WESTERN ASSET/CLAYMORE INFLATION-LINKED OPPORTUNITIES & INCOME FUND
Form N-Q
November 20, 2015

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED

MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number: **811-21477**

Western Asset/Claymore Inflation-Linked Opportunities & Income Fund

(Name of Fund)

385 East Colorado Boulevard, Pasadena, CA 91101

(Address of Principal Executive Offices)

Robert I. Frenkel, Esq.

Legg Mason & Co., LLC

100 Stamford Place

Stamford, CT 06902

(Name and address of agent for service)

Registrant s telephone number, including area code: 1-888-777-0102

Date of fiscal year end: **December 31**

Date of reporting period: **September 30, 2015**

ITEM 1. SCHEDULE OF INVESTMENTS.

WESTERN ASSET / CLAYMORE

INFLATION LINKED OPPORTUNITIES & INCOME FUND

FORM N-Q

SEPTEMBER 30, 2015

WESTERN ASSET/CLAYMORE INFLATION-LINKED OPPORTUNITIES & INCOME FUND

Schedule of investments (unaudited) **September 30, 2015**

SECURITY	RATE	MATURITY DATE	FACE AMOUNT	VALUE
U.S. TREASURY INFLATION PROTECTED SECURITIES - 109.9%				
U.S. Treasury Bonds, Inflation Indexed	2.000%	1/15/26	38,080,641	$ 42,721,720
U.S. Treasury Bonds, Inflation Indexed	1.750%	1/15/28	26,292,274	29,062,218
U.S. Treasury Bonds, Inflation Indexed	3.625%	4/15/28	14,106,162	18,693,966
U.S. Treasury Bonds, Inflation Indexed	2.500%	1/15/29	2,356,528	2,827,005
U.S. Treasury Bonds, Inflation Indexed	3.875%	4/15/29	18,872,360	26,018,304
U.S. Treasury Bonds, Inflation Indexed	2.125%	2/15/41	6,974,656	8,268,601
U.S. Treasury Bonds, Inflation Indexed	0.750%	2/15/42	264,043	231,085
U.S. Treasury Bonds, Inflation Indexed	0.625%	2/15/43	6,311,222	5,316,220
U.S. Treasury Bonds, Inflation Indexed	1.375%	2/15/44	10,224,640	10,374,145
U.S. Treasury Bonds, Inflation Indexed	0.750%	2/15/45	3,506,606	3,040,932
U.S. Treasury Notes, Inflation Indexed	2.000%	1/15/16	133,516,717	133,144,739[(a)]
U.S. Treasury Notes, Inflation Indexed	0.125%	4/15/16	27,635,472	27,364,147[(a)]
U.S. Treasury Notes, Inflation Indexed	2.375%	1/15/17	25,692,048	26,378,180[(a)]
U.S. Treasury Notes, Inflation Indexed	0.125%	4/15/17	12,608,760	12,562,789
U.S. Treasury Notes, Inflation Indexed	2.625%	7/15/17	552,715	578,969
U.S. Treasury Notes, Inflation Indexed	0.125%	4/15/18	42,329,220	42,280,160[(a)]
