UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2020.

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ____ to ____

Commission File Number 001-13341

Titan Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**94-3171940**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
400 Oyster Point Blvd., Suite 505, South San Francisco, California	**94080**
(Address of principal executive offices)	**(Zip Code)**

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒		
Smaller reporting company	☒	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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, par value $0.001	TTNP	Nasdaq Capital Market

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	**Outstanding at August 10, 2020**
Common Stock, par value $0.001	97,223,180

Titan Pharmaceuticals, Inc.

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Part I. Financial Information

Item 1. Financial Statements

TITAN PHARMACEUTICALS, INC.

CONDENSED BALANCE SHEETS
(in thousands, except per share data)

	June 30, 2020 (unaudited)	December 31, 2019 (Note 1)
Assets		
Current assets:		
Cash and cash equivalents	$ 5,498	$ 5,223
Receivables	1,061	993
Inventory	969	998
Prepaid expenses and other current assets	1,162	1,094
Total current assets	8,690	8,308
Property and equipment, net	799	817
Operating lease right-of-use asset	273	397
Total assets	$ 9,762	$ 9,522
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,528	$ 1,401
Accrued clinical trials expenses	275	309
Accrued sales allowances	64	809
Other accrued liabilities	1,074	809
Operating lease liability, current	292	272
Current portion of long-term debt	1,624	—
Total current liabilities	4,857	3,600
Operating lease liability, non-current	—	150
Long-term debt	3,345	4,019
Warrant liability	—	320
Total liabilities	8,202	8,089
Stockholders' equity:		
Common stock, at amounts paid-in	97	57
Additional paid-in capital	360,725	350,413
Accumulated deficit	(359,262)	(349,037)
Total stockholders' equity	1,560	1,433
Total liabilities and stockholders' equity	$ 9,762	$ 9,522

See Notes to Condensed Financial Statements

TITAN PHARMACEUTICALS, INC.

CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except per share amount)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	**2019**	**2020**	**2019**
Revenues:				
License revenue	$ 6	$ —	$ 6	$ 313
Product revenue	115	304	325	621
Grant revenue	1,204	198	2,330	513
Total revenues	1,325	502	2,661	1,447
Operating expenses:				
Cost of goods sold	228	246	399	550
Research and development	2,007	1,907	4,284	3,751
Selling, general and administrative	3,474	3,231	6,589	6,313
Total operating expenses	5,709	5,384	11,272	10,614
Loss from operations	(4,384)	(4,882)	(8,611)	(9,167)
Other expense:				
Interest expense, net	(250)	(253)	(472)	(499)
Non-cash loss on changes in the fair value of warrants	—	—	(923)	—
Loss on debt extinguishment	—	(65)	—	(65)
Other income (expense), net	(7)	3	(219)	17
Other expense, net	(257)	(315)	(1,614)	(547)
Net loss and comprehensive loss	$ (4,641)	$ (5,197)	$ (10,225)	$ (9,714)
Basic and diluted net loss per common share	$ (0.05)	$ (0.38)	$ (0.12)	$ (0.73)
Weighted average shares used in computing basic and diluted net loss per common share	94,930	13,576	88,785	13,397

See Notes to Condensed Financial Statements

TITAN PHARMACEUTICALS, INC.

CONDENSED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands)
(unaudited)

	Common Stock		Additional Paid-In	Accumulated	
	Shares	Amount	Capital	Deficit	Equity
Balances at December 31, 2019	57,379	$ 57	$ 350,413	$ (349,037)	$ 1,433
Net loss	—	—	—	(5,584)	(5,584)
Issuance of common stock, net	8,700	9	443	—	452
Issuance of common stock upon exercises of warrants, net	27,388	27	6,135	—	6,162
Reclassification of warrants from liability	—	—	2,897	—	2,897
Stock-based compensation	—	—	(84)	—	(84)
Balances at March 31, 2020	93,467	$ 93	$ 359,804	$ (354,621)	$ 5,276
Net loss	—	—	—	(4,641)	(4,641)
Issuance of common stock upon exercises of warrants, net	3,756	4	842	—	846
Stock-based compensation	—	—	79	—	79
Balances at June 30, 2020	97,223	$ 97	$ 360,725	$ (359,262)	$ 1,560

	Common Stock		Additional Paid-In	Accumulated	Equity
	Shares	Amount	Capital	Deficit	(Deficit)
Balances at December 31, 2018	13,010	$ 13	$ 339,397	$ (332,579)	$ 6,831
Net loss	—	—	—	(4,517)	(4,517)
Issuance of common stock upon exercises of warrants, net	404	—	605	—	605
Stock-based compensation	—	—	136	—	136
Balances at March 31, 2019	13,414	$ 13	$ 340,138	$ (337,096)	$ 3,055
Net loss	—	—	—	(5,197)	(5,197)
Issuance of common stock upon exercises of warrants, net	70	—	105	—	105
Issuance of common stock upon conversion of convertible loan	448	1	649	—	650
Issuance of common stock in at-the-market offerings, net	330	—	466	—	466
Stock-based compensation	—	—	350	—	350
Balances at June 30, 2019	14,262	$ 14	$ 341,708	$ (342,293)	$ (571)

See Notes to Condensed Financial Statements

TITAN PHARMACEUTICALS, INC.

CONDENSED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2020	**2019**
Cash flows from operating activities:		
Net loss	$ (10,225)	$ (9,714)
Adjustments to reconcile loss to net cash used in operating activities:		
Depreciation and amortization	128	123
Non-cash interest expense	296	335
Non-cash loss on changes in fair value of warrants	923	—
Stock-based compensation	(5)	486
Finance costs attributable to issuance of warrants	211	—
Other	(6)	8
Changes in operating assets and liabilities:		
Receivables	(68)	597
Inventory	29	(55)
Contract assets	—	99
Prepaid expenses and other assets	(68)	(197)
Accounts payable	127	(501)
Accrued sales allowances	(745)	830
Other accrued liabilities	208	(155)
Deferred revenue	—	(313)
Net cash used in operating activities	(9,195)	(8,457)
Cash flows from investing activities:		
Purchases of property and equipment	(87)	(83)
Net cash used in investing activities	(87)	(83)
Cash flows from financing activities:		
Net proceeds from equity offering	1,895	—
Net proceeds from the exercises of common stock warrants	7,008	710
Net loan proceeds	654	—
Net proceeds from the issuance of common stock in an at-the-market offering	—	466
Net cash provided by financing activities	9,557	1,176
Net increase (decrease) in cash and cash equivalents	275	(7,364)
Cash, cash equivalents and restricted cash at beginning of period	5,223	9,656
Cash, cash equivalents and restricted cash at end of period	$ 5,498	$ 2,292
Supplemental disclosure of cash flow information:		
Interest paid	$ 198	$ 219
Non-cash conversion of Molteni Convertible Loan	$ —	$ 650

See Notes to Condensed Financial Statements

TITAN PHARMACEUTICALS, INC.

NOTES TO CONDENSED FINANCIAL STATEMENTS
(unaudited)

1. Organization and Summary of Significant Accounting Policies

The Company

We are a pharmaceutical company developing therapeutics utilizing our proprietary long-term drug delivery platform, ProNeuraTM, for the treatment of select chronic diseases for which steady state delivery of a drug provides an efficacy and/or safety benefit. We have transitioned to a commercial stage enterprise following the reacquisition of Probuphine® (buprenorphine) implant, or Probuphine, in May 2018 from our former licensee. Probuphine is the first product based on our ProNeura technology approved in the U.S., Canada and the European Union, or EU, for the maintenance treatment of opioid use disorder, or OUD, in select patients. We operate in only one business segment, the development and commercialization of pharmaceutical products.

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statement presentation. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three and six months ended June 30, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020, or any future interim periods.

The balance sheet at December 31, 2019 is derived from the audited financial statements at that date, but does not include all of the information and footnotes required by GAAP for complete financial statements. These unaudited condensed financial statements should be read in conjunction with the audited financial statements and footnotes thereto included in the Titan Pharmaceuticals, Inc. Annual Report on Form 10-K/A for the year ended December 31, 2019, as filed with the Securities and Exchange Commission ("SEC").

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. The accompanying financial statements have been prepared assuming we will continue as a going concern.

At June 30, 2020, we had cash and cash equivalents of $5.5 million, which we believe is sufficient to fund our planned operations through the third quarter of 2020. We will require additional funds to finance our operations beyond such period. We are exploring several financing alternatives; however, there can be no assurance that our efforts to obtain the funding required to continue our operations will be successful.

Going concern assessment

We assess going concern uncertainty in our condensed financial statements to determine if we have sufficient cash on hand and working capital, including available borrowings on loans, to operate for a period of at least one year from the date the financial statements are issued or available to be issued, which is referred to as the "look-forward period" as defined by Accounting Standard Update ("ASU") No. 2014-15. As part of this assessment, based on conditions that are known and reasonably knowable to us, we will consider various scenarios, forecasts, projections, estimates and will make certain key assumptions, including the timing and nature of projected cash expenditures or programs, and its ability to delay or curtail expenditures or programs, if necessary, among other factors. Based on this assessment, as necessary or applicable, we make certain assumptions around implementing curtailments or delays in the nature and timing of programs and expenditures to the extent we deem probable those implementations can be achieved and we have the proper authority to execute them within the look-forward period in accordance with ASU No. 2014-15.

Based upon the above assessment, we concluded that, at the date of filing the financial statements in this Quarterly Report on Form 10-Q for the six months ended June 30, 2020, we did not have sufficient cash to fund our operations for the next 12 months without additional funds and, therefore, there is substantial doubt about our ability to continue as a going concern within 12 months after the date the financial statements were issued.

Use of Estimates

The preparation of these unaudited condensed financial statements requires that we make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. On an ongoing basis, we evaluate our estimates, including critical accounting policies or estimates related to warrants issued in equity financing, research and development expenses, income taxes, inventories, revenues, accrued sales allowances, contingencies and litigation and share-based compensation. We base our estimates on historical experience, information received from third parties and on various market specific and other relevant assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ significantly from those estimates under different assumptions or conditions.

Inventories

Inventories are recorded at the lower of cost or net realizable value. Cost is based on the first in, first out method. We regularly review inventory quantities on hand and write down to its net realizable value any inventory that we believe to be impaired. The determination of net realizable value requires judgment including consideration of many factors, such as estimates of future product demand, product net selling prices, current and future market conditions and potential product obsolescence, among others. The components of inventories are as follows:

	As of	
	June 30, 2020	**December 31, 2019**
Raw materials and supplies	532	563
Finished goods	437	435
	$ 969	$ 998

Revenue Recognition

We generate revenue principally from the sale of Probuphine in the U.S., collaborative research and development arrangements, technology licenses and sales, and government grants. Consideration received for revenue arrangements with multiple components is allocated among the separate performance obligations based upon their relative estimated standalone selling price.

In determining the appropriate amount of revenue to be recognized as we fulfill our obligations under our agreements, we perform the following steps for our revenue recognition: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations based on estimated selling prices; and (v) recognition of revenue when (or as) we satisfy each performance obligation.

Net Product Revenue

We recognize revenue from product sales when control of the product transfers, generally upon shipment or delivery, to our customers, which include distributors. As customary in the pharmaceutical industry, our gross product revenue is subject to a variety of deductions in the forms of variable consideration, which include rebates, chargebacks, returns and discounts, in arriving at reported net product revenue. This variable consideration is estimated using the most-likely amount method, which is the single most-likely outcome under a contract and is typically at stated contractual rates. The actual outcome of this variable consideration may materially differ from our estimates. From time to time, we will adjust our estimates of this variable consideration when trends or significant events indicate that a change in estimate is appropriate to reflect the actual experience. Additionally, we will continue to assess the estimates of our variable consideration as we continue to accumulate additional historical data. Changes in the estimates of our variable consideration could materially affect our financial statements.

Returns – Consistent with the provisions of ASC 606, we estimate returns at the inception of each transaction, based on multiple considerations, including historical sales, historical experience of actual customer returns, levels of inventory in our distribution channel, expiration dates of purchased products and significant market changes which may impact future expected returns to the extent that we would not reverse any receivables, revenues, or contract assets already recognized under the agreement. We have entered into agreements with large national specialty pharmacies with a distribution channel different from that of our existing customers and, therefore, the related reserves have unique considerations. We will continue to evaluate the activities with these specialty pharmacies during upcoming quarters and will update the related reserves accordingly.

Rebates – Our provision for rebates is estimated based on our customers' contracted rebate programs and our historical experience of rebates paid.

Discounts –The provision is estimated based upon invoice billings, utilizing historical customer payment experience.

The following table provides a summary of activity with respect to our product returns, and discounts and rebates, which are included on our condensed consolidated balance sheets within accrued sales allowances (in thousands):

	Accrued Sales Allowances			
	Product Return Allowance	Discounts and Rebates Allowance	Total	Allowance for Doubtful Accounts
Balance at December 31, 2019	$ 721	$ 88	$ 809	$ 63
Provision	28	25	53	14
Payments/credits	(709)	(89)	(798)	(12)
Balance at June 30, 2020	$ 40	$ 24	$ 64	$ 65

During the six months ended June 30, 2020, we received customer returns of approximately $0.7 million that had been reserved for previously.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. Our performance obligations include commercialization license rights, development services and services associated with the regulatory approval process.

We have optional additional items in contracts, which are accounted for as separate contracts when the customer elects such options. Arrangements that include a promise for future commercial product supply and optional research and development services at the customer's discretion are generally considered as options. We assess if these options provide a material right to the customer and, if so, such material rights are accounted for as separate performance obligations. If we are entitled to additional payments when the customer exercises these options, any additional payments are recorded in revenue when the customer obtains control of the goods or services.

Transaction Price

We have both fixed and variable consideration. Non-refundable upfront payments are considered fixed, while milestone payments are identified as variable consideration when determining the transaction price. Funding of research and development activities is considered variable until such costs are reimbursed at which point they are considered fixed. We allocate the total transaction price to each performance obligation based on the relative estimated standalone selling prices of the promised goods or services for each performance obligation.

At the inception of each arrangement that includes milestone payments, we evaluate whether the milestones are considered probable of being achieved and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the value of the associated milestone is included in the transaction price. Milestone payments that are not within our control, such as approvals from regulators, are not considered probable of being achieved until those approvals are received.

For arrangements that include sales-based royalties or earn-out payments, including milestone payments based on the level of sales, and the license or purchase agreement is deemed to be the predominant item to which the royalties or earn-out payments relate, we recognize revenue at the later of (a) when the related sales occur, or (b) when the performance obligation to which some or all of the royalty or earn-out payment has been allocated has been satisfied (or partially satisfied).

Allocation of Consideration

As part of the accounting for these arrangements, we must develop assumptions that require judgment to determine the stand-alone selling price of each performance obligation identified in the contract. Estimated selling prices for license rights are calculated using the residual approach. For all other performance obligations, we use a cost-plus margin approach.

Timing of Recognition

Significant management judgment is required to determine the level of effort required under an arrangement and the period over which we expect to complete our performance obligations under an arrangement. We estimate the performance period or measure of progress at the inception of the arrangement and re-evaluate it each reporting period. This re-evaluation may shorten or lengthen the period over which revenue is recognized. Changes to these estimates are recorded on a cumulative catch up basis. If we cannot reasonably estimate when our performance obligations either are completed or become inconsequential, then revenue recognition is deferred until we can reasonably make such estimates. Revenue is then recognized over the remaining estimated period of performance using the cumulative catch-up method. Revenue is recognized for licenses or sales of functional intellectual property at the point in time the customer can use and benefit from the license. For performance obligations that are services, revenue is recognized over time proportionate to the costs that we have incurred to perform the services using the cost-to-cost input method.

Research and Development Costs and Related Accrual

Research and development expenses include internal and external costs. Internal costs include salaries and employment related expenses, facility costs, administrative expenses and allocations of corporate costs. External expenses consist of costs associated with outsourced contract research organization ("CRO") activities, sponsored research studies, product registration, patent application and prosecution, and investigator sponsored trials. We also record accruals for estimated ongoing clinical trial costs. Clinical trial costs represent costs incurred by CROs and clinical sites. These costs are recorded as a component of research and development expenses. Under our agreements, progress payments are typically made to investigators, clinical sites and CROs. We analyze the progress of the clinical trials, including levels of patient enrollment, invoices received and contracted costs when evaluating the adequacy of accrued liabilities. Significant judgments and estimates must be made and used in determining the accrued balance in any accounting period. Actual results could differ from those estimates under different assumptions. Revisions are charged to expense in the period in which the facts that give rise to the revision become known.

Leases

In February 2016, the Financial Accounting Standards Board (the "FASB") issued ASU No. 2016-02, Leases (Topic 842), to enhance the transparency and comparability of financial reporting related to leasing arrangements.

We determine whether the arrangement is or contains a lease at inception. Operating lease right-of-use assets and lease liabilities are recognized at the present value of the future lease payments at commencement date. The interest rate implicit in lease contracts is typically not readily determinable, and therefore, we utilize our incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. Certain adjustments to the right-of-use asset may be required for items such as initial direct costs paid or incentives received.

Lease expense is recognized over the expected term on a straight-line basis. Operating leases are recognized on our condensed balance sheet as right-of- use assets, operating lease liabilities current and operating lease liabilities non-current. We no longer recognize deferred rent on our condensed balance sheet.

The following table presents obligation related to our operating lease:

2020	$	155
2021		156
Total minimum lease payments (base rent)		311
Less: imputed interest		(19)
Total operating lease liabilities	$	292

Recent Accounting Pronouncements

Accounting Standards Adopted

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement, which eliminates, adds and modifies certain disclosure requirements for fair value measurements as part of the FASB's disclosure framework project. We adopted ASU 2018-13 effective January 1, 2020 with no material impact to our financial statements and related disclosures.

Accounting Standards Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses, which requires an organization to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. Financial institutions and other organizations will now use forward-looking information to better inform their credit loss estimates. The amendments in this ASU are effective for us in our interim period ending March 31, 2023. We are currently assessing the impact of the adoption of Topic 326 on our financial statements and disclosures.

