all disputes arising between the Parties under this Agreement, if the Parties are unable to resolve such dispute within thirty (30) days after such dispute is first identified by either Party in writing to the other, the Parties shall refer such dispute to the Chief Executive Officers of the Parties for attempted resolution by good faith negotiations within thirty (30) days after such notice is received. If the Chief Executive Officers of the Parties cannot resolve the dispute within thirty (30) days after such notice is received, such dispute shall be resolved in accordance with the terms of Section 15.3.

15.3 **Equitable Relief**. Notwithstanding the foregoing provisions of this Article 15, either Party may bring an action for an injunction or other equitable relief with respect to any actual or threatened breach of this Agreement. For the avoidance of any doubt, nothing in this Article 15 shall preclude, interfere with or modify either Party's rights under Article 13 above with respect to the termination of this Agreement. Any dispute that is not resolved as provided in Section 15.2, whether before or after termination of this Agreement, will be resolved by litigation in the courts of competent jurisdiction located in New York, New York. Each Party hereby agrees to the exclusive jurisdiction of such courts and waives any objections as to the personal jurisdiction or venue of such courts.

**16. Miscellaneous**

16.1 **Force Majeure**. Neither Party shall be held liable or responsible to the other Party nor be deemed to have defaulted under or breached the Agreement for failure or delay in fulfilling or performing any term of the Agreement during the period of time when such failure or delay is caused by or results from a Force Majeure event or act, omission or delay in acting by the other Party. The affected Party shall notify the other Party of such Force Majeure circumstances as soon as reasonably practicable. Any suspension of performance shall be of no greater scope and of no longer duration than is reasonably required and the Party suffering the Force Majeure shall use Commercially Reasonable Efforts to remedy its inability to perform.

16.2 **Assignment**. This Agreement may not be assigned or otherwise transferred without the prior written consent of the other Party; provided, however, that:

(a) Titan may assign this Agreement to (i) an Affiliate of Titan or (ii) in connection with the transfer or sale of its business or all or substantially all of its assets or in the event of a merger, consolidation, change in control or similar corporate transaction (any of the foregoing, a "**Corporate Transaction**"), without such consent; and

(b) Molteni may assign this Agreement to (i) an Affiliate of Molteni or (ii) in connection with a Corporate Transaction, without such consent.

This Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the Parties. Any purported assignment not in accordance with this Agreement shall be void.

16.3 **Severability**. In the event that any of the provisions contained in this Agreement are held 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, unless the absence of the invalidated provision(s) adversely affects the substantive rights of the Parties. In such event, the Parties covenant and agree to renegotiate any such term, covenant or application thereof in good faith in order to provide a reasonably acceptable alternative to the term, covenant or condition of this Agreement or the application thereof that is invalid or unenforceable, it being the intent of the Parties that the basic purposes of this Agreement are to be effectuated.

16.4 **Notices**.

(a) Correspondence, reports, documentation, and any other communication in writing between the Parties in the course of ordinary implementation of this Agreement (but not including any notice required by this Agreement) shall be in writing and delivered by hand, sent by facsimile, or by overnight express mail (e.g., FedEx) to any one (1) member of the Steering Committee appointed by the Party which is to receive such written communication, or any other way as the Steering Committee deems appropriate.

(b) Extraordinary notices and communications (including notices of termination, Force Majeure, material breach, change of address, or any other notices required by this Agreement) shall be in writing and shall be deemed to have been given when delivered in person, or sent by overnight courier service (e.g., FedEx), postage prepaid, or by facsimile confirmed by prepaid registered or certified air mail letter or by overnight express mail (e.g., FedEx), or sent by prepaid certified or registered air mail, return receipt requested, to the following addresses of the parties (or to such other address or addresses as may be specified from time to time in a written notice), and shall be deemed to have been properly served to the addressee upon receipt of such written communication, to the following addresses of the Parties:

if to Titan to:

Titan Pharmaceuticals, Inc.
400 Oyster Point Blvd., Suite 505
South San Francisco, CA 94080-1921
Attention: President & CEO (Sunil Bhonsle)
Fax No.: 650-244-4956

with a copy to:

Fran M. Stoller, Esq.
Loeb & Loeb LLP
345 Park Avenue
New York, NY 10154
Fax No.: 212-214-0706

if to Molteni to:

L. Molteni & C. dei F.lli Alitti Società di Esercizio S.p.A.
Strada Statale 67
Frazione Granatieri
Scandicci (Florence), Italy
Attention: Giuseppe Seghi Recli
Fax No.: +39 055 720057

with a copy to:

Willkie Farr & Gallagher LLP
787 Seventh Avenue
New York, NY 10019-6099
Fax No.: 212 728 9968
Attn: Mark A. Cognetti, Esq.

Studio Legale Delfino e Associati
Willkie Farr & Gallagher LLP
Via Michele Barozzi, 2
20122 Milan
Attn: Maurizio Delfino

or to such other address as the Party to whom notice is to be given may have furnished to the other Parties in writing in accordance herewith. Any such communication shall be deemed to have been given when delivered if personally delivered or sent by facsimile on a Business Day, upon confirmed delivery by nationally-recognized overnight courier if so delivered and on the third Business Day following the date of mailing if sent by registered or certified mail.

16.5 **Remedies**.

(a) Cumulative Remedies. All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either Party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at Law, in equity, by statute, in any other agreement between the Parties or otherwise.

(b) Specific Performance. Each of the Parties acknowledges and agrees that the other Party would be damaged irreparably in the event any of the provisions of this Agreement are not performed in all material respects or otherwise are breached. Accordingly, and notwithstanding anything herein to the contrary, each of the Parties agree that the other Party shall be entitled to injunctive relief to prevent breaches of the provisions of this Agreement, and/or to enforce specifically this Agreement and the terms and provisions hereof, in any action instituted in any court or tribunal having jurisdiction over the Parties and the matter, without posting any bond or other security, and that such injunctive relief shall be in addition to any other remedies to which such Party may be entitled, at Law or in equity.

(c) No Further Obligations. If Titan materially breaches its performance of any of its material representations or obligations hereunder, and has not cured such breach within sixty (60) days (or, if such breach cannot be cured within such sixty (60) day period, if Titan does not commence and diligently continue actions to cure such breach during such sixty (60) day period and does not ultimately cure such breach within ninety (90) days after notice) after notice of such breach is provided by Molteni to Titan for other cases of breach, then in addition to any other rights and remedies that Molteni may at Law or in equity, Molteni shall have no further obligation to perform any of its obligations under Article 5 and Sections 2.8(a), 2.9(a), 6.1, 6.2, 6.4, and 6.5.

16.6 **Applicable Law and Venue**. This Agreement shall be governed and construed by the Laws of the State of New York without regard to principles of conflicts of laws and any dispute arising out of, or in connection with, this Agreement, shall be subject to the exclusive jurisdiction of any New York State or federal court located in the City of New York, County of Manhattan. The United Nations Convention On Contracts For The International Sale Of Goods shall not apply in any action, suit or proceeding arising out of or relating to this Agreement.

16.7 **Entire Agreement**. This Agreement, including the Schedules hereto, contains the entire understanding of the Parties with respect to the subject matter of this Agreement. All express or implied agreements and understandings, either oral or written, made on or before the Effective Date, including any offering letters or term sheets, are expressly superseded by this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by all Parties.

16.8 **Independent Contractors**. It is expressly agreed that the Parties shall be independent contractors and that the relationship between the Parties shall not constitute a partnership, joint venture or agency. Neither Party shall have the authority to make any statements, representations or commitments of any kind, or to take any action, that shall be binding on the other Party, without the prior consent of such other Party.

16.9 **Waiver**. The waiver by a Party hereto of any right hereunder or the failure to perform or of a breach by another Party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by said other Party whether of a similar nature or otherwise.