U.S. Treasury Notes, Inflation Indexed	2.125%	1/15/19	11,704,832	12,468,690
U.S. Treasury Notes, Inflation Indexed	0.125%	4/15/19	23,425,500	23,345,596
U.S. Treasury Notes, Inflation Indexed	1.375%	1/15/20	30,901,360	32,424,704
U.S. Treasury Notes, Inflation Indexed	0.125%	4/15/20	46,898,982	46,596,718
U.S. Treasury Notes, Inflation Indexed	1.250%	7/15/20	48,481,216	50,896,453[(a)]
U.S. Treasury Notes, Inflation Indexed	1.125%	1/15/21	59,632,420	61,968,043[(a)]
U.S. Treasury Notes, Inflation Indexed	0.625%	7/15/21	14,136,048	14,334,278
U.S. Treasury Notes, Inflation Indexed	0.125%	1/15/22	4,829,289	4,705,978
U.S. Treasury Notes, Inflation Indexed	0.125%	7/15/22	60,326,733	58,827,191
U.S. Treasury Notes, Inflation Indexed	0.125%	1/15/23	67,763,772	65,330,307[(a)]
U.S. Treasury Notes, Inflation Indexed	0.375%	7/15/23	29,124,484	28,619,728
U.S. Treasury Notes, Inflation Indexed	0.625%	1/15/24	29,923,329	29,778,770
U.S. Treasury Notes, Inflation Indexed	0.125%	7/15/24	13,468,206	12,850,217
U.S. Treasury Notes, Inflation Indexed	0.250%	1/15/25	8,121,256	7,784,037
TOTAL U.S. TREASURY INFLATION PROTECTED SECURITIES				
(Cost - $841,654,664)				838,793,890
ASSET-BACKED SECURITIES - 5.2%				
Bear Stearns Asset-Backed Securities Trust, 2001-3 A1	1.094%	10/27/32	8,331	7,975[(b)]
Bear Stearns Asset-Backed Securities Trust, 2007-SD2 2A1	0.594%	9/25/46	106,400	91,018[(b)]
Credit-Based Asset Servicing and Securitization LLC, 2007-RP1 A	0.504%	5/25/46	5,581,621	4,707,545[(b)(c)]
CSAB Mortgage-Backed Trust, 2007-1 3A30, IO	6.456%	5/25/37	13,603,139	4,159,146[(b)]
Hertz Vehicle Financing LLC, 2015-1A B	3.520%	3/25/21	4,050,000	4,019,625
Hertz Vehicle Financing LLC, 2015-1A C	4.350%	3/25/21	2,450,000	2,431,625
Renaissance Home Equity Loan Trust, 2007-1 AF3	5.612%	4/25/37	8,841,005	4,832,414
Residential Asset Mortgage Products Inc., 2005-EFC3 M6	0.894%	8/25/35	6,000,000	4,842,852[(b)]
Residential Asset Mortgage Products Inc., 2005-RS3 M5	0.874%	3/25/35	7,451,000	6,176,745[(b)]
Security National Mortgage Loan Trust, 2006-3A A2	5.830%	1/25/37	300,000	261,835[(b)(c)]
Structured Asset Securities Corp., 2005-SC1 1A2	7.646%	5/25/31	9,071,245	7,888,708[(b)(c)]
TOTAL ASSET-BACKED SECURITIES				39,419,488