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform, which provides companies with optional guidance, including expedients and exceptions for applying generally accepted accounting principles to contracts and other transactions affected by reference rate reform, such as the London Interbank Offered Rate (LIBOR). This new standard was effective upon issuance and generally can be applied to applicable contract modifications through December 31, 2022. We are evaluating the effects that the adoption of this guidance will have on our disclosures.

Subsequent Events

We have evaluated events that have occurred after June 30, 2020 and through the date that our condensed financial statements are issued.

Fair Value Measurements

Financial instruments, including receivables, accounts payable and accrued liabilities are carried at cost, approximate their fair values due to the short-term nature of these instruments. Our investments in money market funds are classified within Level 1 of the fair value hierarchy. Our derivative liability is classified within Level 3 of the fair value hierarchy because the fair value is calculated using significant judgment based on our own assumptions in the valuation of this liability.

At June 30, 2020 and December 31, 2019, the fair value of our investments in money market funds were approximately $5.3 million and approximately $4.9 million, respectively, which are included within our cash and cash equivalents in our condensed balance sheets.

2. Stock Plans

The following table summarizes the stock-based compensation expense recorded for awards under our stock option plans:

(in thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	**2019**	**2020**	**2019**
Research and development	$ —	$ 14	$ —	$ 91
Selling, general and administrative	79	336	(5)	395
Total stock-based compensation	$ 79	$ 350	$ (5)	$ 486

We use the Black-Scholes-Merton option-pricing model with the following assumptions to estimate the fair value of our stock options:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	**2019**	**2020**	**2019**
Weighted-average risk-free interest rate	0.4%	2.1%	0.4%	2.2%
Expected dividend payments	—	—	—	—
Expected holding period (years) [1]	5.8	5.9	5.8	5.4
Weighted-average volatility factor [2]	1.04	0.93	1.04	0.94
Estimated forfeiture rates for options granted [3]	28%	21%	28%	21%

(1) Expected holding period is based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and the expectations of future employee behavior.

(2) Weighted average volatility is based on the historical volatility of our common stock.

(3) Estimated forfeiture rates are based on historical data.

The following table summarizes option activity:

(in thousands)	Options (in thousands)	Weighted Average Exercise Price per share	Weighted Average Remaining Option Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding December 31, 2019	1,192	$ 6.23	7.9	$ —
Granted	50	0.28		
Forfeited or expired	(324)	1.88		
Outstanding at June 30, 2020	918	7.44	7.0	1
Exercisable at June 30, 2020	824	8.19	6.8	—

Options to purchase 50,000 common shares were granted during the three month periods ended June 30, 2020.

As of June 30, 2020, there was approximately $39,000 of total unrecognized compensation expense related to non-vested stock options. This expense is expected to be recognized over a weighted-average period of approximately 1.8 years.

3. Net Loss Per Share

The table below presents common shares underlying stock options, warrants and convertible loans that are excluded from the calculation of the weighted average number of common shares outstanding used for the calculation of diluted net loss per common share. These are excluded from the calculation due to their anti-dilutive effect:

(in thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	**2019**	**2020**	**2019**
Weighted-average anti-dilutive common shares resulting from options	898	1,124	944	894
Weighted-average anti-dilutive common shares resulting from warrants	8,342	277	8,342	257
Weighted-average anti-dilutive common shares resulting from convertible loans	3,243	333	3,243	333
	12,483	1,734	12,529	1,484

4. Molteni Purchase Agreement

On March 21, 2018, we entered into a purchase agreement ("Molteni Purchase Agreement") with L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. ("Molteni") pursuant to which Molteni acquired the European intellectual property related to Probuphine, including the marketing authorization application under review by the European Medicines Agency ("EMA"), and gained the exclusive right to commercialize the Probuphine product supplied by us, to be marketed under the tradename Sixmo, in the EU, as well as certain countries of the Commonwealth of Independent States, the Middle East and North Africa (the "Molteni Territory").

In connection with the Molteni Purchase Agreement, we received an initial payment of €2.0 million (approximately $2.4 million), of which approximately $1.0 million was allocated to the transfer of the intellectual property, which was recognized immediately, and approximately $1.4 million to our efforts towards the approval by the EMA by using the expected cost-plus approach to estimate the standalone selling price of and other regulatory bodies ("Titan Services"), which was recorded as deferred revenue and amortized as the performance obligations associated with the Titan Services being satisfied over time. Titan Services included employee-related expenses as well as other manufacturing, regulatory and clinical costs. During the three months ended March 31, 2019, we fully amortized our deferred revenue and recognized approximately $0.3 million of revenue associated with the completion of Titan Services.

In August 2018, we entered into an amendment to the Molteni Purchase Agreement, pursuant to which Molteni made an immediate payment of €950,000 (approximately $1.1 million) and a convertible loan of €550,000 (approximately $0.6 million) ("Molteni Convertible Loan") (see Note 5) to us, both in exchange for the elimination of an aggregate of €2.0 million (approximately $2.3 million) of regulatory milestones provided for in the Molteni Purchase Agreement.

In September 2019, we entered into an additional amendment to the Molteni Purchase Agreement, pursuant to which the percentage earn-out payments on net sales were reduced and payments of any earn-outs were delayed until the later of (i) January 1, 2021 or (ii) the one year anniversary of completion of compliance by our manufacturer with EU requirements (currently anticipated to occur during the second quarter of this year). The milestone payments under the Purchase Agreement remain unchanged.

5. Debt Agreements

Horizon and Molteni Loans

In March 2018, we entered into an Amended and Restated Venture Loan and Security Agreement (the "Loan Agreement") with Horizon Technology Finance Corporation ("Horizon") and Molteni pursuant to which Horizon assigned approximately $2.4 million of the $4.0 million outstanding principal balance of its loan to us to Molteni and Molteni was appointed as the collateral agent and assumed majority and administrative control of the loan. Under the Loan Agreement, Molteni had the right to convert its portion of the debt into shares of our common stock at a conversion price of $7.20 per share and was required to effect this conversion of debt to equity upon completion of an equity financing meeting specified criteria. In connection with the Loan Agreement, we issued warrants to purchase an aggregate of 6,667 shares of our common stock with an exercise price per share of $7.20 to Horizon.

In September 2019, we entered into an amendment to the Loan Agreement pursuant to which the interest-only payment and forbearance periods were extended by one year to December 31, 2020 and the maturity date was extended by one year to June 1, 2022. In connection with the amendment to the Loan Agreement, the final payments to the lenders were increased by an aggregate of approximately $0.3 million (exclusive of a restructuring fee payable to Horizon) and the conversion provisions related to Molteni's portion of the loan amount were revised to eliminate the mandatory conversion feature, to reduce the conversion price to $0.225 and to cap the number of shares issuable upon conversion to 3,422,777, with any balance repayable in cash.

In accordance with ASC 470, the amendment to the loan from Molteni is accounted for under debt extinguishment accounting, which required us to extinguish the carrying amount of the loan prior to the amendment and reacquire the loan after the amendment. As a result, during the three months ended September 30, 2019, we recorded approximately $0.3 million gain on debt extinguishment related to the write-off of the balance of the accreted final payment of the loan. The modification to the loan from Horizon did not constitute debt extinguishment and, therefore, did not have any impact to our condensed financial statements.

Repayment of the loans is on an interest-only basis, followed by monthly payments of principal and accrued interest for the balance of the 46-month term. The loans bear interest at a floating coupon rate of one-month LIBOR (floor of 1.10%) plus 8.40%. A final payment equal to 5.0% of each loan tranche will be due on the scheduled maturity date for such loan. In addition, if we repay all or a portion of the loan prior to the applicable maturity date, we will pay Horizon and Molteni prepayment penalty fees.

Debt discount associated with the Horizon and Molteni Loans was approximately $0.3 million as of both June 30, 2020 and December 31, 2019.

Molteni Convertible Loan

In connection with the amendment to the Molteni Purchase Agreement (see Note 4), in June 2019, the Molteni Convertible Loan, together with unpaid accrued interest, was converted in full into 448,287 shares of our common stock at $1.50 per share upon the receipt of EMA approval of Sixmo. As a result, we recorded approximately $0.1 million loss on debt extinguishment.

Paycheck Protection Program Loan

On April 20, 2020, we received an approximately $0.7 million loan ("PPP Loan") pursuant to the Paycheck Protection Program of the CARES Act. The PPP Loan matures in April 2022 with an annual interest rate of 1.0%. The PPP Loan has a six month deferral of payments period and may be prepaid at any time without penalty. Forgiveness of the loan, when requested, is not automatic and is only available for principal that is used for the limited purposes that expressly qualify for forgiveness under SBA requirements. The proceeds of the PPP Loan are to be used to retain workers and maintain payroll and make mortgage interest, lease and utility payments.

6. Stockholders' Equity

Our common stock outstanding as of June 30, 2020 and December 31, 2019 was 97,223,180 shares and 57,378,794 shares, respectively.

January 2020 Offering

In January 2020, we completed a financing with several institutional investors pursuant to which we issued 8,700,000 shares of our common stock in a registered direct offering and warrants to purchase 8,700,000 shares of our common stock with an exercise price of $0.25 per share in a concurrent private placement (the "January 2020 Warrants") pursuant to which we received net cash proceeds of approximately $1.9 million, after deduction of underwriting fees and other offering expenses. The January 2020 Warrants become exercisable in July 2020 and expire in July 2025, however, the shares of common stock issuable upon exercise of the January 2020 Warrants have not been reserved and, accordingly, such warrants are not exercisable unless and until we receive stockholder approval of either a reverse stock split or an increase in our authorized shares of common stock. During the three months ended March 31, 2020, financing costs of $211,000 allocated to the January 2020 warrant liability were expensed and included in other income (expense) in the condensed statements of operations and comprehensive loss.

Common Stock Warrants

During the six months ended June 30, 2020, we received an aggregate of approximately $7.0 million in cash proceeds from the exercises of warrants to purchase 31,144,386 shares of our common stock.

7. Warrant Liabilities

On March 3, 2020, we amended certain outstanding warrants to purchase an aggregate of 11,552,314 shares of common stock, including the January 2020 Warrants and warrants we issued in connection with a financing in August 2019 (the "August 2019 Warrants"), to modify certain provisions that had required them to be previously classified as liabilities and to enable them to now be classified as equity under the relevant accounting standards. As a result, during the three months ended March 31, 2020, we reclassified the fair value of the warrants on the date of the amendment from warrant liabilities to additional paid-in capital in the condensed balance sheet and recognized a non-cash loss on changes in the fair value of warrants in the condensed statement of operations and comprehensive loss.

The following table provides a roll forward of the fair value of our warrant liabilities, the fair value of which was determined by Level 3 inputs for the six months ended June 30, 2020 (in thousands):

Fair value, December 31, 2019	$ 320
Issuance of the January 2020 Warrants	1,654
Change in fair value[(1)]	923
Reclassification of warrants to additional paid-in capital	(2,897)
Fair value, June 30, 2020	$ —

(1) Recognized as non-cash loss on changes in fair value of warrants in the condensed statement of operations and comprehensive loss.

The warrant liability associated with the January 2020 Warrants was classified within Level 3 of the fair value hierarchy. The following table presents the weighted-average key assumptions used to calculate the fair value of the January 2020 Warrants:

	As of	
	March 3, 2020	**January 7, 2020**
Expected volatility	124%	121%
Risk-free interest rate	0.8%	1.6%
Dividend yield	—	—
Expected term (in years)	4.9	5.0
Weighted-average fair value per share warrant	$ 0.26	$ 0.19

The warrant liability associated with the August 2019 Warrants was classified within Level 3 of the fair value hierarchy. The following table presents the weighted-average key assumptions used to calculate the fair value of the August 2019 Warrants:

	As of	
	March 3, 2020	**December 31, 2019**
Expected volatility	124%	125%
Risk-free interest rate	0.8%	1.7%
Dividend yield	—	—
Expected term (in years)	4.5	4.6
Weighted-average fair value per share warrant	$ 0.21	$ 0.11

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

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

References herein to "we," "us," "Titan," and "our company" refer to Titan Pharmaceuticals, Inc. and its subsidiaries unless the context otherwise requires.

Overview

We are a pharmaceutical company developing and commercializing therapeutics utilizing our proprietary long-term drug delivery platform, ProNeura™, for the treatment of select chronic diseases for which steady state delivery of a drug provides an efficacy and/or safety benefit. ProNeura consists of a small, solid rod made from a mixture of EVA (ethylene-vinyl acetate) and a drug substance. The resulting product is a solid matrix that is placed subdermally, normally in the inside part of the upper arm, in a short physician office-based outpatient procedure performed by a trained health care provider, or HCP, and is removed in a similar manner at the end of the treatment period. Probuphine is the first product based on our ProNeura technology approved in the U.S., Canada and EU for the maintenance treatment of OUD in clinically stable patients taking 8 mg or less a day of oral buprenorphine. Once implanted, buprenorphine HCl is released continuously through the process of diffusion-controlled dissolution, reaching a stable blood level in about four weeks and maintaining it thereafter for a total of six months, thereby avoiding the fluctuating peak and trough levels of oral dosing that often pose problems in certain disease settings, including OUD.

Since the reacquisition of Probuphine in mid-2018, we have been implementing our plan aimed at building the foundation to support an effective U.S. product relaunch to target select OUD market segments best suited for Probuphine. With our limited resources, we have made important progress in expanding access to treatment, educating and supporting the health care provider and patient communities, and improving the product order and distribution process through establishment of new relationships with specialty pharmacies and a central patient services hub. While we have continued to experience challenges to product adoption that have hampered sales growth, we believe we have learned much about the key factors that positively impact results, and we have been incorporating these in our sales and marketing programs. More specifically, we focus on the proper selection of HCPs with patients who meet the criteria for Probuphine treatment; selecting clinics with staff experienced in managing third party payer coverage plans that require prior authorization due to the subdermal insertion procedure, or, for those that don't, providing adequate staff educational support; and the rollout of education programs to help caregivers and patients understand the benefits of long acting medication.

In late 2019, we began expansion of our commercial team with experienced pharmaceutical sales leadership and now have 10 territory sales professionals who are being supported by four equally qualified and experienced medical science liaisons within our Medical Affairs team. Unfortunately, the emergence in the U.S. of the COVID-19 pandemic in the middle of the first quarter of 2020 and the resulting restrictions on travel and implementation of social distancing rules have minimized personal physician/patient interaction except in emergencies, which has hindered the effectiveness of the commercial team during the second quarter. We have shifted our focus during this period to preparatory work using digital communication techniques to establish relationships with new HCPs and their staff, providing virtual communication tools for them to use with their patients and highlighting the potential benefits of Probuphine as a treatment modality in the increasing telemedicine environment. While patient enrollments for Probuphine treatment began dropping off rapidly during March, which trend continued through April and parts of May, the efforts of our commercial team with clinics in certain regions are paying off as we saw patient enrollments starting to rise in June, a pattern that continued through July.

At the end of June 2020 we established a co-promotion partnership with Indegene, Inc., a leading healthcare solutions company ("Indegene"), to establish multichannel digital marketing programs throughout the United States and expand the capabilities for the engagement of HCPs who can be certified to prescribe Probuphine. Indegene's sophisticated multichannel marketing tools, predictive analytics and social media campaigns will be used along with its dedicated tele-representatives to help expand the universe of Probuphine Risk Evaluation and Mitigation Strategy ("REMS")-certified HCPs and enable further expansion of maintenance treatment with Probuphine for appropriate OUD patients. Our field sales and medical liaison personnel will provide support to Indegene as needed and we will be responsible for all training of HCPs, administration of the REMS program and regulatory affairs. Teams from both companies have been working diligently to implement the digital communications platform and have already initiated the first digital campaign to HCPs in early August 2020. During the third quarter of 2020 we are also implementing a pilot program that uses digital techniques to provide pertinent information on OUD and Probuphine to patients and their caregivers, with follow-up from trained staff to connect potential patients with appropriate HCPs certified under the Probuphine REMS program. Both of these new partnerships provide important capabilities for potential growth in the current environment of limited person-to-person interactions.

Our goal is to establish strong relationships with the medical community and inform health care providers and patients of the long acting treatment option with Probuphine, in order to increase the usage of Probuphine. We believe that with sufficient capital resources, Probuphine has the potential to be an important weapon in the battle against OUD and provide health care providers, patients and their caregivers an important maintenance treatment option.

The COVID-19 pandemic has also had an effect on the manufacturing of Probuphine for the EU. As previously mentioned we had planned to have product available for shipment to Molteni by the end of the second quarter of 2020, and we were in the midst of modifying the facilities and setting up testing protocols to meet EU regulations when the various restrictions related to the pandemic were implemented in March causing delays in the completion of this work to the end of the second quarter, and availability of product for shipment to the end of third quarter of 2020. The spread of COVID-19 throughout Europe has also delayed Molteni's plans for product launch in major EU countries which is now expected to occur late this year or early next year.

Last year the National Institute for Drug Addiction, or NIDA, awarded us an approximately $8.7 million grant over two years for our nalmefene implant development program for the prevention of opioid relapse following detoxification. This grant provides funds for the completion of implant formulation development, cGMP manufacturing and non-clinical studies required for filing an IND. During the first quarter we met with the FDA to review our non-clinical development plans and obtain guidance regarding filing an Investigational New Drug application, or IND. The FDA provided clear guidance on the type of development plan that we should follow, specifically that this product development should follow the 505 b (i) regulatory pathway due to the lack of safety data on nalmefene for a long acting formulation, and the non-clinical studies that will be required to file an IND. Based on this input, collecting all the non-clinical chronic toxicology data will require an additional study as well as increasing the duration of an ongoing study that will delay filing of the IND to mid-2021. We have discussed the change in development plan with NIDA and they have accepted our plan to reallocate previously approved funds for conduct of the studies.