16.10 **Headings; References; Interpretation**. The captions to the several Articles, Schedules or Sections of this Agreement are not a part of the Agreement, but are merely guides or labels to assist in locating and reading the several Articles, Schedules or Sections of this Agreement. Where words and phrases are used herein in the singular, such usage is intended to include the plural forms where appropriate to the context, and vice versa. The words "including", "includes" and "such as" are used in their non-limiting sense and have the same meaning as "including without limitation" and "including but not limited to". Any reference in this Agreement to an Article, Schedule or Section shall, unless otherwise specifically provided, be to an Article, Schedule or Section of this Agreement. "Herein" means anywhere in this Agreement. "Hereunder" and "hereto" means under or pursuant to any provision of this Agreement.

16.11 **Counterparts**. The Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures to the Agreement transmitted by fax, by email in "portable document format" ("**pdf**") or by any other electronic means intended to preserve the original graphic and pictorial appearance of the Agreement shall have the same effect as physical delivery of the paper document bearing original signature.

[Remainder of this page intentionally left blank]

**IN WITNESS WHEREOF**, the Parties have executed this Agreement as of the Effective Date.

TITAN PHARMACEUTICALS, INC.

By: /s/ Sunil Bhonsle
Name: Sunil Bhonsle
Title: Chief Executive Officer

[*Signature Page to Asset Purchase, Supply and Support Agreement*]

L. MOLTENI & C. DEI F.LLI ALITTI SOCIETÀ
DI ESERCIZIO S.P.A.

By: /s/ Giuseppe Seghi Recli
Name: Giuseppe Seghi Recli
Title: Managing Director

[*Signature Page to Asset Purchase, Supply and Support Agreement*]

**SCHEDULE 1.99**

**Titan House Marks**

## SCHEDULE 1.105

**Transferred Core Patents**

European Patent Application No. 12193435.0

Publication No. EP 2561860A

“Implantable Polymeric Device for Sustained Release of Buprenorphine”

Inventors: Rajesh A. PATEL and Louis R. BUCALO

## SCHEDULE 3.1

**Steering Committee Members**

**Titan designees:**

Kate Beebe (the Steering Primary Contact pursuant to Section 3.1(c))

Marc Rubin

**Molteni designees:**

Bruno Fiorentino (the Steering Primary Contact pursuant to Section 3.1(c))

Federico Seghi Recli

**SCHEDULE 6.3**

**Purchase Price**

**[*******]**

## SCHEDULE 8.2(a)

**Registered IP**

1. European Patent Application No. 12193435.0

   Publication No. EP 2561860A

   "Implantable Polymeric Device for Sustained Release of Buprenorphine"

   Inventors: Rajesh A. PATEL and Louis R. BUCALO

2. The following trademark registrations with the European Union Intellectual Property Office:
   a. PROBUPHINE, Reg. No. 010891646 – Filing date of 5/17/2012, Registration date of 10/11/2012.
   b. PROBUPHINE, Reg. No. 017362781 – Filing date of 10/18/2017, Registration date of 1/29/2018.
   c. PROBUPHINE, Reg. No. 002707743 – Filing date of 5/16/2002, Registration date 10/27/2003.
   d. PRONEURA, Reg. No. 004940359 – Filing date of 3/1/2006, Registration date of 2/13/2007.

3. The following trademark registrations with the Swiss Federal Institute of Intellectual Property:
   a. PRONEURA, Reg. No. 524391 – Filing date of 6/1/2004, Registration date of 8/3/2004.
   b. PROBUPHINE, Reg. No. 502931 – Filing date of 5/17/2002, Registration date of 9/5/2002.
   c. PROBUPHINE, Reg. No. 631889 – Filing date of 5/18/2012, Registration date of 7/16/2012.
   d. PROBUPHINE, Reg. No. 712054 – Filing date of 10/17/2017, Registration date 1/19/2018.

## EXHIBIT A

**Bill of Sale**

See attached.

## EXHIBIT B

**IP Assignment Agreements**

Forms to be executed by the Parties promptly following the Closing Date.