(Cost - $39,073,307)

COLLATERALIZED MORTGAGE OBLIGATIONS - 8.0%				
Banc of America Funding Corp., 2015-R2 4A2	0.411%	9/29/36	13,577,467	6,695,049[(b)(c)]
Banc of America Funding Corp., 2015-R2 5A2	0.419%	9/29/36	8,649,146	3,768,433[(b)(c)]
Citigroup Mortgage Loan Trust Inc., 2007-6 2A5, IO	6.456%	5/25/37	9,266,466	3,801,179[(b)]
Countrywide Alternative Loan Trust, 2004-33 1A1	2.757%	12/25/34	5,653	5,607[(b)]

See Notes to Schedule of Investments.

WESTERN ASSET/CLAYMORE INFLATION-LINKED OPPORTUNITIES & INCOME FUND

Schedule of investments (unaudited) (cont d) **September 30, 2015**

SECURITY	RATE	MATURITY DATE	FACE AMOUNT	VALUE
COLLATERALIZED MORTGAGE OBLIGATIONS - (continued)				
Countrywide Alternative Loan Trust, 2004-33 2A1	2.775%	12/25/34	6,047	$ 5,953[b]
Countrywide Alternative Loan Trust, 2005-22T1 A2, IO	4.876%	6/25/35	4,846,558	735,664[b]
Countrywide Alternative Loan Trust, 2007-19 1A16, IO	6.306%	8/25/37	16,181,662	4,224,902[b]
Credit Suisse Mortgage Trust, 2009-16R 5A3	2.977%	6/26/36	5,138,403	2,242,435[b][c]
Credit Suisse Mortgage Trust, 2015-Town MZ	9.180%	3/15/17	7,740,000	7,681,950[b][c]
Downey Savings & Loan Association Mortgage Loan Trust, 2004-AR1 A2B	1.056%	9/19/44	29,373	26,523[b]
First Horizon Alternative Mortgage Securities, 2006-FA8 1A8	0.564%	2/25/37	165,471	90,131[b]
GSR Mortgage Loan Trust, 2007-2F 4A1	0.494%	3/25/37	16,304,950	8,526,136[b]
JPMorgan Reremic, 2015-1 1A3	0.359%	12/27/46	11,120,000	6,965,777[b][c]
Lehman Mortgage Trust, 2006-5 2A2, IO	6.956%	9/25/36	8,581,415	2,997,857[b]
Lehman Mortgage Trust, 2006-8 4A2, IO	7.556%	12/25/36	1,903,404	621,180[b]
Lehman Mortgage Trust, 2006-9 3A2, IO	7.036%	1/25/37	5,390,052	1,835,906[b]
Lehman Mortgage Trust, 2007-2 2A12, IO	6.496%	2/25/37	10,287,201	3,382,730[b]
Lehman Mortgage Trust, 2007-4 2A2, IO	6.476%	5/25/37	8,655,181	2,589,033[b]
Morgan Stanley Mortgage Loan Trust, 2007-11AR 2A3	2.751%	6/25/37	153,408	102,863[b]
Nomura Asset Acceptance Corp., 2004-AR4 1A1	2.658%	12/25/34	16,955	17,003[b]
Residential Accredit Loans Inc., 2006-QS7 A5, IO	5.406%	6/25/36	3,199,860	561,863[b]
Structured Agency Credit Risk Debt Notes, 2014-HQ3 M3	4.944%	10/25/24	1,600,000	1,617,616[b]
Structured Agency Credit Risk Debt Notes, 2015-HQ2 M3	3.444%	5/25/25	2,820,000	2,643,361[b]
Washington Mutual Inc., Mortgage Pass-Through Certificates, 2004-AR08 A1	0.614%	6/25/44	20,018	18,576[b]
TOTAL COLLATERALIZED MORTGAGE OBLIGATIONS				
(Cost - $60,302,267)				61,157,727
CORPORATE BONDS & NOTES - 10.2%				
CONSUMER DISCRETIONARY - 0.6%				
Hotels, Restaurants & Leisure - 0.4%				
Greektown Holdings LLC/Greektown Mothership Corp., Senior Secured Notes	8.875%	3/15/19	2,735,000	*2,803,375*[c]
Media - 0.2%				
Univision Communications Inc., Senior Secured Notes	5.125%	2/15/25	1,860,000	*1,743,750*[c]
Textiles, Apparel & Luxury Goods - 0.0%				
Empire Today LLC/Empire Today Finance Corp., Senior Secured Notes	11.375%	2/1/17	310,000	*285,200*[c]
TOTAL CONSUMER DISCRETIONARY				4,832,325
CONSUMER STAPLES - 0.6%				
Food Products - 0.4%				
JBS Investment GmbH, Senior Notes	7.250%	4/3/24	1,000,000	962,500[c]
Marfrig Holding Europe BV, Senior Notes	8.375%	5/9/18	2,400,000	2,238,000[d]
Total Food Products				*3,200,500*

Tobacco - 0.2%				
Alliance One International Inc., Secured Notes	9.875%	7/15/21	1,800,000	*1,539,000*
TOTAL CONSUMER STAPLES				4,739,500
ENERGY - 1.1%				
Energy Equipment & Services - 0.1%				
FTS International Inc., Senior Secured Bonds	6.250%	5/1/22	1,000,000	*310,000*
Oil, Gas & Consumable Fuels - 1.0%				
Chesapeake Energy Corp., Senior Notes	6.125%	2/15/21	1,000,000	696,875

See Notes to Schedule of Investments.