Our Chief Executive Officer, Sunil Bhonsle, has expressed his desire to retire, hopefully by the end of the year. To prepare for this transition, and contingent on our ability to raise additional capital, we will look for a successor with experience in the commercial space, as we continue our transition to a commercial-stage company.

We operate in only one business segment, the development of pharmaceutical products. We make available free of charge through our website, www.titanpharm.com, our periodic reports as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Recent Accounting Pronouncements

See Note 1 to the accompanying unaudited condensed financial statements included in Part 1, Item 1 of this Quarterly Report on Form 10-Q for information on recent accounting pronouncements.

Results of Operations for the Three and Six Months June 30, 2020 and 2019

Revenues

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	Change	2020	2019	Change
	(In thousands)					
Revenues:						
License revenue	$ 6	$ —	$ 6	$ 6	$ 313	$ (307)
Product revenue	115	304	(189)	325	621	(296)
Grant revenue	1,204	198	1,006	2,330	513	1,817
Total revenues	$ 1,325	$ 502	$ 823	$ 2,661	$ 1,447	$ 1,214

The increase in total revenues for the three and six months ended June 30, 2020 compared to the same period in 2019 was primarily due to increases in grant revenue, partially offset by decreases in license and product revenue. Product revenue during the three and six month periods ended June 30, 2020 declined substantially from the comparable periods in 2019 due to a substantial decrease in unit sales volumes, increased utilization of our patient assistance programs and the effects of the COVID-19 pandemic and the related shelter in place restrictions and clinic closures. Also, the first half of 2019 unit sales volume included initial purchases by specialty pharmacies. License revenue recognized for the six months ended June 30, 2019 was related to the amortization of deferred revenue associated with the sale of our European intellectual property rights to Molteni.

Operating Expenses

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	Change	2020	2019	Change
	(In thousands)					
Operating expenses:						
Cost of goods sold	$ 228	$ 246	$ (18)	$ 399	$ 550	$ (151)
Research and development	2,007	1,907	100	4,284	3,751	533
Selling, general and administrative	3,474	3,231	243	6,589	6,313	276
Total operating expenses	$ 5,709	$ 5,384	$ 325	$ 11,272	$ 10,614	$ 658

Cost of goods sold reflects costs and expenses associated with sales of our Probuphine product by us after reacquiring the product in May 2018.

The increase in research and development costs for the three and six months ended June 30, 2020 was primarily associated with increased activities related to our NIDA grant for the development of a nalmefene implant. Other research and development expenses include internal operating costs such as research and development personnel-related expenses, non-clinical and clinical product development related travel expenses, and allocation of facility and corporate costs. As a result of the risks and uncertainties inherently associated with pharmaceutical research and development activities described elsewhere in this document, we are unable to estimate the specific timing and future costs of our clinical development programs or the timing of material cash inflows, if any, from our product candidates. However, we anticipate that our research and development expenses will increase at such time as we are able to undertake the required Probuphine Phase 4 clinical studies and continue our current or any future ProNeura development programs to the extent these costs are not supported through grants or partners.

The increase in selling, general and administrative expenses for the three and six months ended June 30, 2020 was primarily due to expenses associated with the commercialization of Probuphine, which resulted in increases in employee related expenses, consulting and professional fees, other outside services, travel costs and facilities related expenses.

Other Expense, Net

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	Change	2020	2019	Change
	(In thousands)					
Other expense:						
Interest expense, net	$ (250)	$ (253)	$ 3	$ (472)	$ (499)	$ 27
Non-cash loss on changes in fair value of warrants	—	—	—	(923)	—	(923)
Loss on debt extinguishment	—	(65)	65	—	(65)	65
Other income, net	(7)	3	(10)	(219)	17	(236)
Other expense, net	$ (257)	$ (315)	$ 58	$ (1,614)	$ (547)	$ (1,067)

The decrease in other expense, net for the three month ended June 30, 2020 was primarily attributable to loss on debt extinguishment associated with the conversion of the Molteni Convertible Loan. The increase in other expense, net for the six months ended June 30, 2020 was primarily attributable due non-cash losses on changes in the fair value of our warrants and approximately $0.2 million in costs attributable to the issuance of warrants.

Net Loss and Net Loss per Share

Our net loss for the three months ended June 30, 2020 was approximately $4.6 million, or approximately $0.05 per share, compared to our net loss of approximately $5.2 million, or approximately $0.38 per share, for the comparable period in 2019. Our net loss for the six months ended June 30, 2020 was approximately $10.2 million, or approximately $0.12 per share, compared to our net loss of approximately $9.7 million, or approximately $0.73 per share, for the comparable period in 2019.

Liquidity and Capital Resources

We have funded our operations since inception primarily through the sale of our securities and the issuance of debt, as well as with proceeds from warrant and option exercises, corporate licensing and collaborative agreements, and government-sponsored research grants. At June 30, 2020, we had working capital of approximately $3.8 million compared to working capital of approximately $4.7 million at December 31, 2019.

In January 2020, we completed a financing with several institutional investors pursuant to which we issued 8,700,000 shares of our common stock in a registered direct offering and warrants to purchase 8,700,000 shares of our common stock with an exercise price of $0.25 per share in a concurrent private placement pursuant to which we received net cash proceeds of approximately $1.9 million, after deduction of underwriting fees and other offering expenses.

During the six months ended June 30, 2020, we received an aggregate of approximately $7.0 million in cash proceeds from the exercises of warrants to purchase 31,144,386 shares of our common stock.

On April 20, 2020, we received an approximately $0.7 million PPP Loan under the Paycheck Protection Program ("PPP") of the CARES Act. Under the terms of the CARES Act and the PPP Flexibility Act, we may apply for and be granted forgiveness for all or a portion of loan granted under the PPP, with such forgiveness to be determined, subject to limitations (including where our employees have been terminated and not re-hired by a certain date), based on the use of the loan proceeds for payment of payroll costs and any payments of mortgage interest, rent, and utilities. The terms of any forgiveness may also be subject to further requirements in regulations and guidelines adopted by the SBA. While we currently believe that the majority of the use of the PPP loan proceeds will meet the conditions for forgiveness under the PPP, no assurance is provided that we will obtain partial forgiveness of the loan.

In June 2020, we established a co-promotion partnership with Indegene to establish multichannel digital marketing programs throughout the United States and expand the capabilities for the engagement of HCPs who can be certified to prescribe Probuphine. Under the terms of the co-promotion partnership, we are required to contribute approximately $0.8 million during the first year and approximately $0.4 million during the second year of the agreement.

At June 30, 2020, we had cash and cash equivalents of $5.5 million, which we believe is sufficient to fund our planned operations through the third quarter of 2020. We will require additional funds to finance our operations beyond such period. We are exploring several financing alternatives; however, there can be no assurance that our efforts to obtain the funding required to continue our operations will be successful.

Sources and Uses of Cash

	Six Months Ended June 30,	
	2020	2019
	(In thousands)	
Net cash used in operating activities	(9,195)	(8,457)
Net cash used in investing activities	(87)	(83)
Net cash provided by financing activities	9,557	1,176
Net increase (decrease) in cash and cash equivalents	275	(7,364)

Net cash used in operating activities for the six months ended June 30, 2020 consisted primarily of our net loss of approximately $10.2 million and approximately $0.5 million related to net changes in operating assets and liabilities, partially offset by approximately $1.3 million of non-cash charges mainly related to non-cash losses on changes in fair value of warrants, interest expense, stock based compensation and depreciation and amortization and approximately $0.2 million in costs attributable to the issuance of warrants. Net cash used in operating activities for the six months ended June 30, 2019 consisted primarily of our net loss of approximately $9.7 million. This was partially offset by approximately $0.3 million related to net changes in operating assets and liabilities and non-cash charges of approximately $0.5 million related to stock-based compensation, approximately $0.3 million related to interest expense, approximately $0.1 million related to depreciation and amortization.

Cash used in investing activities was primarily related to purchases of equipment for both the six months ended June 30, 2020 and 2019.

Net cash provided by financing activities for the six months ended June 30, 2020 consisted of approximately $1.9 million of net cash proceeds from the January 2020 offering, approximately $7.0 million of net cash proceeds from the exercises of warrants to purchase our common stock and approximately $0.7 million from our PPP Loan. Net cash provided by financing activities for the six months ended June 30, 2019 consisted of approximately $0.7 million of net proceeds from the exercises of warrants to purchase our common stock and approximately $0.5 million of net proceeds from the issuance of our common stock under at-the-market offerings (the "ATM").

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Our market risk disclosures set forth in our Annual Report on Form 10-K/A for the year ended December 31, 2019 have not materially changed.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Our President and Chief Executive Officer, being our principal executive and financial officer, has evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act as of June 30, 2020, the end of the period covered by this report, and has concluded that our disclosure controls and procedures were effective to ensure that the information required to be disclosed by us in reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our principal executive and principal financial officer as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the six months ended June 30, 2020 that materially affected, or were reasonably likely to materially affect, our internal controls over financial reporting.

PART II

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

If our stockholders do not approve the current proposal to increase our number of authorized shares of common stock, we will likely not be able to raise the capital necessary to fund our operations beyond September 2020 and may need to cease operations. In such event, all of our assets, which have been pledged to secure our outstanding loans, will be subject to forfeiture and our stockholders would likely experience the loss of their investment.

To date, the proposal contained in our proxy statement dated May 22, 2020 to amend our certificate of incorporation to increase the authorized shares of common stock has not achieved the requisite favorable vote for adoption under Delaware law. We currently have only approximately 5,000,000 shares available, which is not sufficient to enable us to raise the capital necessary to fund our operations beyond September 2020, most importantly to implement the programs that have been initiated pursuant to our new co-promotion partnership with Indegene. If we fail to obtain approval of the amendment proposal and raise the operating capital we require, we may need to cease operations. All of our assets, including our intellectual property, have been pledged to secure our outstanding indebtedness to Molteni and Horizon. In the event we are unable to meet our obligations or otherwise default under such loans, our assets can be foreclosed upon and our stockholders would likely experience the loss of their investment.

We face risks related to health epidemics, such as the current COVID-19 global pandemic, that could adversely affect our operations or financial results.

The spread of COVID-19, the novel coronavirus, including restrictions on travel, "shelter in place" orders, and quarantine policies put into place by businesses and state and local governments to mitigate its transmission, may have a material adverse effect on our business. While the duration of the pandemic and its potential economic impact are difficult to predict, it already has caused significant disruption in the healthcare industry and is likely to have continuing impacts as it continues. The travel restrictions, "shelter in place" orders, quarantine policies, and general concerns about the spread of COVID-19 have disrupted the delivery of healthcare to patients, for example resulting in clinic closures and generally making it more difficult for some patients to visit with their physician and obtain pharmaceutical prescriptions. Also, healthcare office staffing shortages may delay the administrative work, and particularly insurance-related documentation, needed to obtain reimbursement for Probuphine. In addition, the COVID-related policies, restrictions and concerns have and may continue to disrupt our sales and marketing efforts and REMS training activities, as well as the operations of the various parts of our supply and distribution chain. The ultimate impact of the COVID-19 pandemic, or any other health epidemic, is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, healthcare systems or the global economy as a whole. As the pandemic continues, it may result in a sustained economic downturn that could affect demand for and supply of our product, as well as our ability to access capital on reasonable terms, or at all, beyond the third quarter of this year. These factors could have a material adverse effect on our business, operating results and financial condition.

We received a loan under the Paycheck Protection Program of the CARES Act, and all or a portion of the loan may not be forgivable.

On April 20, 2020, we received an approximately $0.7 million PPP Loan pursuant to the Paycheck Protection Program of the CARES Act. The PPP Loan matures in April 2022 with an annual interest rate of 1.0%. The PPP Loan has a six month deferral of payments period and may be prepaid at any time without penalty. The proceeds of the PPP Loan are to be used to retain workers and maintain payroll and make mortgage interest, lease and utility payments. Under the CARES Act, we will be eligible to apply for forgiveness of all loan proceeds used to pay payroll costs, rent, utilities and other qualifying expenses during the 24-week period following receipt of the loan, provided that we maintain our number of employees and compensation within certain parameters during such period. Not more than 40% of the forgiven amount may be for non-payroll costs. If the conditions outlined in the PPP loan program are adhered to by us, all or part of such loan could be forgiven. However, we cannot provide any assurance that we will be eligible for loan forgiveness or that any amount of the PPP loan will ultimately be forgiven by the SBA. Any forgiven amounts will not be included in our taxable income.

Item 6. Exhibits

(b) Exhibits

No.	Description
1.1	Underwriting Agreement between Titan Pharmaceuticals, Inc. and Maxim Group LLC (23)
3.1.1	Amended and Restated Certificate of Incorporation of the Registrant, as amended (5)
3.1.2	Certificate of Amendment to the Restated Certificate of Incorporation dated September 24, 2015 (9)
3.1.3	Certificate of Amendment to the Restated Certificate of Incorporation dated January 23, 2019 (21)
3.2	By-laws of the Registrant (1)
3.3	Certificate of Designation of Series A Convertible Preferred Stock (20)
4.1	Form of 2014 Class A Warrant (13)
4.3	Form of 2014 Underwriter Warrant (8)
4.4	Form of Lender Warrant (13)
4.5	Form of Rights Agreement Warrant (15)
4.6	Warrant Agency Agreement between Titan Pharmaceuticals, Inc. and Continental Stock Transfer & Trust Company and Form of Offering Warrant (20)
4.7	Representative's Purchase Warrant (20)
4.8	Form of August 2019 Private Placement Warrant (22)
4.9	Form of August 2019 Pre-Funded Warrant (22)
4.10	Class B Warrant Agency Agreement dated October 16, 2019 between Titan Pharmaceuticals, Inc. and Maxim Group LLC Form of January 2020 Private Placement Warrant (23)
4.11	Form of January 2020 Private Placement Warrant (24)
4.12	Form of March 3, 2020 Warrant Amendment Agreement (27)
4.13	Description of the Registrant's Common Stock (27)
10.1	2001 Non-Qualified Employee Stock Option Plan (2)

10.2	2002 Stock Option Plan (3)
10.3	Lease for the Registrant's facilities, amended as of October 1, 2004 (4)
10.4	Amendments to lease for Registrant's facilities dated May 21, 2007 and March 12, 2009 (5)
10.5	Amendment to lease for Registrant's facilities dated June 15, 2010 (6)
10.6	Titan Pharmaceuticals, Inc. 2014 Incentive Plan (7)
10.7	Titan Pharmaceuticals, Inc. Third Amended and Restated 2015 Omnibus Equity Incentive Plan(21)
10.8	Controlled Equity Offering SM Sales Agreement, dated September 1, 2016, between Titan Pharmaceuticals, Inc. and Cantor Fitzgerald & Co. (11)
10.9	Employment Agreement between Titan Pharmaceuticals, Inc.and Sunil Bhonsle (12)
10.10	Employment Agreement between Titan Pharmaceuticals, Inc. and Marc Rubin (12)
10.11	Venture Loan and Security Agreement, dated July 27, 2017, by and between Titan Pharmaceuticals, Inc. and Horizon Technology Finance Corporation (13)
10.12	Amendment of Venture Loan and Security Agreement, dated February 2, 2018, by and between Titan Pharmaceuticals, Inc. and Horizon Technology Finance Corporation (14)
10.13	Amended and Restated Venture Loan and Security Agreement, dated March 21, 2018, by and between Titan Pharmaceuticals, Inc., Horizon Technology Finance Corporation and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. (15)
10.14 ±	Asset Purchase, Supply and Support Agreement dated March 21, 2018, by and between Titan Pharmaceuticals, Inc. and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. (15)
10.15	Rights Agreement dated March 21, 2018, by and between Titan Pharmaceuticals, Inc. and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. (15)
10.16 ±	Termination and Transition Services Agreement dated May 25, 2018 by and between Titan Pharmaceuticals, Inc. and BraeburnPharmaceuticals, Inc. (16)
10.17 ±	Amendment to Asset Purchase, Supply and Support Agreement dated August 3, 2018, by and between Titan Pharmaceuticals, Inc. and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A (17)
10.18 ±	Distribution and Sublicense Agreement dated February 1, 2016 as amended by agreement dated August 2, 2018 between Titan Pharmaceuticals, Inc. and Knight Therapeutics Inc. (18)
10.19	Amendment to lease for Registrant's facility dated March 21, 2016 (18)
10.20	Unsecured Convertible Loan Agreement dated September 18, 2018 (19)
10.21	Employment Agreement between the Registrant and Katherine Beebe DeVarney (25)
10.22	Employment Agreement between the Registrant and Dane Hallberg (25)
10.23	Securities Purchase Agreement, dated August 7, 2019, by and between Titan Pharmaceuticals, Inc. and the investors named therein (22)
10.24	Securities Purchase Agreement, dated January 7, 2020, by and between Titan Pharmaceuticals, Inc. and the investors named therein (24)
10.25	Placement Agency Agreement, dated August 7, 2019, by and between Titan Pharmaceuticals, Inc. and Maxim Group LLC (22)
10.26	Placement Agency Agreement, dated January 7, 2020, by and between Titan Pharmaceuticals, Inc. and Maxim Group LLC (24)
10.27	Amendment dated September 10, 2019 to Amended and Restated Venture Loan and Security Agreement, dated March 21, 2018, by and between Titan Pharmaceuticals, Inc., Horizon Technology Finance Corporation and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. (26)
10.28 ±	Amendment No. 2 dated September 10, 2019 to Asset Purchase, Supply and Support Agreement by and between Titan Pharmaceuticals, Inc. and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. (26)
10.29	Amendment No. 2 dated March 12, 2020 to Amended and Restated Venture Loan and Security Agreement, dated March 21, 2018, by and between Titan Pharmaceuticals, Inc., Horizon Technology Finance Corporation and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. (27)
10.30 ±±	Agreement for Co-Promotion Partnership, dated June 23, 2020, by and between Titan Pharmaceuticals, Inc. and Indegene, Inc.
31.1	Certification of the Principal Executive and Financial Officer pursuant to Rule 13(a)-14(a) of the Securities Exchange Act of 1934
32.1	Certification of the Principal Executive and Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

± Confidential treatment has been granted as to certain portions of this exhibit.
±± Certain information has been omitted from this exhibit in reliance upon Item 601(b)(10) of Regulation S-K.
(1) Incorporated by reference from the Registrant's Registration Statement on Form S-3 (File No. 333-221126).
(2) Incorporated by reference from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001.
(3) Incorporated by reference from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002.
(4) Incorporated by reference from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2005.
(5) Incorporated by reference from the Registrant's Registration Statement on Form 10 filed on January 14, 2010.
(6) Incorporated by reference from the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2010.
(7) Incorporated by reference from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2013.
(8) Incorporated by reference from the Registrant's Registration Statement on Form S-1/A dated September 30, 2014.
(9) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on September 28, 2015.
(10) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on August 3, 2016.
(11) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on September 1, 2016.
(12) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on April 3, 2019.
(13) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on July 27, 2017.
(14) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on February 7, 2018.
(15) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on March 26, 2018.
(16) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on May 30, 2018.
(17) Incorporated by reference from the Registrant's Current Report on Form 8-K filed on August 3, 2018.
(18) Incorporated by reference from the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2018.
(19) Incorporated by reference from the Registrant's Current Report on Form 8-K dated September 20, 2018.
(20) Incorporated by reference from the Registrant's Current Report on Form 8-K dated September 25, 2018.
(21) Incorporated by reference from the Registrant's Current Report on Form 8-K dated January 25, 2019.
(22) Incorporated by reference from the Registrant's Current Report on Form 8-K dated August 8, 2019.
(23) Incorporated by reference from the Registrant's Current Report on Form 8-K dated October 18, 2019.
(24) Incorporated by reference from the Registrant's Current Report on Form 8-K dated January 7, 2020.
(25) Incorporated by reference from the Registrant's Annual Report on Form 10-K dated April 1, 2019.
(26) Incorporated by reference from the Registrant's Registration Statement on Form S-1 dated September 12, 2019.
(27) Incorporated by reference from the Registrant's Annual Report on Form 10-K dated March 30, 2020.