## EXHIBIT C

**Amended and Restated Venture Loan and Security Agreement**

See attached.

## EXHIBIT D

**Rights Agreement**

See attached.

**EXHIBIT E**

**Warrant**

See attached.

**Exhibit 10.3**

**RIGHTS AGREEMENT**

This Rights Agreement (this "Agreement") is dated March 21, 2018 by and between TITAN PHARMACEUTICALS, INC., a corporation organized and existing under the laws of the State of Delaware and having its principal office at 400 Oyster Point Blvd., Suite 505, South San Francisco, CA 94080-1921, United States ("Titan"), and L. MOLTENI & C. DEI FRATTELLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A., a company organized and existing under the laws of Italy having its principal office at Strada Statale 67, Frazione Granatieri, Scandicci (Florence), Italy, or any of its affiliates, ("Molteni").

WHEREAS, Titan and Molteni are parties to (i) an Asset Purchase, Supply and Support Agreement (the "IP Agreement") and (ii) an Amended and Restated Venture Loan and Security Agreement (the "Loan Agreement"), both of even date herewith (the IP Agreement and the Loan Agreement being collectively referred to herein as the "Transaction Agreements");

WHEREAS, in order to induce Molteni to enter into the Transaction Agreements, Titan and Molteni have agreed to enter into this Agreement to provide certain rights to Molteni.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the parties hereto agree as follows:

1. Warrants. Upon execution of the Transaction Agreements, Titan shall issue to Molteni seven-year warrants in the form attached hereto as Appendix A (the "Warrants") to purchase an aggregate of 540,000 shares of Titan's common stock, par value $0.001 per share (the "Common Stock") at an exercise price of $1.20 per share.

2. Board Seat.

a. Following the date hereof until such time as Molteni ceases to beneficially own at least 1% of Titan's issued and outstanding Common Stock, inclusive of shares issuable upon exercise of the Warrants and conversion of Molteni's promissory note (the "Note") issued in connection with the Loan Agreement, Molteni shall have the right to designate one member of Titan's board of directors (the "Board"), which right may be exercised at any time and from time to time by providing written notice to Titan of such exercise and such designee (such designee, subject to the terms hereof, the "Designee").

b. The Designee shall be Federico Seghi Recli or such other person as shall be reasonably acceptable to the nominating committee of the Board.

c. From time to time, upon exercise by Molteni of the right to designate the Designee pursuant to Section 2(a) above, the Board shall take all action necessary to appoint the Designee (including, to the extent necessary, by increasing the size of its Board to create a vacancy if no such vacancy exists and no Designee is then serving on the Board) and, thereafter, unless otherwise requested by Molteni in writing, to nominate such Designee for election to the Board on Titan's slate and use its reasonable best efforts to cause the election of the Designee to the Board at any meeting of the stockholders thereafter at which the election of directors is held and included in any written consent in lieu thereof (including recommending that Titan's stockholders vote in favor in the election of the Designee (along with other Company nominees) and otherwise supporting the Designee for election in a manner no less rigorous and favorable than the manner in which Titan supports its nominees in the aggregate.

d. At the time any such Designee becomes a member of the Board and at least annually thereafter, the Board shall offer the Designee the opportunity to become a member of each committee of the Board.

e. At the time any such Designee becomes a member of the Board, the Company and Designee shall enter into a customary indemnification agreement (that includes, in respect of the Designee, exculpation, indemnification (including advancement of expenses) to the maximum extent possible under applicable law).

f. Titan shall pay all actual and documented reimbursable out-of-pocket costs and expenses incurred by the Designee in connection with his or her participation as a member of the Board or any committee thereof, including in connection with attending regular and special meetings of the Board or any committee thereof, in each case in a manner consistent with Titan's policies for reimbursing such expenses of the members of the Board and its committees (and in any event, in a manner no less favorable than that in respect of any other director of the Company.