WESTERN ASSET/CLAYMORE INFLATION-LINKED OPPORTUNITIES & INCOME FUND

Schedule of investments (unaudited) (cont d) **September 30, 2015**

2017 2016 2015 2014 2013 (in thousands) Balance Sheet Data: Cash and cash equivalents $7,522 $14,006 $7,857 $15,470 $11,798 Working capital 3,846 12,973 7,391 12,921 5,974 Total assets 8,905 18,667 13,287 20,8

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Item 7. 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," "in "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. Please see "Note Regarding Forward-Looking Statements" at the beginning of this Annual Report on Form 10-K.

The following discussion of our financial condition and results of operations should be read in conjunction with our financial statements and the related notes thereto and other financial information appearing elsewhere in this Annual Report on Form 10-K.

Overview

We are a pharmaceutical company developing proprietary therapeutics for the treatment of serious medical disorders. Our product development programs utilize our proprietary long-term drug delivery platform, ProNeura™, and focus primarily on innovative treatments for select chronic diseases for which steady state delivery of a drug provides an efficacy and/or safety benefit.

Probuphine®, our first product candidate based on the ProNeura platform, was approved by the FDA in May 2016 for the maintenance treatment of opioid dependence in patients who are stable on low to moderate doses of daily sublingual buprenorphine treatment. We licensed development and commercialization rights of Probuphine for the U.S. and Canadian markets to Braeburn Pharmaceuticals, Inc., or

BraeburnIn the first quarter of 2017, Braeburn commenced a full commercial launch of the product. However, as with the launch of any new method of medical treatment in the current reimbursement environment, progress has been slow and for the year ended December 31, 2017 we had revenues of $215,000. While Probuphine sales grew modestly from

the first to the second quarter of 2017 royalty revenues to Titan showed a marked decline during the second half of the year.

Based on feedback from Braeburn and key opinion leaders, we believe that access to care for patients has been negatively impacted by issues related to the timing and amount of reimbursement to patients and their doctors from insurance providers, as well as the requirements of the Risk Evaluation and Mitigation Strategy, or REMS, program. Although the opioid addiction epidemic continues to be a major concern for the United States, the hurdles to penetrating the market and growing sales of Probuphine have been considerable. We believed that the Camurus weekly and monthly depot injection products licensed by Braeburn would enable clinicians and patients to become accustomed to longer duration procedure-oriented treatment, thereby encouraging the potential use of Probuphine during the maintenance treatment stage. However, in January 2018, the FDA did not approve the NDA for these products causing a substantial delay in the regulatory approval process.Cconsequently, Braeburn substantially reduced its field sales force and medical liason personnel hampering any efforts to aggressively commercialize Probuphine. We are in discussions with Braeburn management to more fully understand the current status of Probuphine, including Braeburn’s interactions with the FDA regarding the post-approval clinical requirements, and the possible return of the commercialization rights. In light of the difficulties encountered to date, we cannot predict either the timing or the degree to which Probuphine will be accepted by the U.S. medical community.

We have continued to make progress in the efforts to advance potential commercialization of Probuphine outside of the U.S. and Canada. During the first quarter 2017, the European Medicines Agency, or EMA, granted eligibility for Probuphine to follow the centralized review and approval process for its Marketing Authorization Application, or MAA. Subsequently we met with the review teams of the two EMA member countries appointed as rapporteur and co-rapporteur to familiarize them with the development of Probuphine and the safety and efficacy data set, as well as receive their advice on the MAA preparation and presentation. The MAA was submitted to the EMA on November 6, 2017. In October 2017, we received a notice of allowance from the European Patent Office for a patent covering methods of use claims for treating opioid dependence with a subdermal implant containing buprenorphine. On March 21, 2018, we entered into an Asset Purchase, Supply and Support Agreement, or Purchase Agreement, with L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A., or Molteni, pursuant to which Molteni acquired the European intellectual property related to Probuphine, including the MAA, and will have the exclusive right to commercialize the Titan supplied Probuphine product in Europe, as well as certain countries of the Commonwealth of Independent States, the Middle East and North Africa.