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.

Dated: August 14, 2020

By: /s/ Sunil Bhonsle
Name: **Sunil Bhonsle**
Title: **President and Chief Executive Officer**
(Principal Executive and Principal Financial Officer)

Exhibit 10.30

Pursuant to Item 601(b)(10) of Regulation S-K, certain confidential portions of this exhibit marked with brackets and asterisks have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed.

AGREEMENT FOR CO-PROMOTION PARTNERSHIP

This Agreement For Co-Promotion partnership (this "**Agreement**"), is made as of June 23, 2020 (the "**Effective Date**"), by and between **Titan Pharmaceuticals, Inc**., a Delaware corporation, located at 400 Oyster Point Blvd., Suite 505, South San Francisco, California, 94080-1958 ("**TITAN**") and **Indegene, Inc.**, a Delaware corporation with an office at 150 College Rd W, Suite 104, Princeton, NJ 08540 ("**Indegene**").

Each of TITAN and Indegene are referred to in this Agreement as a "**Party**" and together as the "**Parties**".

Recitals

Whereas, TITAN wishes to engage Indegene to perform certain commercial activities with regard to co-promotion of the Product (as defined below), in the Territory (as defined below) under the terms and conditions set forth in this Agreement; and

Whereas, Indegene has expertise in digital and multi-channel marketing campaigns for the pharmaceutical industry and desires to undertake such activities to create a co-promotion partnership with TITAN pursuant to the terms and conditions set forth in this Agreement.

Now, Therefore, in consideration of the premises and the mutual covenants and agreements contained herein, the Parties, intending to be legally bound hereby, do agree as follows:

ARTICLE 1

DEFINITIONS

For purposes of this Agreement, the following terms, whether in the singular or the plural, shall have the meanings designated to them under this Article 1, unless otherwise specifically indicated:

1.1 "**Adverse Event**" shall mean any untoward medical occurrence associated with the use of the Product, whether or not considered Product-related. An Adverse Event may be any unfavorable and unintended sign (for example, an abnormal laboratory finding), symptom, or disease temporally associated with the use of the Product, whether or not considered related to the Product.

1.2 "**Affiliate**" shall mean, with respect to a Party, any Person that controls, is controlled by, or is under common control with that Party. For the purpose of this definition, "control" or "controlled" means, direct or indirect, ownership of fifty percent (50%) or more of the shares of stock entitled to vote for the election of directors in the case of a corporation or fifty percent (50%) or more of the equity interest in the case of any other type of legal entity; status as a general partner in any partnership; or any other arrangement whereby the Person controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity or the ability to cause the direction of the management or policies of a corporation or other entity. The Parties acknowledge that in the case of entities organized under the laws of certain countries where the maximum percentage ownership permitted by law for a foreign investor is less than fifty percent (50%), such lower percentage shall be substituted in the preceding sentence, provided that such foreign investor has the power to direct the management and policies of such entity.

1.3 "**Agreement**" shall have the meaning given in the Preamble.

1.4 **"Applicable Law"** shall mean each applicable provision of any national, federal, state, local or municipal laws, treaties, statutes, ordinances, orders, rules, and regulations, including those applicable to the manufacture, storage, marketing, promotion, sale and distribution of pharmaceutical products in the Territory, including the U.S. Foreign Corrupt Practices Act, Federal Food, Drug and Cosmetic Act (including its "fair balance" requirements), the Prescription Drug Marketing Act of 1987, the Generic Drug Enforcement Act of 1992 (21 U.S.C. § 335a et seq.), the Anti-Kickback Statute (42 U.S.C. § 1320a-7b et seq.), the False Claims Act (31 U.S.C. §§ 3729 et seq.) and the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h et seq.), including any and all implementing regulations thereunder of any national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, national securities exchange, or securities listing organizations that are in effect from time to time during the Term and apply to a particular activity or obligation hereunder.

1.5 "**Auditor**" shall have the meaning given in Section 9.1.

1.6 "**Calendar Day**" shall mean business days and non-business days.

1.7 "**Calendar Month**" shall mean the respective periods of days that define a given month.

1.8 "**Calendar Year**" shall mean the respective periods of twelve (12) consecutive Calendar Months beginning on January 1 and ending on December 31; *provided, however*, that (a) the first Calendar Year of the Term shall extend from the Effective Date until December 31, 2020 and (b) the last Calendar Year of the Term shall end on the date of expiration or termination of this Agreement.

1.9 "**Change of Control**" shall mean (a) the acquisition, directly or indirectly (through beneficial ownership or otherwise), of a majority of the voting securities of a party, (b) a merger, reorganization or other business combination in which the stockholders of a party beneficially own less than a majority of the voting stock of the surviving entity, or (c) the sale, conveyance, transfer, lease or other disposition of all or substantially all assets of a party to a non-Affiliate party.

1.10 "**Channel and Tactical Mix**" shall have the meaning set forth in Appendix 2.

1.11 "**Claim**" shall mean any claim, demand, proceeding, action, liability, suit, expense, fine, penalty, damage, loss and cost (including without limitation legal advisors' fees).

1.12 "**Co-promotion**" shall mean any Detailing Activities and Promotional Activities undertaken by Indegene with the appropriate approval and permissions of Titan in accordance with this Agreement

1.13 "**Commercialization**" or "**Commercialize**" shall mean any and all activities related to marketing, Promoting, Detailing, distributing, importing, exporting, selling or offering to sell the Product, including any of the foregoing activities performed by a Third Party on behalf of one of the Parties.

1.14 "**Confidential Information**" shall have the meaning given in Article 12.2. For clarity, the Confidential Information of TITAN includes, but is not limited to, Detail Plan, Promotional Materials, Target List, Training Materials, Personal Data and any other information designated by TITAN as Confidential Information.

1.15 "**Contact Center**" shall mean the location where the technology resides which allows the Indegene Representatives to make outbound or receive inbound calls.

1.16 "**CRM System**" shall mean Indegene's computer system for customer relationship management utilized to manage, track and record the Detail Activities of the Indegene Representatives. Such systems shall be maintained on a computer network that meets commercially reasonable and generally accepted standards within the industry for data security, business continuity and backups.

1.17 "**Detail**" or "**Detailing**" shall mean a comprehensive multi-channel virtual, not in person promotion of Product utilizing MLR-approved materials in order to increase the awareness of Product with the universe of prospective HCPs as outlines in the Target list

1.18 "**Detailing Activities**" shall mean Detailing of the Product within the FDA-approved indications and in accordance with the Channel & Tactical Mix and this Agreement as well as complete data entry into the Indegene CRM system, as applicable, such as details of each and every Detail activity as well as the responses from Targets and follow through actions.

1.19 "**Disclosing Party**" shall have the meaning given in Section 12.1

1.20 "**Disease State"** shall mean Opioid Abuse Disorder (OAD)

1.21 "**Dispute**" shall mean any dispute, controversy, difference or Claim of whatever nature arising out of, relating to, or having any connection with this Agreement.

1.22 "**Dispute Notice**" shall have the meaning set forth in Section 16.11.

1.23 "**Effective Date**" shall have the meaning set forth in the Preamble.

1.24 "**FDA**" shall mean the United States Food and Drug Administration, or any successor entity thereto.

1.25 "**Final Installment**" shall have the meaning set forth in Section 10.1.

1.26 "**Force Majeure Event**" shall have the meaning set forth in Section 16.7.

1.27 **"Gainshare"** shall have the meaning set forth in Section 10.2.

1.28 "**Governance Board**" shall have the meaning set forth in Section 2.1(a).

1.29 "**Governance meetings**" shall have the meaning set forth in Section 2.1

1.30 **"Gross Sales"** shall mean the Product Wholesale Acquisition Cost (WAC) for all commercial sales of the Product to Third Parties in the Territory by Titan, its Affiliates or its or their licensees. The current WAC for 1 unit of Product is $4,950.

1.31 "**Health Care Organization**" or "**HCO**" shall mean any organization employing HCPs that provides medical care to patients.

1.32 "**Health Care Professional**" or "**HCP**" shall mean any individual who does or could legally prescribe, recommend, purchase, supply, or administer the Product in the Territory or influence the prescribing, recommending, purchasing, supplying or administration of the Product in the Territory (e.g., licensed physicians, physician assistants, nurses, nurse practitioners, pharmacists, medical assistants, and other medical professional involved inpatient care; scientists or PhDs, who because of their professional reputations, may have an influence on clinical opinions; and others who could influence the purchase and/or prescribing of the Product, including group purchasing organizations, pharmacy benefit managers, managed care organizations, and other entities who arrange for the provision of healthcare services).

1.33 "**Hub**" shall mean a third-party patient and provider access, application and order processing center.

1.34 "**Indegene**" shall have the meaning set forth in the Preamble.

1.35 "**Indegene Indemnitees**" shall have the meaning set forth in Section 14.2.

1.36 "**Indegene Lead**" shall have the meaning set forth in Section 2.2.

1.37 "**Indegene Managers**" shall have the meaning given in Section 6.1.

1.38 "**Indegene Personnel**" shall mean the Indegene Representatives, the Indegene Home Office Personnel, the Indegene Lead, the Indegene Manager, the Indegene Trainer, and Quality Assurance/Quality Control Supervisors.

1.39 "**Indegene Pre-existing IP**" shall have the meaning set forth in Section 7.7.

1.40 "**Indegene Representative**" shall mean employees of Indegene located in the Kennesaw, Atlanta contact center facility (the "**Contact Center**") who shall be qualified and trained on the Product, TITAN Policies, and obligations under this Agreement.

1.41 "**Indemnitee**" shall have the meaning set forth in Section 14.3.

1.42 "**Indemnitor**" shall have the meaning set forth in Section 14.3.

1.43 "**Initial Amount**" shall have the meaning set forth in Section 10.1.

1.44 "**Initial Term**" shall have the meaning set forth in Section 15.1.

1.45 "**Initial Training**" shall have the meaning set forth in Section 5.2(b).

1.46 "**Materials**" shall mean Promotional Materials, Product Labeling, and Training Materials that, directly or indirectly mentions, describes, promotes, or otherwise is used in the promotion or sale of the Product, all of which shall be approved by MLR. For clarity, if Indegene creates Materials for proposed use to support the Services, all such Materials must be reviewed and approved by MLR prior to use of such Materials, as appropriate.

1.47 "**MLR**" shall mean the TITAN, Medical, Legal, and Regulatory Review Committee as may be constituted from time to time.

1.48 "**Net Sales**" means the Product Wholesale Acquisition Cost (WAC) for all commercial sales of the Product to Third Parties in the Territory by Titan, its Affiliates or its or their licensees, less the following deductions actually allowed or reserved in accordance with GAAP (collectively, "**Permitted Deductions**"):

- credits or allowances actually granted for damaged or spoiled Product, returns, Recalls or rejections of such Product, and retroactive price adjustments;
- normal and customary trade, cash and quantity discounts, allowances and credits for such Product;
- sales, value added, excise or similar taxes paid or allowed, or other governmental charges imposed upon the importation, use or sale of such Product in the Territory;

- fees paid to Third Party distributors and legally allowed chargebacks, rebates or similar payments to customers with respect to such Product, including managed health care organizations, wholesalers, distributors, buying groups, retailers, health care insurance carriers, pharmacy benefit management companies, health maintenance organizations or other institutions or health care organizations or to any Governmental Authority or Regulatory Authority, including, but not limited to any federal, state/provincial, local and other governments, their agencies and purchasers and reimbursers;

- Special packaging costs, freight, postage, shipping and insurance charges related to delivery of such Product;

- Fees paid by TITAN to the Hub; and

- Sales or other transfers between TITAN, its Affiliates or its or their licensees and any dispositions of such Product for pre-clinical or clinical testing required in connection with obtaining Regulatory Approvals of Product, in each case, without charge, shall be excluded from the computation of Net Sales and no payments will be payable to Indegene on such sales or transfers.

The per unit Net Sales shall not be less than 62% of WAC for one (1) unit of product for any given Promotional Measurement Period for the first 12 months of the Term of the Agreement nor less than 65% of WAC thereafter.

1.49 "**Patients**" shall mean new or continuing patients who commenced six month treatment cycle with Probuphine during a calendar quarter.

1.50 "**Party**" and "**Parties**" shall have the meaning set forth in the preamble.

1.51 "**Person**" shall mean any individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture or other similar entity or organization, including a government or political subdivision, department or agency of a government.

1.52 "**Personal Data**" shall have the meaning set forth in section 13.3.

1.53 "**Product**" shall mean PROBUPHINE® (buprenorphine implant).

1.54 "**Product Copyrights**" shall mean all registered and unregistered copyrights owned or controlled by TITAN or included in any of the Materials, including both published and unpublished works. Product Copyrights shall be solely owned by TITAN.

1.55 "**Product Intellectual Property**" shall mean, collectively, the Product Copyrights and the Product Trademarks.

1.56 "**Product Labeling**" shall mean all labels and other written, printed or graphic matter affixed to or upon (i) any container, packaging or wrapper utilized with the Product, (ii) any written material accompanying the Product, including, without limitation, Product package inserts, each of which have been provided by TITAN to Indegene, or (iii) any other Materials.

1.57 "**Product Trademarks**" shall mean all trademarks, service marks, trade names, and other indicia of source or goodwill, including the registrations and applications for registration thereof, owned or controlled by TITAN or included in any of the Materials. Product Trademarks shall be solely owned by TITAN.

1.58 **"Project Team"** shall have the meaning set forth in section 2.1(a).

1.59 "**Promotion**" shall mean the activities normally undertaken by a pharmaceutical company's sales force to implement marketing plans and directed to educate specific healthcare providers on the purchase and approved use of a particular prescription pharmaceutical product , and to market the pharmaceutical product for its approved use. When used as a verb, "**Promote**" shall mean to engage in such activities.

1.60 **"Promotion Year"** shall mean the calendar year in which Promotion of the Product occurs.

1.61 "**Promotional Materials**" shall mean all written, printed, electronic, or graphic materials agreed by the Parties for use by Indegene Representatives in connection with the provision of the Services hereunder.

1.62 "**Promotional Measurement Period** shall mean quarterly time periods, as determined by Indegene & TITAN mutually, used to assess promotional effectiveness

1.63 "**Promotional Activities**" shall mean Promotion activities for the Product provided hereunder, including but not limited to brand management, customer engagement, planning and strategy, not in person promotion-channel mix/tactic identification/execution, project management, content adaptation, data and analytics etc.

1.64 "**Quality Assurance/Quality Control Supervisors**" shall mean employees of Indegene located at the Contact Center who will be trained on the Product and TITAN Policies and obligations under this Agreement and who will support the Indegene Personnel and ensure that all activity by Indegene Personnel is compliant with this Agreement.

1.65 "**Receiving Party**" shall have the meaning set forth in Section 12.1.

1.66 "**Renewal Term**" shall have the meaning set forth in Section 15.1.

1.67 "**REMS Program"** means the Risk Evaluation and Mitigation Strategy requirements implemented under Section 505-1 of the Federal Food, Drug and Cosmetic Act in connection with the regulatory approval of the Product by the U.S. Food and Drug Administration. REMS requirements imposed by the FDA under the REMS Program allow for the Product to be delivered only to HCPs that have been certified in accordance with Titan's REMS Program.

1.68 "**Revenue Payments**" shall have the meaning set forth in Section 10.2.

1.69 **"Sales Shipment Data"** shall mean the actual sales units that get shipped via the Titan HUB service portal to the implantation site.

1.70 "**Segment**" shall mean a group of people, or HCPs, who share one or more common characteristics and are grouped together for marketing purposes.

1.71 "**Service Quality Shortfall**" shall have the meaning set forth in Section 2.3.

1.72 "**Services**" shall mean the services provided under this Agreement for the Product, including Promotional Services and Detailing Services as more fully described in Section 3 and Appendix 2.

1.73 "**Subsequent Training**" shall have the meaning set forth in Section 5.2(c).

1.74 "**Target**" shall mean any HCP or HCO to whom Detailing Services are provided, including recipients of Details.