3. Observation Rights. If at any time Molteni has not designated a Designee in accordance with Section 2 above, Titan shall invite one individual selected by Molteni to attend all meetings of the Board (including "executive sessions" of the Board and any committee meetings) in a nonvoting observer capacity and, in this respect, concurrently with delivery to members of the Board (and any committee thereof), shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors with respect to such meetings; provided, that such representative agrees to hold in confidence all information so provided; and provided, further, that Titan reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if Titan believes, upon advice of outside counsel, that access to such information or attendance at such meeting would adversely affect the attorney-client privilege between Titan and its counsel.

4. Registration Rights. Titan hereby grants Molteni demand and piggy-back registration rights with respect to the shares of Common Stock shares issuable upon exercise of the Warrants and conversion of the Note (collectively, the "Registrable Securities") as set forth on Appendix B.

5. Information Rights. Until such time as Molteni ceases to beneficially own at least 1% of Titan's issued and outstanding Common Stock, inclusive of shares issuable upon exercise of the Warrants and conversion of the Note, Titan shall provide to Molteni such information, documents and access in respect of Titan and its subsidiaries as may be reasonably requested from time to time by Molteni; provided however that Titan shall not be obligated under this Section 5 to provide information (i) that Titan reasonably determines in good faith to be a trade secret or (ii) the disclosure of which would adversely affect the attorney-client privilege between Titan or any subsidiary thereof and its counsel.

6. Application of Takeover Protections. Titan hereby represents and warrants that it has 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 pursuant to its charter documents or the laws of its state of incorporation (including, without limitation, under Section 203 of the Delaware General Corporation Law) that is or could become applicable to Molteni as a result of the issuance of the warrants and purchase of the Notes and Titan fulfilling its obligations or exercising their rights pursuant to the Transaction Documents.

7. Outstanding Shares. Titan hereby represents and warrants to Molteni that the number of shares of Common Stock of Molteni outstanding on the date hereof on a fully diluted basis (assuming the conversion of all outstanding convertible securities and the exercise of all outstanding options and warrants) does not exceed 27,000,000 shares.

8. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER . THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK. EACH OF TITAN AND MOLTENI HEREBY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE STATE OF NEW YORK. TITAN AND MOLTENI HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS.

9. Counterparts. The Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

10. Miscellaneous. Each of Molteni and Titan represents and warrants that it has all necessary power and authority to execute this Agreement and perform its obligations in accordance with the terms hereof. Each of Molteni and Titan represents and warrants that the execution and delivery of this Agreement and the consummation of the transactions contemplated herein have been duly authorized by all necessary action on the part such party and constitutes a legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by Titan and Molteni. Titan acknowledges and agrees that Molteni would be damaged irreparably in the event any of the provisions of this Agreement are not performed in all material respects or otherwise are breached. Accordingly, and notwithstanding anything herein to the contrary, Titan agrees that Molteni shall be entitled to seek injunctive relief to prevent breaches of the provisions of this Agreement, and/or to enforce specifically this Agreement and the terms and provisions hereof, in any action instituted in any court or tribunal having jurisdiction Titan and Molteni and the matter, without posting any bond or other security, and that such injunctive relief shall be in addition to any other remedies to which Molteni may be entitled, at law or in equity.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first written above.

TITAN PHARMACEUTICALS, INC.

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

L. MOLTENI & C. DEI FRATELLI ALITTI SOCIETÀ DI ESERCIZIO S.P.A.

By: /s/ Giuseppe Seghi Recli
Name: Giuseppe Seghi Recli
Title: Managing Director

APPENDIX A

FORM OF WARRANT

APPENDIX B

REGISTRATION RIGHTS

This Appendix B to the Rights Agreement by and between Molteni and the Company (the "Rights Agreement") shall govern the registration rights granted to Molteni by the Company. Defined terms used but not otherwise defined herein shall have the meanings ascribed to such term in the Rights Agreement.