1.75 "**Target List**" shall mean the list of HCPs and / or HCOs selected from the universe of HCPs in the Territory which are mutually agreed upon between the Parties to be considered for Detailing of the Product in the Territory.

1.76 "**Term of the Agreement**" shall have the meaning set forth in Section 15.1.

1.77 "**Territory**" shall mean the United States of America together with its commonwealths, territories and possessions, including without limitation Puerto Rico.

1.78 **"Third Party**" shall mean a party other than TITAN or Indegene, or their Affiliates.

1.79 **TITAN**" shall have the meaning set forth in the Preamble.

1.80 "**TITAN Code of Conduct**" shall mean TITAN's current code of conduct attached as Appendix 4 hereto as such may be amended and provided in writing by TITAN to Indegene from time to time, including the United States supplement thereto.

1.81 "**TITAN Indemnitees**" shall have the meaning set forth in Section 14.1.

1.82 "**TITAN Lead**" shall have the meaning set forth in Section 2.2.

1.83 "**TITAN Policies**" shall mean all TITAN policies and procedures regarding the areas of law specifically set forth in Applicable Law, the TITAN Code of Conduct and any other policies or procedures of TITAN in effect and provided in writing to Indegene from time to time.

1.84 "**Total Product Units**" means the total actual number of Product units (prescriptions) filled in the Territory during the applicable period as established by reference to the Sales Shipment data.

1.85 "**Training**" shall mean written or oral instruction on the appropriate methods to market and promote the Product and related information (including but not limited to the compliance with TITAN Policies, disease area, market segment, customers and competition) and/or communication and selling techniques, conducted by sales training, compliance, marketing or medical personnel, as appropriate, and / or self-directed, with Training Materials.

1.86 "**Training Materials**" shall mean all written, printed, electronic, or graphic material agreed by the Parties for use in the training of Indegene Personnel.

1.87 **"Weekly Status Meetings"** shall have the meaning set forth in Section 2.1

ARTICLE 2

THE GOVERNANCE BOARD & PROJECT TEAM

2.1 Composition and Details of Governance & Weekly Status Meetings

.

(a) Structure and Procedures.

(i) Governance Board: The Parties hereby establish a joint governance board (the "**Governance Board**") to oversee, review and coordinate the Services. The Governance Board shall comprise no less than one (1) representative of each Party, which in the case of Indegene, shall include an executive officer of Indegene acting as an Indegene Lead. Each Party shall appoint its respective representative to the Governance Board from time to time with one being the main point of contact, and may substitute one or more of its representatives, in its sole discretion, effective upon receipt of notice by the other Party of such change. The Governance Board shall meet periodically, but in no event less than once during a Calendar Month during the first 6 months of the term of the Agreement and once each calendar quarter (the "**Governance Meetings**") thereafter. Such meetings shall occur in person at TITAN offices at 400 Oyster Point Boulevard, Suite 505, South San Francisco, CA or by video conference or teleconference as mutually agreed upon by the Parties. Each Party shall bear all expenses it incurs for participating in any Governance Board Meetings, including all travel and lodging expenses. TITAN and Indegene shall mutually agree to activities under this Agreement through the Governance Board.

(ii) Project team: The parties also establish the working team ("**Project Team")** to execute the program and perform the day-to-day activities. This Project Team will include multiple representatives from both parties who will belong to different functions and will execute on various elements of the program like marketing strategy, medical strategy, disease and product training, approval of promotional material, regulatory/pharmacovigilance. The Project team shall meet weekly ("Weekly Status Meetings") with the required representatives attending the meeting to discuss the progress and day-to-day execution of the program

(iii) The key personnel for the Governance Board and the Project Team are listed in Appendix 1.

(b) Meeting Agenda. In the Governance Board Meetings, the Parties will manage and coordinate all Services, including: (i) developing, reviewing and maintaining the Target List and Channel & Tactical Mix; (ii) reviewing Indegene's performance relative to the Channel & Tactical Mix; (iii) Product Net Sales , (iv) determining when Subsequent Training is required from time to time, (v) monitoring, and (vi) reviewing any proposal from either Party that any additional Services should be provided by Indegene from time to time and any applicable terms therefore. In the Weekly Status meetings, the Parties will meet to discuss day-do-day execution items, including (i) execution of Channel & Tactical Mix, (ii) reviewing timeline ,(iii) approval of Promotional Materials and (iv) making day-to-day decisions affecting the program.

2.2 Lead Contacts. The Parties hereby agree that Indegene's performance of the Services and its obligations under this Agreement shall be under the day-to-day supervision of an appropriately qualified employee of Indegene (the "**Indegene Lead**") who shall fully inform, update and cooperate with TITAN's or its nominated Affiliate's designated contact person (the "**TITAN Lead**") on a timely, reasonable and regular basis, as requested by the TITAN Lead. As of the Effective Date, the Indegene Lead will be Nikita Garg Senior Account Director, and the TITAN Lead will be Joseph Schrei, Executive Director of Commercial Operations. Indegene may only substitute such Indegene Lead with another suitably qualified person upon prior written approval by TITAN.

2.3 Service Quality Shortfall. If either Party believes or has reason to believe that Indegene's provision of the Services falls below the standard required by Section 4.1(a) or Section 13.2 (a "**Service Quality Shortfall**") (including for example any suspected non-compliance with Applicable Law or TITAN Policies by an Indegene Representative), such Party shall provide the other Party with written notice of such event and without limiting TITAN's rights and remedies hereunder (including under Section 6.3), the Indegene Lead will meet with the TITAN Lead promptly but in no event later than five (5) business days thereafter to agree on actions reasonably required to be taken by Indegene to remedy such Service Quality Shortfall as promptly as practicable. If the Indegene Lead and the TITAN Lead are unable to agree as to whether a Service Quality Shortfall has occurred or appropriate remedial action, TITAN may terminate this Agreement pursuant to Section 15.3.

ARTICLE 3

CO-PROMOTION

3.1 Provision of Services: In consideration of the compensation hereunder, during the Term, both parties shall engage in Co-promotion in accordance with and subject to the terms and conditions set forth in this Agreement. For clarity, where this Agreement specifies that any obligation hereunder will be performed by Indegene, Indegene shall ensure that any Indegene Representative used by Indegene to perform such obligation fully complies with the terms and conditions set forth in this Agreement.

3.2 Objectives: The objective of the Co-promotion activities is to engage the universe of HCPs who are eligible to prescribe the Product using Detailing Activities and Promotional Activities.

3.3 Channel & Tactical Mix: Titan will review and approve in writing Indegene's use of Promotional Materials to develop, deploy, and re-deploy tactics to be promoted through the channels detailed in Appendix 2. Indegene will select the particular tactics to deploy and the timing and frequency of such deployments and re-deployments, as applicable. Both Parties shall mutually decide the mix of the channels based on the requirements to optimize the program and will agree on the Channel & Tactical Mix during the Governance Board Meetings. Indegene will use data to regularly optimize the campaign tactics and channels to achieve higher impact.

3.4 Tracking. In order to track and maintain Indegene's performance under this Agreement, Titan will share the Sales Shipment Data on or before the 5th day of every month for the preceding month during the Term of the Agreement

3.5 Limitations. The Parties acknowledge and agree that the shall be limited to only the Product for use in the Territory and shall not include any rights or obligations with respect to any other product, any other compound or any non-branded, generic or other therapeutically equivalent versions of the Product. For clarity, TITAN retains the right, on its own or through a Third Party, to Commercialize the Product. Except as specifically set forth herein, TITAN shall retain all rights with respect to and full control of, all activities with respect to the Product, including, but not limited to, all regulatory, clinical, manufacturing, distribution, importing, pricing, contracting, distribution, reimbursement, use, offering, sale and development of the Product as well as all medical activities or responsibilities. All Detailing Activities or Promotional Activities will be agreed to by both Parties. Marketing tactic mix will be discussed with the Governance Board and all changes shall be mutually agreed upon.

3.6 No Subcontracting, no Sublicensing. Indegene shall not subcontract or sublicense any of its obligations or the provision of any of the Services by Indegene under this Agreement without the prior written consent of TITAN. TITAN may exercise its rights and perform its obligations under this Agreement acting by itself or through any of its Affiliates and may subcontract or sublicense such activities without restriction. Each Party expressly acknowledges and agrees that it shall remain fully and unconditionally obligated and responsible for the full and complete performance of all of its obligations under the terms and conditions of this Agreement whether or not such performance is carried out by itself or any permitted sublicensee or subcontractor.

ARTICLE 4

RESPONSIBILITIES OF THE PARTIES

4.1 Responsibilities of Indegene.

(a) Service Requirements. Indegene shall provide the Services to TITAN, as applicable, in a professional, ethical and competent manner and in accordance with:

(i) all Applicable Law;

(ii) the PhRMA Code on Interactions with Health Care Professionals, and any other obligation to report in writing certain information regarding detailing and promotion activities to funding agencies, potential research subjects, or the general public;

(iii) the terms and conditions of this Agreement;

(iv) TITAN Policies;

(v) Instructions during Training;

(vi) the Materials; and

(vii) the Channel & Tactical Mix;

TITAN and TITAN's advisers may, during regular business hours, perform inspections and observations of Indegene's provision of the Services to ensure compliance with this Section 4.1(a).

(b) Cooperation with TITAN. The Parties agree that, as part of the provision of the Services, Indegene will collaborate and cooperate with TITAN to Promote the Product. Prior to performing any Services, Indegene Representative(s) will be fully trained and certified by TITAN on the Product and its core messaging, Adverse Event reporting to TITAN, handling unsolicited requests for medical information, as well as TITAN Policy requirements, among other areas. Specifically, with regard to the Services, Indegene will:

(i) utilize its HCP email database to deploy Product MLR-approved email campaign(s) to all Product MLR-approved matched Targets;

(ii) utilize Indegene Representatives to Detail to HCPs by way of outbound telephone calls from the Contact Center, using Product, MLR-approved, Promotional Materials.

(c) Limitations on Promotion. Indegene may only Promote within the mutually agreed target segment. Moreover, Indegene shall not Promote the Product outside of the FDA-approved indications (also known as "off-label"), Territory or to HCPs or HCOs who are not on the Target List. The Target List shall be approved by TITAN and Indegene shall assume that all laws have been considered for the list approval. Other than in the event of gross negligence and/or willful misconduct on Indegene's part, Indegene shall not be responsible for any claims from any party under Telephone Consumer Protection Act (TCPA) and Telemarketing, Consumer Fraud and Abuse Prevention Act (TCFPA), Federal Trade Commission Telemarketing Sales Rule and any other state and federal "Do Not Call" laws, California Consumer Privacy Act (CCPA) or any other legislation that applies to its use or deployment of the Target List, subject however, to Indegene using or deploying only the TITAN approved Target List, which claims will be the responsibility of TITAN.

(d) No False or Misleading Statements. Indegene shall not, in connection with the provision of the Services hereunder, disparage the Product, TITAN or TITAN's Affiliates, or make any false or misleading statement, or any representation or warranty, oral or written, to Third Parties, concerning the Product.

(e) Customer Communications. Indegene shall notify each Target that it is conducting the Services on behalf of TITAN in an appropriate form based on the applicable mode of communication as may be agreed between the Parties from time to time. All such communications must be MLR-approved. Indegene shall keep TITAN advised of market developments of which Indegene becomes aware which may reasonably be deemed to affect the Product.

(f) No Distribution by Indegene. Indegene shall not solicit or receive orders for the Product and shall have no authority to accept the same in the name of or for the account of TITAN. The Parties recognize that Third Parties may attempt to order Product directly from Indegene. In such event, Indegene shall promptly advise the customer through MLR-approved messaging that Indegene is not authorized to accept orders for the Product and it shall provide the customer with adequate information to enable the customer to complete the order directly with TITAN.

(g) Taxes. If any state taxing authority determines that sales or excise taxes are applicable to Indegene's services performed hereunder, Indegene shall properly accrue and pay such sales or excise taxes to the appropriate states. In addition, Indegene shall be responsible for the payment of any applicable use taxes related to the supply to or use by Indegene hereunder of Materials. Taxes on the services provided by Indegene under this Agreement, other than Tax on its income, shall be recovered by Indegene from TITAN.

(h) Non-Solicitation. During the Term and for a period of twelve (12) months thereafter, neither Party and its Affiliates shall, directly or indirectly, solicit or hire any Person who is, or has been, engaged as an employee, consultant or subcontractor of the other Party, involved in this agreement and introduced to the other Party, unless agreed to by the Parties in writing. This Section 4.1(h) shall not preclude either Party from soliciting or hiring any such personnel who: (a) initiates discussions with such Party regarding such employment without any prohibited solicitation by the other Party; (b) has ceased to be employed by the other Party prior to commencement of employment discussions between the other Party and such Person; or (c) responds to any general solicitation placed by the other Party, including, without limitation, any recruitment efforts conducted by any recruitment agency, provided that such Party has not directed such recruitment efforts at such personnel.

4.2 Responsibilities of TITAN. TITAN shall have the following responsibilities, among others set forth in this Agreement:

(a) Responsibility for Product. The Parties acknowledge that TITAN shall have the sole right and discretion, at its expense, to develop, make, have made, import, export, label, distribute, market, promote, commercialize, sell, have sold, and offer for sale the Product in the Territory and to establish and modify the terms and conditions with respect to the sale of the Product, including, without limitation, the price at which the Product will be sold, any discount applicable to payments or receivables for Product, including Product returns. TITAN shall develop, prioritize and administer in its sole discretion an annual budget for advertising and promotional activities for the Product. Any claims or liability related to or arising out of the Product shall be the sole liability of TITAN and TITAN shall make good any claim or liability on Indegene from any third party relating to or arising out of the Product.

(b) Responsibility for Sales. TITAN shall have the sole right and discretion to book and account for all sales and to establish and modify the terms and conditions with respect to the sale of the Product, including any terms and conditions relating to or affecting the price at which the Products shall be sold, any discounts, distribution, returns or credit terms. TITAN shall determine, process, administer and pay any and all rebates, chargebacks and discounts for the Product.

(c) Responsibility for Negotiations. TITAN shall have the sole right and discretion for all contracting, negotiations and communications relating to the Product with government and private payors, including managed care organizations, wholesalers, and distributors, including: (a) contract strategy, (b) contracting, (c) contract administration and claims processing, (d) contract compliance, monitoring and auditing, (e) account management and (f) government reporting, government program, rebate processing and pricing schedules.

(d) Responsibility for Adverse Event Reporting. TITAN shall be solely responsible for Adverse Event reporting for the Product to the applicable Government and/ or Statutory authorities. Indegene's responsibility will be to TITAN alone and Indegene shall not be required to interact with any Government and/ or Statutory authorities.

ARTICLE 5

MATERIALS; TRAINING

5.1 Materials.

(a) Use of Approved Materials. TITAN may develop Materials for use by Indegene in relation to the Disease State and Product in the Territory. Indegene shall be responsible for creating and/or updating Promotional Materials for use by Indegene in relation to the Product in the Territory, which Promotional Materials must be approved by TITAN prior to use by Indegene. For clarity, Indegene shall submit all Promotional Materials it creates or updates to the MLR for review and approval prior to use in accordance with all applicable TITAN Policies.

(b) Distribution of Materials. TITAN shall provide Materials to Indegene at TITAN's discretion, or upon Indegene's reasonable request, in the amount, of types and at times determined by TITAN in its reasonable discretion.

(c) Cessation of Use of Materials. Indegene shall promptly cease and withdraw the use of any Materials when instructed by TITAN in writing to do so. Such instruction shall be directed to Jamie Peck, VP Co-Commercialization. Indegene shall cooperate with TITAN in effecting such cessation and withdrawal as quickly as reasonably practicable upon notice from TITAN with respect thereto. Indegene shall bear the costs and expenses in connection with conducting such withdrawal and reimburse TITAN for any reasonable and verifiable out-of-pocket costs incurred by TITAN in connection with conducting such withdrawal.

5.2 Training.

(a) Initial Training. TITAN shall provide initial Training consistent with the initial Training TITAN provides to sales employees prior to Promoting the Product in the Territory ("**Initial Training**"). TITAN shall be responsible for all Product-related Training. The content and manner of delivery of such Initial Training shall be determined by TITAN. The Initial Training shall be conducted by TITAN at an Indegene-designated facility for all then-current Indegene Personnel. TITAN shall also provide any additional technical personnel to provide such Initial Training as it deems necessary. The Parties shall use reasonable efforts to schedule Initial Training sessions at such mutually convenient times as to permit the Initial Training to be provided alongside Indegene's own Training and minimize the costs therefor. Indegene shall cause each Indegene Personnel to complete the Initial Training to TITAN's satisfaction prior to the individual Indegene Personnel performing Detailing Services or Promotional Services.

(b) Subsequent Training. From time to time, Indegene shall request TITAN to provide follow-on Training following the Initial Training consistent with the follow-on Product Training TITAN provides to TITAN employees, as directed by TITAN (" **Subsequent Training**"). The content and manner of delivery of such Subsequent Training shall be determined by TITAN. The Subsequent Training shall be conducted by TITAN at an Indegene-designated facility or virtually, as determined by TITAN, for all then-current Indegene Personnel.

ARTICLE 6

PERSONNEL

6.1 Provision of Personnel. Indegene shall provide qualified Indegene Personnel for activities as needed. The key personnel who shall be involved in execution of Co-promotion are as shown in Appendix 1. In the event that any of the Indegene Personnel involved in the provision of the Services ceases to be an employee of Indegene, Indegene shall timely replace that individual with an individual who fulfills the requirements as set forth in this Agreement.

6.2 Use and Compliance of Indegene Personnel. Indegene shall ensure that all Indegene Personnel involved in the provision of the Services:

(a) are appropriately experienced, qualified and trained to perform the respective Services under this Agreement and are no less experienced, qualified or trained than individuals performing services analogous to the Services for or on behalf of Indegene in relation to other products;

(b) perform the Services with all reasonable skill, care and diligence, and in no event with less skill, care and diligence as is used by individuals performing services analogous to the Services for or on behalf of Indegene in relation to other products; and

(c) are familiar with the requirements of this Agreement which are relevant to their performance of the Services.

6.3 Replacement of Indegene Personnel.

(a) Removal by Indegene. If Indegene believes, by monitoring as provided under Section 11.4 of this Agreement or otherwise, that Indegene Personnel is failing to fulfill the requirements of Section 4.1(a), this Agreement, (including for example, any suspected non-compliance with Applicable Law or TITAN Policies), Indegene shall immediately remove that individual from the performance of the Services and replace that individual with an individual who fulfills the requirements of this Section 6.

(b) Removal by TITAN. Without limiting TITAN's rights and remedies hereunder, if TITAN notifies Indegene in writing that it believes that Indegene Personnel is failing to fulfill the requirements of Section 4.1(a), this Agreement, (including for example, any suspected non-compliance with Applicable Law or TITAN Policies), providing reasonable evidence of such belief, Indegene shall immediately remove that individual from the performance of the Services and will replace that individual with an individual who fulfils the requirements of this Section 6. Without limiting TITAN's rights and remedies hereunder, if TITAN has any concerns about the performance of any Indegene Personnel other than for the reasons set forth in the preceding sentence, TITAN may notify Indegene in writing specifying its concerns and providing reasonable evidence. Indegene shall, within five (5) business days of receipt of such notice, investigate TITAN's concerns and discuss in good faith its findings with TITAN and, if following such period, the Parties agree that the individual should cease to provide the Services, then Indegene shall immediately remove such individual from the performance of the Services and replace that individual with an individual who fulfills the requirements of Section 6.

(c) Restriction on Indegene Personnel. Indegene agrees that it shall only use employees of Indegene in the provision of the Services hereunder.

(d) Responsibility for Indegene Personnel. The Parties agree and acknowledge that Indegene has sole authority and responsibility for managing, hiring, firing, disciplining and compensating all Indegene Personnel, including paying for all benefits, wages, overtime, paid leave, workers' compensation and disability insurance, group health and dental insurance, unemployment insurance, retirement plans, stock-based benefits or plans and employment taxes, as applicable, and shall pay any and all other costs associated with the Indegene Personnel, except as expressly provided herein. Indegene shall cause that no Indegene Personnel self-identifies, either expressly or through implication, as an employee or agent of TITAN. Indegene shall be responsible for any failure of the Indegene Personnel to comply with such requirement. The Parties agree and acknowledge that Indegene will be fully responsible for compliance with all Applicable Laws relating to the Indegene Personnel, including the Affordable Care Act's employer mandate and its implementing regulations. The Parties agree and acknowledge that Indegene Personnel are not entitled to and will not receive from TITAN, any benefits normally provided by TITAN to its own employees, including, but not limited to, wages, overtime, paid leave, workers' compensation and disability insurance, group health and dental insurance, unemployment insurance, retirement plans, and stock-based benefits or plans.

ARTICLE 7

INTELLECTUAL PROPERTY RIGHTS

7.1 License Grant. Subject to the terms and conditions of this Agreement, TITAN hereby grants to Indegene during the Term a non-exclusive, non-sublicensable, revocable and non-transferable, royalty-free right and license under the Product Intellectual Property solely as and to the extent necessary for Indegene to provide the Services under this Agreement.

7.2 Product Trademarks.

(a) Use of Product Trademarks. Indegene shall provide the Services solely under the Product Trademarks only as authorized by TITAN. All use of the Product Trademarks by Indegene shall at all times inure to the benefit of TITAN as owner of the Product Trademarks. Indegene shall not use the Product Trademarks in a manner which is misleading or deceptive, or which would bring the Product Trademarks, the Product, TITAN or its Affiliates or sublicensees, into disrepute. Indegene shall use the Product Trademarks in accordance with sound trademark and trade name usage principles and in accordance with all Applicable Laws as reasonably necessary to maintain the validity and enforceability of the Product Trademarks. Indegene shall not adopt or use or cause any Third Party to adopt or use any trademark similar to the Product Trademarks. Indegene shall not register, maintain, acquire or otherwise use any domains using any trademark the same or similar to the Product Trademarks.

(b) Notification of Unauthorized Use. Indegene shall, promptly upon learning thereof, notify TITAN in writing of any: (i) unauthorized use of the Product Trademarks by a Third Party, (ii) Claim or suit by a Third Party that the use of the Product Trademarks infringes or otherwise violates the rights of a Third Party, or (iii) disparagement of the Product. Indegene shall cooperate with TITAN to the extent reasonably required by TITAN in actions to protect the rights in the Product Trademarks in the Territory.

7.3 Rights in Materials and Product Intellectual Property. Indegene acknowledges and agrees that, as between the Parties, TITAN shall retain all right, title and interest in and to the Materials and the Product Intellectual Property and, for the avoidance of doubt, nothing herein shall be construed to qualify the Materials as a "joint work" (or other term of similar import) under Title 17 of the United States Code or other Applicable Law. Any Materials newly created by Indegene or modifications of existing Materials shall be considered as work for hire for TITAN and shall be the property of TITAN, with TITAN owning the copyright and all other rights with respect thereto. Indegene shall ensure that all Materials newly created or modified by Indegene contain the following or a similar copyright notice: © {INSERT CURRENT YEAR OF PRINTING OR PUBLICATION} TITAN PHARMACEUTICALS, INC. Indegene shall ensure that Materials newly created by Indegene or modifications of already existing Materials made by Indegene do not infringe any third-party rights.

7.4 Ownership of Product. TITAN retains and shall, during the Term, retain all proprietary and property interests in and to the Product until the point of sale. TITAN's National Drug Code (NDC) number shall at all times remain on the Product. Indegene shall not have nor represent that it has any control over, or proprietary or property interests in, the Product.

7.5 No Additional Licenses or Rights. Except as expressly set forth in Section 7.1, nothing in this Agreement grants Indegene any license, right, title or interest in or to any patents, trademarks, copyright, know-how, trade secrets or other intellectual property rights owned or controlled by TITAN or its Affiliates (either impliedly, by estoppel or otherwise). This Agreement conveys no implied rights or licenses to Indegene.

7.6 Product Intellectual Property. Indegene shall notify TITAN promptly upon becoming aware that there exists an actual or potential infringement or misappropriation by Third Parties in the Territory of the Product Intellectual Property, or that the Product or any intellectual property rights covering the Product, might or actually infringe or misappropriate, or are dependent upon a Third-Party intellectual property right in the Territory. TITAN shall have the sole and exclusive right to take action to enforce the Product Intellectual Property against any infringement or misappropriation. Upon request, Indegene shall reasonably cooperate with TITAN on any action to enforce the Product Intellectual Property at TITAN's expense.

7.7 Indegene Pre-existing Intellectual Property. To the extent that any Indegene or Third Party pre-existing materials or inventions owned or controlled by Indegene are included in or with the Services ("**Indegene Pre-existing IP**"), Indegene hereby grants to TITAN and its Affiliates a worldwide, non-exclusive, non-assignable, non-modifiable, non-resalable, non-transferable, non-revocable, royalty-free right and license (or in the case of Third Party materials, sublicense) for the Term to, directly or through their respective agents, use the Indegene Pre-existing IP in connection with the use, operation, maintenance, and updating of the Services. Indegene shall specifically identify and disclose in writing any such Indegene Pre-existing IP to TITAN in the applicable Services.

7.8 Indegene Derivative Intellectual Property. In addition to retaining exclusive ownership and rights to Indegene Pre-existing IP, any derivative works or intellectual property developed by Indegene at any time during the Term will solely be owned by Indegene, excluding all materials that contain Product Intellectual Property, other TITAN intellectual property or TITAN Confidential Information. TITAN acknowledges and agrees that Indegene will have the right to generate aggregate and anonymous data and de-identified population level analysis and that such data or analyses belongs to Indegene, including without limitation any developments or improvements to Indegene's products and services such as machine learning algorithms and artificial intelligence based models, and related materials and reports.

ARTICLE 8

REGULATORY MATTERS

8.1 Regulatory Approvals. TITAN shall have the sole right and discretion between the Parties to file and maintain the regulatory approvals required to market the Product as a pharmaceutical product for use in the Territory, at TITAN's expense. TITAN shall have sole right and discretion, as between the Parties, for making all regulatory filings for the Product as required by Applicable Law, at TITAN's expense.

8.2 Regulatory Communications. All communications with and responses to government agencies and regulatory authorities concerning the Product or the marketing thereof, shall be the sole responsibility of TITAN, at TITAN's expense. Indegene shall promptly notify TITAN and provide copies, as applicable, if it receives any communication from any government agency or regulatory authority in relation to the Product or if it becomes aware of any pending action or receives threat thereof by any government agency or regulatory authority that relates to the Product. Indegene shall assist TITAN, at TITAN's expense, with respect to communications from government agencies and regulatory authorities to the extent deemed reasonably necessary by TITAN to fully respond to such communications.

8.3 Investigation Cooperation. Indegene shall cooperate with TITAN, TITAN's advisers and Third Parties (where relevant), as may be reasonably required in relation to any internal or external investigation relating to the Product (including any investigations conducted by or on behalf or in connection with any investigation by any government agency, regulatory authority, in connection with threatened litigation, etc.), including by making Indegene Personnel available for interview, providing all relevant information and providing access to Indegene sites, records, reports, statements and books of accounts. In addition, in relation to any such investigation, TITAN, TITAN's advisers and Third Parties (where relevant), may, where reasonably required, during regular business hours, perform inspections and observations of Indegene's provision of the Services.

8.4 Regulatory Inspections. Indegene shall promptly notify TITAN in writing within one (1) business day if any government agency or regulatory authority notifies Indegene in advance that it intends to audit or inspect Indegene or perform inspections and observations of Indegene's provision of the Services in relation to the Product and shall permit, to the extent permitted by Applicable Law, TITAN to attend such audit or inspection at TITAN's expense. If Indegene receives no advance notice and is subject to an inspection by a government agency or regulatory authority, Indegene shall promptly notify TITAN of the same. In either case, Indegene shall promptly provide TITAN with a copy of any report issued to Indegene following such audit or inspection by the relevant government agency or regulatory authority and any responses by Indegene thereto.

8.5 Sunshine Act Reporting. Indegene shall provide to TITAN any reports relating to transfers of value or other payments made to HCPs and HCOs that are required to be made in relation to the Product and / or the provision of the Services in accordance with the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h et seq.), state transparency reporting requirements or other Applicable Law. These reports should be submitted monthly, or upon request by TITAN, and in the format required by TITAN.All such reports shall be submitted to: sunshine@titanpharm.com.

8.6 Pharmacovigilance Agreement. The Parties will enter into a reasonable and customary pharmacovigilance agreement within thirty (30) days following the Effective Date that will govern the Parties' obligations in relation to the reporting by the Parties of Adverse Events, field reports, Product complaints, handling of recalls and other pharmacovigilance responsibilities regarding the Product and that will cover other matters customarily contained in similar agreements for products of a similar nature.

ARTICLE 9

AUDITS.

9.1 Scope of Audit. Commencing one hundred eighty (180) days following the Effective Date and terminating one year following the expiration of the Term of the Agreement, each Party may, upon written request, cause an internationally-recognized independent accounting firm (the "**Auditor**"), which is reasonably acceptable to the audited Party, to inspect the relevant records of the audited Party and its Affiliates and the Agreement and Services-related reports, statements and books of accounts, as applicable only to the extent directly related to this Agreement. Before beginning its audit, the Auditor shall execute an agreement acceptable to the audited Party by which the Auditor agrees to keep confidential all information reviewed or accessed during the audit. The Auditor shall have the right to disclose to the auditing Party only its conclusions regarding any payments owed under this Agreement.

9.2 Audit Procedures. The audited Party and its Affiliates shall make their records, only to the extent directly related to this Agreement, available for inspection by the Auditor during regular business hours at such place or places where such records are customarily kept, upon receipt of reasonable advance notice from the auditing Party. The records shall be reviewed solely to verify the audited Party's compliance with this Agreement. Such inspection right shall not be exercised more than once in any Calendar Year and not more frequently than once with respect to records covering any specific period of time. The auditing Party agrees to hold in strict confidence all information received and all information learned in the course of any audit or inspection, except to the extent necessary to enforce its rights under this Agreement or to the extent required to comply with any law, regulation or judicial order.

9.3 Audit Reports. The Auditor shall provide its audit report and basis for any determination to the audited Party at the time such report is provided to the auditing Party before it is considered final.

9.4 Underpayments and Overpayments. In the event that the final result of the audit reveals an undisputed underpayment, TITAN shall promptly pay to Indegene the underpaid amount in accordance with the payment terms set forth under Section 10.4. In the event that the final result of the audit reveals an undisputed overpayment, Indegene shall promptly refund to TITAN the overpayment amount in the manner instructed by TITAN. Disputed overpayments and underpayments shall be resolved in accordance with Section 11.3(e) below.

9.5 Audit Costs. The auditing Party shall pay for such audits, as well as its expenses associated with enforcing its rights with respect to any payments hereunder. The audited Party shall have the right to request a further determination by such Auditor as to matters which the audited Party disputes within thirty (30) days following receipt of such report. The audited Party will provide the auditing Party and the Auditor with a reasonably detailed statement of the grounds upon which it disputes any findings in the audit report and the Auditor shall undertake to complete such further determination within thirty (30) days after the dispute notice is provided, which determination shall be limited to the disputed matters. The Parties agree that they shall use reasonable efforts, through the participation of finance representatives of both Parties, to resolve any Dispute arising in relation to the Audit by good faith discussion.

ARTICLE 10

COMPENSATION, INVESTMENT AND PAYMENT TERMS

10.1 Upfront Compensation. As an upfront compensation for the Services, TITAN shall pay to Indegene a payment upon receipt of invoice at respective intervals mentioned below and is non-refundable:

(a) For the first 12 months of the Term of the Agreement, USD eight hundred and ten thousand ($810,000) (the "**Initial Amount**"). The invoice and payment schedule for Initial Amount will be as follows

Amount	Invoice Date	Payment Date
$ 350,000	On signature of agreement	Within 7 days of invoicing
$ 153,333	90 days after Effective Date	Within 30 days of invoicing
$ 153,333	180 days after Effective Date	Within 30 days of invoicing
$ 153,334	270 days after Effective Date	Within 30 days of invoicing

(b) For the second 12 months of the Term of the Agreement, USD four hundred and twenty thousand ($420,000) (the "**Final Installment**) The invoice and payment schedule for Initial Amount will be as follows

Amount	Invoice Date	Payment Date
$ 210,000	On the one year anniversary of the Effective Date	Within 7 days of invoicing
$ 210,000	On the 18-month anniversary of the Effective Date	Within 30 days of invoicing

10.2 Revenue-based Payments. In addition to the compensation set forth in Section 10.1 and subject to the terms and conditions hereof, TITAN shall pay to Indegene, as further compensation for the Services, a percentage of the Net Sales of the Product during the Term ("**Revenue Payment**"), as calculated by multiplying the Net Sales by the applicable revenue percentage rate set forth below (the "**Gainshare**") for the applicable Promotional Measurement Period.

This compensation will be calculated quarterly and Indegene will invoice TITAN the Revenue Payment on or before the thirtieth (30th) day of the month following the last month of the quarter. The Gainshare will be equal to [**]% of Net Sales.

Revenue payments, once accepted by TITAN within the time-lines agreed for a respective month, cannot be changed under any circumstances. Further, there shall be no cumulative reconciliation done.

In addition to compensation defined in Sections 10.1 and 10.2, Indegene will also be eligible for one-time milestone incentives as set forth in the table below:

Sr. No.	Description	Value
1.	Achieving 500 PROBUPHINE Patients per quarter	$[*******]
2.	Achieving 1000 PROBUPHINE Patients per quarter	$[*******]
3.	Achieving 2000 PROBUPHINE patients per quarter	$[*******]

10.3 Payment Terms. All undisputed payments to be made by TITAN to Indegene pursuant to this Agreement shall be made by wire transfer within thirty (30) days following the date of the applicable invoice. Such payments shall be made to the designated account of Indegene in accordance with the wiring instructions provided below. If any portion of an invoice is disputed, TITAN shall pay the undisputed amounts and the Parties shall use good faith efforts to reconcile the disputed amount within fifteen (15) days after notice from TITAN of the disputed amount. If the Parties cannot resolve the disputed amounts during that fifteen (15) day period, then the matter shall be resolved in accordance with Section 16.11. If an overpayment or underpayment has been invoiced in accordance with the above section, payment shall be made by wire transfer within thirty (30) days following receipt of the invoice.

Payee: Indegene Inc.
Wire: [**********]

10.4 Fair Market Value of Services.

(a) The Parties acknowledge and agree that the compensation set forth herein represents the fair market value of the Services provided hereunder negotiated in an arms-length transaction. The Parties further agree that this Agreement does not involve the counseling or promotion of a business arrangement that violates state or federal law, and that the Services contracted for shall not exceed those that are reasonably necessary to accomplish the commercially reasonable business purpose of the Agreement.

(b) In the event that at any point during the Term either Party in its reasonable discretion believes or has reason to believe that the Revenue-Based Payments result in compensation to Indegene that is inconsistent with the fair market value of the Services, such Party shall notify the other Party of its belief, and the Parties shall meet and discuss in good faith a new compensation structure to be set at fair market value. In the event the Parties cannot agree to a new compensation structure, either Party shall have the right to immediately terminate the Agreement upon written notice to the other Party.

10.5 Investment by Indegene in the Partnership. During the first 12 months of the Term of this Agreement, Indegene expects to make an investment of $[*******] with respect to the Co-promotion activities described on Appendix 2, such investment to be made substantially in accordance with Appendix 3, subject to review by the Governance Board, with at least [***]% of such amount projected to be spent during the one hundred eighty (180) days following the Effective Date. During the second year of the Term of this Agreement, Indegene expects to make investments of $[******] in accordance with a schedule to be agreed upon by the Governance Board. During the balance of the Term of the Agreement, the amount and schedule of Indegene's investments shall be agreed upon by the Governance Board. In addition to the $1,230,000 of payments to be made by TITAN during the first two years of the Term of this Agreement pursuant to the provisions of Section 10.1 hereof, TITAN expects to continue its current level of commercial activities for Probuphine during the Term of this Agreement as described in Appendix 6.