1. Registration Rights. Titan covenants and agrees as follows:

1.1 Registration. No later than one (1) year from the date hereof, Titan shall file a Form S-1 or Form S-3 registration statement with respect to Registrable Securities. Titan cause the Form S-1 or Form S-3 registration statement to become effective as soon as practicable after such filing and shall prepare and file with the SEC such amendments, including post-effective amendments, and supplements as may be necessary to keep such registration statement effective and in compliance with the provisions of the Securities Act until such time as there are no longer any Registrable Securities.

1.2 Titan Registration. If Titan proposes to register (including, for this purpose, a registration effected by Titan for stockholders other than Molteni) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), Titan shall, at such time, promptly give Molteni notice of such registration. Upon the request of Molteni given within twenty (20) days after such notice is given by Titan, Titan shall, subject to the provisions of Subsection 1.3, cause to be registered all of the Registrable Securities that Molteni has requested to be included in such registration. Titan shall have the right to terminate or withdraw any registration initiated by it under this Subsection 1.2 before the effective date of such registration, whether or not Molteni has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by Titan in accordance with Subsection 1.6.

1.3 Underwriting Requirements.

(a) If, pursuant to Subsection 1.1, Molteni intends to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise Titan as a part of their request made pursuant to Subsection 1.1. The underwriter(s) will be selected by Titan and shall be reasonably acceptable to Molteni. Molteni shall (together with Titan as provided in Subsection 1.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting.

(b) In connection with any offering involving an underwriting of shares of Titan's capital stock pursuant to Subsection 1.2, Titan shall not be required to include any of the Registrable Securities in such underwriting unless Molteni accepts the terms of the underwriting as agreed upon between Titan and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by Titan. If the total number of securities, including Registrable Securities, requested by Molteni to be included in such offering exceeds the number of securities to be sold (other than by Titan) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then Titan shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and Titan in their sole discretion determine will not jeopardize the success of the offering.

Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by Titan) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below thirty percent (30%) of the total number of securities included in such offering.

1.4 Obligations of Titan. Whenever required under this Section 2 to effect the registration of any Registrable Securities, Titan shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of Molteni, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to one hundred eighty (180) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to Molteni such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents Molteni may reasonably request in order to facilitate its disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by Molteni; provided that Titan shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless Titan is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by Titan are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by Molteni, any underwriters participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by Molteni, all financial and other records, pertinent corporate documents, and properties of Titan, and cause Titan's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify Molteni, promptly after Titan receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify Molteni of any request by the SEC that Titan amend or supplement such registration statement or prospectus.

In addition, Titan shall ensure that, at all times after any registration statement covering a public offering of securities of Titan under the Securities Act shall have become effective, its insider trading policy shall provide that Titan's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

1.5 Furnish Information. It shall be a condition precedent to the obligations of Titan to take any action pursuant to this Section 2 with respect to the Registrable Securities that Molteni shall furnish to Titan such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of Registrable Securities.

1.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for Titan; and the reasonable fees and disbursements of one counsel for Molteni ("Selling Holder Counsel"), shall be borne and paid by Titan. All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by Molteni.

1.7 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, Titan will indemnify and hold Molteni, and the partners, members, officers, directors, and stockholders of Molteni, legal counsel and accountants for Molteni; any underwriter (as defined in the Securities Act) for Molteni, and each Person, if any, who controls Molteni or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and Titan will pay to Molteni and each such, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 1.7(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of Titan, which consent shall not be unreasonably withheld, nor shall Titan be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of Molteni or any such underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, Molteni will indemnify and hold harmless Titan, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls Titan within the meaning of the Securities Act, legal counsel and accountants for Titan, and any underwriter (as defined in the Securities Act), against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of Molteni expressly for use in connection with such registration; and Molteni will pay to Titan and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 1.7(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of Molteni, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by Molteni by way of indemnity or contribution under Subsections 2.7(b) and 2.7(d) exceed the proceeds from the offering received by Molteni (net of any Selling Expenses paid by Molteni), except in the case of fraud or willful misconduct by Molteni.