ARTICLE 11

RECORDS, REPORTS AND AUDITS

11.1 Records. Each Party shall keep complete, true and accurate books and records in accordance with its customary accounting standards in relation to its obligations under this Agreement. Each Party will keep such books and records for at least three (3) years following the Calendar Year to which they pertain, or for such other time period as required under Applicable Law.

11.2 Reports and Reporting.

(a) Indegene Reports. Not later than fifteen (15) days following the end of each month in the Term, Indegene shall submit to TITAN a written report in a form reasonably acceptable to TITAN setting forth for such month certain content as agreed upon by the Governance Board which content may include the following:

(i) Tele-Detailing:

- Tele-Detailing Calls
- Total call attempts
- Unique call attempts
- Total completed details
- Unique completed details
- Average call duration

(ii) Digital Marketing Campaign Data

- Digital Affinity
- Engagement Index
- Switch Propensity
- Content Affinity
- Belief Model
- Network Score
- Brand Rx Potential

11.3 Monitoring.

(a) Monitoring by Indegene. Indegene shall monitor (telephonically or live) Indegene activity including but not limited to a Detail activity or response as well as reporting of Adverse Events to ensure strict compliance with Section 4.1 of this Agreement. When monitoring Indegene Representatives, Indegene shall also monitor the input to the CRM System for the Details observed. Indegene shall also separately monitor input to the CRM System separate from live monitoring to ensure compliance with Section 4.1 of this Agreement. The frequency of monitoring shall be discussed and agreed upon by the Governance Board from time to time.

(b) Monitoring by TITAN. At TITAN's option, TITAN may monitor (telephonically or live) (a "Sit-beside") and Indegene shall cause the Indegene Personnel to permit an employee or other designee of TITAN, including, but not limited to, TITAN's sales and/or marketing, as appropriate, finance, legal, medical, and/or compliance personnel, or other executives, to monitor Detail activity or response (with advance written notice) as well as reporting of Adverse Events. The Parties acknowledge and agree that instructions, directions and input regarding how disease state and Product education should be provided to Targets will generally be provided by TITAN (and may be provided in real time during a Sit-beside), but any administrative-related feedback, including, without limitation, any performance-related feedback, must be provided by Indegene.

ARTICLE 12

CONFIDENTIALITY; PUBLIC STATEMENTS

12.1 Confidential Information. Each Party acknowledges and agrees that it may have access to, or receive, the Confidential Information of the other Party in connection with its rights and obligations under this Agreement. For the purposes of this Agreement, "**Confidential Information**" shall mean any information (whether oral or written or otherwise in tangible or intangible form) received or accessed pursuant to this Agreement by one Party or any Affiliate thereof ("**Receiving Party**") from or on behalf of the other Party or any Affiliate thereof ("**Disclosing Party**"), whether or not developed by the Disclosing Party, including but not limited to, any and all information which relates in any way to any ideas, designs, methods, discoveries, improvements, documents or other results of the Parties' activities to be conducted hereunder, trade secrets, intellectual property and other proprietary rights, business affairs, marketing strategies or information, customer information or employee information and without limiting the foregoing, in the case of TITAN, proprietary or Confidential Information relating to the Product, the Product Intellectual Property and the Channel & Tactical Mix. Confidential Information does not include Indegene Derivative Intellectual Property mentioned in Article 7.8. Confidential Information of the Disclosing Party shall not be subject to the obligations set forth in this Section 12 to the extent that such information:

(a) was, at the time of disclosure, in the public knowledge;

(b) becomes part of the public knowledge after disclosure, by publication or otherwise, except by breach of this Agreement by the Receiving Party or other obligation of confidentiality owed to the Disclosing Party;

(c) was in the Receiving Party's possession at the time of disclosure as evidenced by competent written proof, and which was not acquired, directly or indirectly, from the Disclosing Party or any Third Party which was, at the time of such acquisition, subject to an obligation of confidentiality owed to the Disclosing Party;

(d) is received by the Receiving Party from Third Parties, *provided* such information was not obtained, directly or indirectly, from the Disclosing Party or any Third Party which was, at the time such information was obtained, subject to an obligation of confidentiality owed to the Disclosing Party; or

(e) was independently developed by the Receiving Party, without use of, reliance on, or access to the information provided by the Disclosing Party (as demonstrated by competent proof).

12.2 Confidentiality Obligations. Each Party acknowledges and agrees that the Confidential Information of the Disclosing Party constitutes valuable information and in certain instances trade secrets of the Disclosing Party. Each Receiving Party shall, during the Term and for a period of ten (10) years following the end of the Term, provided that Confidential Information consisting of trade secrets shall be kept confidential beyond such ten (10) year period until such Confidential Information no longer constitutes a trade secret (except where due to a breach by the Receiving Party of this Agreement or other obligation of confidentiality owed to the Disclosing Party), keep all Confidential Information of the Disclosing Party in confidence and shall not, at any time during or after the Term of this Agreement, without the Disclosing Party's prior written consent, disclose or otherwise make available, directly or indirectly, any item of the Disclosing Party's Confidential Information to anyone other than the Receiving Party's employees, licensors, distributors and Affiliates with a need to know and who are bound by obligations of confidentiality, except, however, to the extent otherwise required by Applicable Law or rules of a securities exchange, or to the extent necessary for such Party to confer with its legal, accounting or other advisors (in which case such disclosure shall be made under confidentiality obligations at least as strict as those contained herein). Each Receiving Party and its employees shall use the Confidential Information of the Disclosing Party only in connection with the performance of the Receiving Party's obligations or exercising the Receiving Party's rights hereunder and for no other purpose. Each Receiving Party shall inform its employees of the trade secret, proprietary and confidential nature of the Confidential Information of the Disclosing Party and their obligation to use the Confidential Information only for such purposes as is entitled to use it hereunder. The Receiving Party shall be liable for any breach of such confidentiality and non-use obligations by any of its Affiliates or employees as described in this Section 12.

12.3 Return of Confidential Information. Upon written request by the Disclosing Party, the Receiving Party agrees to promptly and in any event not more than thirty (30) days following receipt of said request, return to the Disclosing Party or destroy, on Disclosing Party's election, any and all of its Confidential Information; *provided* that the Receiving Party shall be entitled to retain one (1) copy solely to the extent required by Applicable Law.

12.4 No Use of Names. Except as otherwise required under Applicable Law, or as otherwise agreed to by the Parties in writing, neither Party shall use the name of the other in its advertising, press releases or promotional materials without the prior written consent of such other Party.

12.5 Irreparable Harm. The Parties acknowledge that a breach of any of the terms or provisions of this Section 12 (Confidentiality), Section 12.4 (No Use of Name) and Section 13.3 (Personal Data) and will cause irreparable harm to the non-breaching Party for which monetary damages may not be wholly adequate and therefore the non-breaching Party shall be entitled, without the requirement of posting a bond, to injunctive relief to enforce the terms and provisions hereof in addition to its other remedies at law or in equity.

ARTICLE 13

REPRESENTATIONS, WARRANTIES AND COVENANTS

13.1 Mutual Representations and Warranties. As of the Effective Date, each Party represents, warrants and covenants to the other Party that:

(a) it is a corporation or entity duly organized and validly existing under the laws of the state or other jurisdiction of its incorporation or formation;

(b) the execution, delivery and performance of this Agreement by such Party has been duly authorized by all requisite corporate action;

(c) it has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder and this Agreement constitutes and when executed shall constitute, its legal, valid and binding obligation, enforceable in accordance with its terms;

(d) it is not bound by any other agreement, obligation or restriction and shall not assume any other obligation or restriction or enter into any other agreement, which would interfere in any material respect or conflict with its obligations under this Agreement;

13.2 Representations, Warranties and Covenants of Indegene. As of the Effective Date, Indegene represents, warrants and covenants to TITAN, that:

(a) it has the requisite employees, facilities, equipment, expertise, experience and skill to provide the Services and perform its other obligations as set forth in this Agreement;

(b) it its employees or contractors performing services with respect to the Product shall conduct the Services in a professional, ethical and lawful manner;

(c) it and its employees or contractors performing Services shall comply with all Applicable Law, the TITAN Policies, or the PhRMA Code on Interactions with Health Care Professionals and any other obligation to report in writing certain information regarding Detailing and Promotion activities to funding agencies, potential research subjects, or the general public in connection with obligations hereunder;

(d) neither it nor its employees or contractors performing Services shall make any false or misleading statement, or any representation or warranty, oral or written, to Third Parties, concerning the Product; and

(e) neither it nor its employees or contractors performing Services have been or are currently excluded, debarred, suspended or otherwise ineligible to participate in the Federal health care programs or in Federal procurement or non-procurement programs, or has been convicted of a criminal offense that falls within the ambit of 42 U.S.C. 1320a-7(a). Indegene further represents that it has policies to screen all prospective employees and contractors prior to engaging their services and to determine whether any existing employee or contractor becomes excluded, debarred, suspended or otherwise declared ineligible, and that it has policies and procedures in effect that require and it shall otherwise require, all employees and contractors to immediately disclose to Indegene any action or event that could reasonably result in such employee or contractor becoming so excluded, debarred, suspended or otherwise declared ineligible. Screening of Indegene employees, contractors, and vendors shall be completed within one hundred twenty (120) days of the Effective Date, and on an annual basis thereafter. At a minimum, Indegene shall check the following exclusion lists:

(i) the HHS/OIG List of Excluded Individuals/Entities (available through the Internet athttp://www.oig.hhs.gov);

(ii) the General Services Administration's List of Parties Excluded from Federal Programs (available through the Internet at http://www.epls.gov); and

(iii) Food and Drug Administration (FDA): https://www.fda.gov/ICECI/EnforcementActions/FDADebarmentList/default.htm.

In the event that an Indegene employee, contractor, vendor or other agent performing under this Agreement, become or are a subject of a proceeding that could lead to that party becoming debarred, suspended, or otherwise ineligible, Indegene shall promptly notify TITAN and TITAN shall have the right to immediately terminate the Agreement.

13.3 Personal Data. Indegene acknowledges that while TITAN shall not knowingly provide it, Indegene may gain access to "Personal Data," which, for purposes of this Agreement, shall mean any information which identifies or is capable of identifying a living or deceased individual, or as otherwise defined as "**Personal Data**" by applicable laws, including, without limitation, TITAN or TITAN's customers', consumers, patients, employees, personnel, shareholders, physicians, suppliers, consultants and competitors, whether verbal or recorded in any form or medium. On receipt of such data, Indegene shall proceed to inform Titan in writing within 48 hours of receipt and then delete said Personal Data permanently from its servers.

13.4 Disclaimer. EXCEPT AS EXPRESSLY SET FORTH HEREIN, ALL OTHER WARRANTIES, CONDITIONS AND REPRESENTATIONS, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING A WARRANTY AS TO THE QUALITY OR FITNESS FOR ANY PARTICULAR PURPOSE, ARE HEREBY EXCLUDED AND DISCLAIMED BY EACH PARTY AND THEIR RESPECTIVE AFFILIATES. NOTHING IN THIS AGREEMENT SHALL BE DEEMED TO AUTHORIZE EITHER PARTY OR ITS RESPECTIVE AFFILIATES TO ACT FOR, REPRESENT OR BIND THE OTHER PARTY OR ANY OF ITS AFFILIATES OTHER THAN AS SPECIFICALLY PROVIDED IN THIS AGREEMENT.

ARTICLE 14

INDEMNIFICATION; LIMITATION ON LIABILITY; INSURANCE

14.1 Indemnification by Indegene. Indegene shall indemnify, defend and hold TITAN and its Affiliates and their respective directors, officers, employees, agents, consultants, advisors, successors and assigns ("**TITAN Indemnitees**") harmless from and against any and all Third Party Claims, arising out of any (a) breach by Indegene or any Indegene Personnel of any of Indegene's obligations, representations, warranties or covenants in this Agreement, (b) any negligence, gross negligence or willful misconduct on the part of Indegene, any Indegene Personnel or any of its Affiliates, directors, officers, employees, agents, consultants, advisors, successors, assigns in connection with this Agreement, (c) any claims brought by, on behalf of or in relation to any Indegene Personnel (including by any governmental agency (including any tax agency) or regulatory authority), (d) any use of Indegene Pre-existing IP, (e) statements or representations by Indegene, any Indegene Personnel or any of its Affiliates, directors, officers, employees, agents, consultants, advisors, successors, or assigns that are contrary to the Product Labeling or Materials, or (f) any claims that TITAN is the employer or co-employer of Indegene's Personnel, except, in each case, to the extent such indemnified amounts are covered by TITAN indemnification of Indegene pursuant to Section 14.2.

14.2 Indemnification by TITAN. TITAN shall indemnify, defend and hold Indegene, and its Affiliates and their respective directors, officers, employees, agents, consultants, advisors, successors and assigns ("**Indegene Indemnitees**") harmless from and against any and all Third Party Claims, arising out of any (a) breach by TITAN of any of TITAN's obligations, representations, warranties or covenants in this Agreement, (b) any negligence, gross negligence or willful misconduct on the part of TITAN or any of its Affiliates, directors, officers, employees, agents, consultants, advisors, successors or assigns in connection with this Agreement, (c) the sale or distribution of the Product (including claims of product liability or claims of intellectual property infringement), (d) activity or action performed by Indegene pursuant to this Agreement due to specific written instruction by TITAN, except to the extent such indemnified amounts are covered by Indegene's indemnification of TITAN pursuant to Section 14.1; or (e) Telephone Consumer Protection Act (TCPA) and Telemarketing, Consumer Fraud and Abuse Prevention Act (TCFPA), Federal Trade Commission Telemarketing Sales Rule and any other state and federal "Do Not Call" laws, California Consumer Privacy Act (CCPA) or any other legislation that applies to the use or deployment of the Target List other than as a result of gross negligence and/or willful misconduct on Indegene's part.

14.3 Indemnification Procedures. A Party (the "**Indemnitee**") which intends to claim indemnification under this Agreement shall promptly notify the other Party (the "**Indemnitor**") in writing of any action, claim or liability in respect of which the Indemnitee or any of its Affiliates, directors, officers, employees, agents, consultants, advisors, successors and assigns intend to claim such indemnification, *provided* that the failure to provide timely notice to the Indemnitor shall release the Indemnitor from any liability to the Indemnitee but only to the extent the Indemnitor is materially prejudiced thereby. Within fifteen (15) days following such notification by the Indemnitee to the Indemnitor, the Indemnitee shall permit and shall cause its employees and agents to permit, the Indemnitor to assume the defense of any such action or claim with qualified counsel at the Indemnitor's sole cost and expense, *provided, however*, that if there exists or is reasonably likely to exist a conflict of interest that would make it inappropriate in the judgment of the Indemnitee in its reasonable discretion for the same counsel to represent both the Indemnitee and the Indemnitor, the Indemnitee shall be able to obtain its own counsel at the expense of the Indemnitor. If the Indemnitor does not deliver written notice to the Indemnitee of its intent to assume control of such defense within such fifteen (15) day period, the Indemnitee may assume such defense with qualified counsel if its choice at the sole cost of the Indemnitor. If the Indemnitor assumes such defense hereunder, the Indemnitee may participate in such defense through counsel of its own selection at the Indemnitee's sole cost and expense. Neither Party shall settle or consent to entry of judgment of any such claim or Dispute without the other Party's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed; *provided* that the Indemnitee shall be deemed to have granted such consent if either (i) such settlement does not adversely affect the Indemnitee and does not impose any obligation or liability on the Indemnitee which cannot be assumed and performed in full by the Indemnitor, or (ii) such settlement involves only the payment of money by the Indemnitor or its insurer. The Indemnitor shall not be responsible for any attorneys' fees or other costs incurred other than as provided in this Agreement. The Indemnitee, its Affiliates, directors, officers, employees, agents, consultants, advisors, successors and assigns, shall provide reasonable and good faith assistance (including but not limited to documents and testimony) to the Indemnitor and its legal representatives, at the Indemnitor's expense, in the investigation and defense of any action, claim or liability covered by this indemnification.

14.4 LIMITATION ON LIABILITY. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW AND EXCEPT WITH RESPECT TO (A) A MATERIAL BREACH OF ITS REPRESENTATIONS OR WARRANTIES HEREIN, (B) A VIOLATION OF ITS INTELLECTUAL PROPERTY, CONFIDENTIALITY AND PERSONAL DATA AND INDEMNIFICATION OBLIGATIONS IN THIS AGREEMENT, OR (C) A CLAIM ARISING OUT OF FRAUD, GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, AND NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, NEITHER PARTY TO THIS AGREEMENT, ITS AFFILIATES, DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, CONSULTANTS, ADVISORS, SUCCESSORS AND ASSIGNS, SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY FOR ANY LOSS OF PROFIT, INCOME, BUSINESS INTERRUPTIONS, DIMINUTION OF VALUE OR LOSS OF OPPORTUNITY, OR ANY INDIRECT, INCIDENTAL, MULTIPLE, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES (EACH INCLUDING BUT NOT LIMITED TO LOSS OF PROFIT, INCOME, BUSINESS INTERRUPTIONS, DIMINUTION OF VALUE OR LOSS OF OPPORTUNITY) WHATSOEVER THAT IN ANY WAY ARISE OUT OF, RELATE TO OR ARE A CONSEQUENCE OF, ITS PERFORMANCE OR NON-PERFORMANCE HEREUNDER, WHETHER BASED UPON A CLAIM OR ACTION OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, EVEN IF SUCH PARTY HAS BEEN PUT ON NOTICE OF THE POSSIBILITY OF SUCH DAMAGES, ARISING OUT OF, RELATING TO OR IN CONNECTION WITH THIS AGREEMENT. The Total liability of Indegene, both Direct and Indirect shall be the lower of the amount of actual claim or the amount actually paid by TITAN under this Agreement.