(c) Promptly after receipt by an indemnified party under this Subsection 1.7 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 1.7, give the indemnifying party notice of the commencement thereof.

The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 1.7, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 1.7.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 1.7 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 1.7 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 1.7, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) Molteni will not be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by Molteni pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall Molteni's liability pursuant to this Subsection 1.7(d), when combined with the amounts paid or payable by Molteni pursuant to Subsection 1.7(b), exceed the proceeds from the offering received by Molteni (net of any Selling Expenses paid by Molteni), except in the case of willful misconduct or fraud by Molteni.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of Titan and Molteni under this Subsection 1.7 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

1.8 Reports Under Exchange Act. With a view to making available to Molteni the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit Molteni to sell securities of Titan to the public without registration or pursuant to a registration on Form S-3, Titan shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the date hereof;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of Titan under the Securities Act and the Exchange Act (at any time after Titan has become subject to such reporting requirements); and

(c) furnish to Molteni, so long as Molteni owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by Titan that it has complied with the reporting requirements of SEC Rule 144, the Securities Act, and the Exchange Act, or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after Titan so qualifies); and (ii) such other information as may be reasonably requested in availing Molteni of any rule or regulation of the SEC that permits the selling of any such securities without registration or pursuant to Form S-3 (at any time after Titan so qualifies to use such form).

2. Definitions. For purposes of this Agreement:

2.1 "Affiliate" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, limited partner, member, employee, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person. For purposes of this definition, the term "control" when used with respect to any Person means the power to direct the management or policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise, and the terms "controlling" and "controlled" shall have meanings correlative to the foregoing.

2.2 "Common Stock" means shares of Titan's common stock, par value $0.001 per share.

2.3 "Damages" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of Titan, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

2.4 "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

2.5 "Excluded Registration" means (i) a registration relating to the sale of securities to employees of Titan or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

2.6 "Form S-1" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

2.7 "Form S-3" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by Titan with the SEC.

2.8 "Person" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

2.9 "Registrable Securities then outstanding" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

2.10 "SEC" means the Securities and Exchange Commission.

2.11 "SEC Rule 144" means Rule 144 promulgated by the SEC under the Securities Act.

2.12 "SEC Rule 145" means Rule 145 promulgated by the SEC under the Securities Act.

2.13 "Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

2.14 "Selling Expenses" means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities.

**Exhibit 99.1**

# TITAN EXECUTES AGREEMENT FOR ACQUISITION BY MOLTENI OF PROBUPHINE® IN EUROPE AND OTHER SELECT TERRITORIES

***Molteni makes upfront payment of approximately $2.4 million and an indirect strategic investment through the purchase of $2.4 million of Horizon's debt***

**SOUTH SAN FRANCISCO, CA – March 21, 2018** – Titan Pharmaceuticals, Inc. (NASDAQ: TTNP) announced today that it has entered into a definitive asset purchase, supply and support agreement with L. Molteni & C. dei F.lli Alitti Società di Esercizio S.p.A. through which Molteni has acquired the European intellectual property related to Probuphine, including the Marketing Authorization Application (MAA) under review by the European Medicines Agency (EMA), and will have the exclusive right to commercialize the Titan supplied Probuphine product in Europe, as well as certain countries of the Commonwealth of Independent States, the Middle East and North Africa (the "Molteni Territory").

Titan received an initial payment of €2.0 million (approx. $2.4 million) for the purchased assets and will receive potential additional payments totaling up to €4.5 million (approx. $5.5 million) upon the achievement of certain regulatory and product label milestones. Additionally, Titan is entitled to receive earn-out payments for up to 15 years on net sales of Probuphine in the Molteni Territory ranging in percentage from the low-teens to the mid-twenties. The agreement supersedes the previously executed term sheet that contemplated a license arrangement with respect to the intellectual property Titan has sold to Molteni.

As part of the transaction, Molteni also made an indirect strategic investment in Titan by purchasing $2.4 million of the outstanding $4.0 million principal balance owed under Titan's July 2017 loan agreement with Horizon Technology Finance Corporation. In connection with an amendment and restatement of the loan agreement, Molteni was appointed collateral agent and assumed majority and administrative control of the debt and the interest only payment and forbearance periods were extended to December 31, 2019. Upon meeting certain conditions, including repayment of the remaining principal amount of $1.6 million to Horizon, the amended and restated loan agreement also includes provisions for conversion of Molteni's $2.4 million portion of the debt into shares of Titan's common stock at a conversion price of $1.20 per share, representing a premium of approximately 17% to the average closing price of Titan's common stock for the last five trading days ended March 20, 2018.

In connection with this transaction, Titan issued to Molteni and Horizon warrants to purchase an aggregate of 580,000 shares of Titan's common stock at a per share exercise price of $1.20.

"We are pleased to form this important partnership with Molteni, a company with a strong track record of success launching and commercializing innovative pain and addiction pharmaceutical products in Europe, that also shares our enthusiasm about the prospects for Probuphine," said Titan President and CEO, Sunil Bhonsle. "In addition to providing an opportunity to expand the commercialization of Probuphine beyond the United States, the additional financial resources and flexibility provided by this transaction enables us to evaluate options to further strengthen our balance sheet, position Probuphine for commercial success in the U.S., and work to advance our pipeline of other ProNeura™-based product candidates."

Molteni President, Giovanni Seghi, commented, “There has been close collaboration between the two companies as we plan the process of preparing for the potential European launch of Probuphine, including our interactions last year with European regulators and our more recent efforts to address their preliminary questions on the MAA. We remain confident that Probuphine has the potential to become a new paradigm for the treatment of opioid addiction in Europe, the second largest market for buprenorphine-based products in the world.”

In connection with the asset purchase and amended loan agreements, Titan has granted Molteni board designee and observer rights.

“Our interactions with Molteni management over the past several months have clearly demonstrated their strong commitment to Probuphine and Titan,” said Titan Executive Chairman, Dr. Marc Rubin. “We know that Molteni shares our vision for Probuphine and we are looking forward to a strong and successful partnership.”

**About Molteni**

Founded in Florence in 1892, Molteni is a privately-held specialty pharmaceutical company developing, manufacturing and marketing pharmacological treatments for addictions and moderate to severe pain. Molteni is a leader in the field of drug dependence. Molteni operates both directly and through its network of specialized partners in more than 30 countries and it is a preferred and qualified partner of International Organizations and Non-Governmental Organizations such as UNICEF, UNDP, IDA Foundation and Global Fund. For more information, please visit www.moltenifarma.it.

**About Titan Pharmaceuticals**

Titan Pharmaceuticals, Inc. (NASDAQ:TTNP), based in South San Francisco, CA, is developing proprietary therapeutics primarily for the treatment of select chronic diseases. The company's lead product is Probuphine®, a novel and long-acting formulation of buprenorphine for the long-term maintenance treatment of opioid dependence. Probuphine employs Titan's proprietary drug delivery system ProNeura™, which is capable of delivering sustained, consistent levels of medication for three months or longer. Approved by the U.S. Food and Drug Administration in May 2016, Probuphine is the first and only commercialized treatment of opioid dependence to provide continuous, around-the-clock blood levels of buprenorphine for six months following a single procedure. The ProNeura technology has the potential to be used in developing products for treating other chronic conditions such as Parkinson's disease and hypothyroidism, where maintaining consistent, around-the-clock blood levels of medication may benefit the patient and improve medical outcomes. For more information about Titan, please visit www.titanpharm.com.

***Forward-Looking Statements***

*This 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 our product development programs and any other statements that are not historical facts. Such statements involve risks and uncertainties that could negatively affect our business, operating results, financial condition and stock price. Factors that could cause actual results to differ materially from management's current expectations include those risks and uncertainties relating to the commercialization of Probuphine, the regulatory approval process, the development, testing, production and marketing of our drug candidates, patent and intellectual property matters and strategic agreements and relationships. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based, except as required by law.*

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