14.5 Insurance. Indegene agrees to maintain during the Term and for a period of three (3) years following the termination or expiry of this Agreement: (a) workers' compensation insurance for all of its employees, the limits of which shall be statutory and employer's liability of not less than $1,000,000 per accident, (b) commercial general liability, including contractual liability and personal/advertising injury liability, with limits of not less than $2,000,000, aggregate (c) product/completed operations liability with limits of not less than $1,000,000 (per occurrence) covering bodily injury and property damage; and professional liability insurance in an amount not less than $5,000,000 per claim. Indegene shall include TITAN and its Affiliates as "Additional Insureds" under its general and product liability insurance policies and shall further provide, within thirty (30) days of TITAN's request, certificates of insurance verifying insurance limits agreed upon as well as notice of cancellation, non-renewal or material change thereto in accordance with its policy notice provisions.

In cases where Indegene is deemed to have caused a loss and/or damage claim as a result of its services performed under or incidental to this Agreement, all insurance coverages required of Indegene will be primary and non-contributory or excess over any insurance or self-insurance program carried by TITAN, and will have no recourse to any self-insurance program or insurance program carried by TITAN.

The limits of insurance coverage will not affect or limit the liability or indemnity obligations of Indegene stated elsewhere in this Agreement or as required by law. By requiring Indegene to maintain insurance, TITAN does not represent that coverage and limits required will be adequate to fund all losses for which Indegene may be liable.

ARTICLE 15

TERM; TERMINATION

15.1 Term of this Agreement. The term of this Agreement shall commence as of the Effective Date and shall cease forty-eight (48) months from Effective Date, unless terminated earlier in accordance with this Article 15 or as otherwise set forth in this Agreement (the "**Initial Term**"). This Agreement may be renewed upon the mutual agreement of the Parties for two successive one (1) year terms (each a "**Renewal Term**") in the form attached at Appendix 5, unless terminated by either Party pursuant to the provisions of this Article 15 or as otherwise set forth in this Agreement after the Initial Term. The Parties agree that prior to renewal the Parties shall discuss and amend the Services and compensation structure to reflect any necessary adjustments to such payments and Services. Any such increase or decrease to the compensation for Services shall become effective upon the renewal date. The Initial Term plus any Renewal Terms during which this Agreement is effective shall constitute the "**Term of this Agreement**".

15.2 Termination for Failure to Comply with Policies: TITAN shall have the right to terminate this Agreement immediately on written notice upon Indegene's non-compliance with any of the TITAN Policies.

15.3 Termination for Breach : Each Party shall have the right to terminate this Agreement immediately upon the material breach of any of the terms and conditions of this Agreement by the other Party, provided, however, if such breach is capable of being cured each Party right to terminate will be subject to the other Party's failure to cure such breach within ninety (90) days following the breaching Party's receipt of written notice from the other Party specifying the nature of such breach in reasonable detail. Breach by parties shall be considered material if the time allocation of Indegene and Titan persons/positions involved in this Agreement falls below the minimum time allocation as described in Appendix 1. Notwithstanding anything to the contrary in this Section 15.3, TITAN shall have the immediate right to terminate this Agreement in the event of a Service Quality Shortfall in accordance with Section 2.3.

15.4 Termination for Change of Control: Subject to Section 16.6, each Party shall have the right to terminate this Agreement upon the occurrence of a Change of Control of the other Party upon no less than sixty (60) days prior written notice to the affected Party, such notice to be provided not later than one hundred twenty (120) days following the effective date of such Change of Control. In this case, Indegene shall be paid the Revenue Payment as described in 10.2 for 12 months from the date of Change of Control at the same rate as that of the preceding month's Revenue Payment.

15.5 Termination on Mutual Agreement :The Parties may at any time mutually agree to terminate this Agreement.

15.6 Termination on Withdrawal: Either Party shall have the right to terminate this Agreement upon the Product being withdrawn from the market in the Territory or upon the recall or suspension of sale of the Product in the Territory. Notice of such termination shall be given in writing to the other party no less than sixty (60) days prior to the effective date of the withdrawal, recall or suspension, if possible or as soon as practicable, and shall be effective upon such effective date. If the Product is withdrawn from the market within the first 12 months of the Agreement, the Revenue Payment due to Indegene up until the date of withdrawal will be paid to Indegene.

15.7 Termination for Performance: Either Party may terminate this Agreement at least 12 months after Effective Date if the Product Gross Sales is not 20% of a mutually agreed upon forecast.

15.8 Termination for Bankruptcy; Insolvency : Either Party may terminate this Agreement upon the occurrence of either of the following:

A. the entry of a decree or order for relief by a court of competent jurisdiction in respect of the other Party in an involuntary case under the Federal Bankruptcy Code, as now constituted or hereafter amended, or any other applicable federal, state or foreign insolvency or other similar law and the continuance of any such decree or order that is unstayed and in effect for a period of sixty (60) consecutive days; or

B. the filing by the other Party of a petition for relief under the Federal Bankruptcy Code, as now constituted or hereafter amended, or any other applicable federal, state or foreign insolvency or similar law.

15.9 Consequences of Termination.

A. Upon termination or expiry of this Agreement for any reason, the rights and licenses granted to Indegene under this Agreement, including but not limited to the license granted pursuant to Section 7.1, including, the right to use all Product Intellectual Property, shall automatically and immediately cease.

B. Upon termination or expiry of this Agreement for any reason, each Party shall destroy or, at the other Party's option, return to the other Party Confidential Information of the other Party then in its possession and in the case of Indegene, any Product Labelling then in Indegene's possession, within thirty (30) days following the termination (*provided* that each Party may retain one (1) copy solely to the extent required by Applicable Law or per Indegene data retention policy which will remain subject to the non-disclosure requirements in this Agreement for as long as such Party retains the Confidential Information).

ARTICLE 16

MISCELLANEOUS PROVISIONS

16.1 Entire Agreement; Modification. This Agreement, including all appendix and attachments hereto, contains the entire Agreement between the Parties with respect to the subject matter hereof and supersedes all previous agreements, negotiations, commitments and writings between the Parties with respect of the subject matter hereof and may not be changed or modified in any manner unless in a written instrument duly approved by both Parties.

16.2 Severability. If any provision of this Agreement or any other document delivered under this Agreement is prohibited or unenforceable in any jurisdiction, it shall be ineffective in such jurisdiction only to the extent of such prohibition or unenforceability and such prohibition or unenforceability shall not invalidate the balance of such provision to the extent it is not prohibited or enforceable nor the remaining provisions hereof, nor render unenforceable such provision in any other jurisdiction, unless the effect of rendering such provision ineffective would be to substantially deviate from the expectations and intent of the respective Parties in entering into this Agreement. In the event any provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the same shall be amended and interpreted so as best to accomplish the Parties' original intent (within the limits of Applicable Law), so as not to affect the validity or enforceability of this Agreement.

16.3 Costs and Expenses. Except as otherwise provided in this Agreement, each Party shall bear its own costs and expenses (including legal and accounting fees) arising out of or in connection with the preparation, negotiation and implementation of this Agreement.

16.4 No Waiver; Cumulative Remedies. No failure or delay on the part of either Party in exercising any right, power or remedy hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. No waiver of any provision hereof shall be effective unless the same shall be in writing and signed by the Party giving such waiver. The remedies herein provided are cumulative and not exclusive of any remedies provided by law.

16.5 Relationship between the Parties. Indegene is being retained and shall perform hereunder strictly as an "independent contractor." Employees of each Party, including all Indegene Personnel, performing services or undertaking activities in connection with this Agreement shall not be and shall not be considered to be, employees of the other Party for any purpose. Neither Party shall have any responsibility for the hiring, termination, compensation, benefits or other conditions of employment of the other Party's employees. Nothing contained in this Agreement shall be construed as creating an employee-employer relationship or a principal-agent relationship or making the Parties joint ventures or, except as otherwise expressly provided herein (if at all), as granting to either Party the authority to bind or enter into any contracts or incur any obligations in the name of or on the account of the other Party or to make any guarantees or warranties on behalf of the other Party.

16.6 Assignment. Neither Party may assign or transfer this Agreement in whole or in part without the prior written consent of the other Party, except that either Party may make an assignment of this Agreement without the other Party's consent (a) to an Affiliate or (b) to a Third Party successor to all or substantially all of the business to which this Agreement relates, whether in a merger, sale of stock, sale of assets or other transaction; *provided* that any such permitted successor or assignee is obligated pursuant to a written agreement to assume performance of this Agreement or such rights and obligations. For clarity, the Parties agree that TITAN shall be entitled to assign or transfer this Agreement to a Third Party on the sale or transfer of all or substantially all of its rights to the Product without Indegene's consent. Any permitted assignment shall be binding on the successors of the assigning Party. Any assignment or attempted assignment by either Party in violation of the terms of this Section 16.6 shall be null and void.

16.7 Force Majeure. Failure of either Party to fulfill or perform its obligations under this Agreement shall not subject such Party to any liability if such failure is due to an event or a cause beyond its reasonable control, such as unforeseen nationwide labor conflict, acts of God, fire, earthquakes, floods, war, mobilization or unforeseen military call-up of a large magnitude, requisition, confiscation, commandeering, public decrees, riots, insurrections (a "**Force Majeure Event**"), *provided* that the affected Party uses commercially reasonable efforts to remove such Force Majeure Event and commence performance hereunder as soon as possible following the removal of such Force Majeure Event and that the affected Party gives the other Party prompt notice of the existence of such Force Majeure Event.

16.8 No Third-Party Beneficiaries. This Agreement is neither expressly nor impliedly made for the benefit of any party other than the Parties and the parties indemnified pursuant to Section 14 and there are no intended Third-Party beneficiaries except for the parties indemnified pursuant to Section 14.

16.9 Interpretation. The language of this Agreement is English. No translation into any other language shall be considered in the interpretation of this Agreement. The captions and headings of Articles and Sections contained in this Agreement are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement or have any effect on its interpretation or construction. All references in this Agreement to the singular shall include the plural where applicable and all references to gender shall include both genders and the neuter. Unless otherwise specified, references in this Agreement to any Article shall include all Sections, subsections and paragraphs in such Article; references in this Agreement to any Section shall include all subsections and paragraphs in such sections; and references in this Agreement to any subsection shall include all paragraphs in such subsection. The word "including", or any variation thereof shall mean "including without limitation" and the word "including", or any variation thereof shall not be construed to limit any general statement which it follows to the specific or similar items or matters immediately following it. The term "or" has, except where otherwise indicated, the inclusive meaning represented by the phrase "and / or". All references in this Agreement, unless otherwise stated, to days means Calendar Days. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against either Party, irrespective of which Party may be deemed to have caused the ambiguity or uncertainty to exist. All references to any agreement, instrument, law, statute, ordinance, order, rule, regulation, guidance, code or other document in this Agreement refers to such as originally executed or entered into force or, if subsequently varied, replaced or supplemented from time to time, as so varied, replaced or supplemented and in effect at the relevant time of reference thereto. No trade customs, courses of dealing or courses of performance by the Parties shall be relevant to modify, supplement or explain any term(s) used in this Agreement.

16.10 Notices. All notices and other communications required or permitted hereunder shall be in writing and shall be deemed to be received (i) if sent to a destination within the United States, four (4) business days following mailing when mailed by registered or certified mail, postage prepaid, or (ii) if sent to a destination outside the United States, seven (7) business days following mailing international priority, or (iii) if sent to a destination within the United States, one (1) business day after delivery to reputable overnight delivery service, or (iv) if sent to a destination outside of the United States, three (3) business days following delivery to a reputable international express delivery service, or (v) when sent by confirmed electronic mail if sent during normal business hours of the recipient and if not, then on the next business day, or (vi) upon receipt when delivered by hand or by messenger, addressed as follows, or to such other addresses as the parties may provide each other from time to time:

If to TITAN:	TITAN PHARMACEUTICALS, INC. 400 Oyster Point Boulevard, Suite 505 South San Francisco, CA Attention: Finance Department at bcrowley@titanpharm.com
With copies to:	LOEB & LOEB LLP 345 Park Avenue New York, New York Attention: Fran Stoller at fstoller@loeb.com
If to Indegene:	Indegene, Inc. 150 College Rd W, Suite 104 Princeton, NJ 08540 Attention: Legal Department
With a copy to:	Legal@indegene.com

16.11 Dispute Resolution. If a Dispute arises between the Parties which they are unable to resolve, each of the Parties shall (subject to any applicable cure period as set forth in this Agreement), be entitled to submit to the other Party written notice of such Dispute, with such notice setting forth in reasonable detail the nature of the Dispute (the "**Dispute Notice**"). For a period of thirty (30) days following the date of the receiving Party's receipt of the Dispute Notice, the Parties shall seek to resolve such Dispute by good faith negotiation between the Parties' senior executive officers or their designee. If at the end of such thirty (30) day period the Dispute remains unresolved, the dispute shall be settled by binding arbitration in the U.S.A., in the State of Delaware if brought by Indegene and in the State of New York or Delaware if brought by TITAN, and administered by the American Arbitration Association ("AAA") in accordance with its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered into any court having jurisdiction thereof. The determination of the arbitrator(s) shall be deemed final without any appeals rights by the Parties. The prevailing Party will be entitled to receive from the non-prevailing Party all costs, damages and expenses, including reasonable attorney's fees, incurred by the prevailing Party in connection with that action or proceeding whether or not the controversy is reduced to judgment or award. The prevailing Party will be that Party who may be fairly said by the arbitrator(s) to have prevailed on the major disputed issues.

16.12 Governing Law. This Agreement shall be governed by, enforced and shall be construed in accordance with the Laws of the State of Delaware without regard to any conflicts of law provision that would result in the application of the Laws of any State other than the State of Delaware.

16.13 Counterparts. This Agreement and any amendment or supplement hereto may be executed in any number of counterparts, each of which shall be deemed an original and all of which taken together shall constitute one and the same instrument. This Agreement shall become binding when any number of counterparts, individually or taken together, shall bear the signatures of both Parties. This Agreement may be executed and delivered by facsimile or any other electronic means, including ".pdf" or ".tiff" files and any facsimile or electronic signature shall constitute an original for all purposes.

16.14 Further Assurances. Each Party shall, at its own expense, furnish, execute and deliver all documents and take all actions as may reasonably be required to affect the terms and purposes of this Agreement.

(Signature Page to Follow)

WITNESS WHEREOF, the Parties have signed this Agreement by their authorized representatives on the signature dates below and this Agreement is effective as of the Effective Date.

TITAN PHARMACEUTICALS, INC.	**INDEGENE, INC.**
By: /s/ Sunil Bhonsle	By: /s/ Gaurav Kapoor
Name: Sunil Bhonsle	Name: Gaurav Kapoor
Title: President and CEO	Title: Executive Vice President & Global Heal – Co-Commercialization
Date: 6/23/2020	Date: 6/23/2020

[********]

Appendix 5

Amendment to Agreement

Amendment No. ___ to
Agreement For Co-promotion Partnership
between TITAN PHARMACEUTICALS, INC. and Indegene, Inc.

This Amendment No. ___ ("**Amendment**") is entered into as of [_____] ("**Amendment Effective Date**") by and between **TITAN PHARMACEUTICALS, INC.** a Delaware corporation with an office at 400 Oyster Point Boulevard, Suite 505 South San Francisco, CA ("**TITAN**") and **Indegene, Inc.**, a Delaware corporation with an office at 150 College Road West Princeton, New Jersey 08540 ("**Indegene**").Each of TITAN and Indegene are referred to in this Agreement as a "**Party**" and together as the "**Parties**".

WHEREAS, TITAN and Indegene are parties to an **Agreement For Promotional Services** dated June 22, 2020 [as amended on [DATE]] [and as assigned by an assignment agreement dated [DATE]], (collectively comprising the "Agreement") concerning the performance of certain promotional activities in the United States; and

WHEREAS, the Parties mutually desire to amend, modify and restate certain terms and conditions of the Agreement.

NOW THEREFORE, in consideration of the premises and the mutual covenants herein contained, it is mutually agreed as follows:

1 DEFINITIONS

Unless otherwise defined herein, capitalized words in this Amendment shall have the meaning attributed to them in the Agreement.

2 AMENDMENTS

The Parties agree, as of the Amendment Effective Date, to a Renewal Term, amending the Agreement by extending the Term for one (1) successive year from the cessation of the Initial Term of [_____] to [_____].

3 INTEGRATION

Except for the sections of the Agreement specifically amended hereunder, all terms and conditions of the Agreement remain and shall remain in full force and effect. This Amendment shall hereafter be incorporated into and deemed part of the Agreement and any future reference to the Agreement shall include the terms and conditions of this Amendment.

4 APPLICABLE LAW & JURISDICTION

This Amendment shall be governed by, and construed in accordance with, the laws which govern the Agreement, and the Parties submit to the jurisdiction and dispute resolution provisions as set forth in the Agreement.

IN WITNESS WHEREOF, the Parties have signed this Amendment by their authorized representatives on the signature dates below and this Amendment is effective as of the Amendment Effective Date.

TITAN PHARMACEUTICALS,

By: _____
Name:
Title:
Date:

INC. INDEGENE, INC.

By _____
Name:
Title:
Date:

Appendix 6

[********]

Exhibit 31.1

CERTIFICATION

I, Sunil Bhonsle, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Titan Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under my supervision, to ensure that material information relating to the registrant is made known to me by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 14, 2020

/s/ Sunil Bhonsle
Name: Sunil Bhonsle
Title: President and Chief Executive Officer
(Principal Executive Officer and Principal
Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with this quarterly report on Form 10-Q of Titan Pharmaceuticals, Inc. (the "Company") for the period ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officer of the Company hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 14, 2020

/s/ Sunil Bhonsle
Name: Sunil Bhonsle
Title: President and Chief Executive Officer
(Principal Executive Officer and Principal
Financial Officer)