We believe that our ProNeura long term drug delivery platform has the potential to be used in the treatment of other chronic conditions where maintaining stable, around the clock blood levels of a medication may benefit the patient and improve medical outcomes.

Efforts to advance our next product candidate, the ropinirole implant for the treatment of Parkinson’s disease, have continued and the Investigational New Drug application, or IND, was cleared by the FDA in August 2017 and the clinical study was initiated with the first patient treated in early October. This study is being conducted at three clinical research sites in the U.S. that specialize in the treatment of Parkinson’s disease. The trial is an open-label, sequential, dose escalation study that will enroll approximately 20 subjects with idiopathic Parkinson's disease. The primary objectives are to characterize the pharmacokinetic profile of the ropinirole implants, to evaluate their safety and tolerability, and to explore potential signals of efficacy using established disease-specific assessment scales. Patients on a stable dose of L-dopa plus oral ropinirole will have their oral ropinirole switched to ropinirole implants for three months of treatment. Initial data from the first cohort of patients is expected in the first half of 2018 and further progress will depend on the data and available resources.

Our goal is to expand our product pipeline using the ProNeura implant platform, and we have been opportunistically evaluating other drugs and disease settings for use with the ProNeura platform in potential treatment applications where conventional treatment is limited by variability in blood drug levels and poor patient compliance.

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.

Critical Accounting Policies and the Use of Estimates

The preparation of our financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. Actual results could differ materially from those estimates. We believe the following accounting policies for the years ended December 31, 2017 and 2016 to be applicable:

Revenue Recognition

We generate revenue principally from collaborative research and development arrangements, technology licenses, and government grants. Consideration received for revenue arrangements with multiple components is allocated among the separate units of accounting based on their respective selling prices. The selling price for each unit is based on vendor-specific objective evidence, or VSOE, if available, third party evidence if VSOE is not available, or estimated selling price if neither VSOE nor third party evidence is available. The applicable revenue recognition criteria are then applied to each of the units.

Revenue is recognized when the four basic criteria of revenue recognition are met: (1) a contractual agreement exists; (2) transfer of technology has been completed or services have been rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured. For each source of revenue, we comply with the above revenue recognition criteria in the following manner:

- Technology license agreements typically consist of non-refundable upfront license fees, annual minimum access fees or royalty payments. Non-refundable upfront license fees and annual minimum payments received with separable stand-alone values are recognized when the technology is transferred or accessed, provided that the technology transferred or accessed is not dependent on the outcome of our continuing research and development efforts.

- Royalties earned are based on third-party sales of licensed products and are recorded in accordance with contract terms when third-party results are reliably measurable and collectability is reasonably assured.

- Government grants, which support our research efforts in specific projects, generally provide for reimbursement of approved costs as defined in the notices of grants. Grant revenue is recognized when associated project costs are incurred.

- Collaborative arrangements typically consist of non-refundable and/or exclusive technology access fees, cost reimbursements for specific research and development spending, and various milestone and future product royalty payments. If the delivered technology does not have stand-alone value, the amount of revenue allocable to the delivered technology is deferred. Non-refundable upfront fees with stand-alone value that are not dependent on future performance under these agreements are recognized as revenue when received, and are deferred if we have continuing performance obligations and have no evidence of fair value of those obligations. Cost reimbursements for research and development spending are recognized when the related costs are incurred and when collections are reasonably expected. Payments received related to substantive, performance-based “at-risk” milestones are recognized as revenue upon achievement of the clinical success or regulatory event specified in the underlying contracts, which represent the culmination of the earnings process. Amounts received in advance are recorded as deferred revenue until the technology is transferred, costs are incurred, or a milestone is reached.

Share-Based Payments

We recognize compensation expense for all share-based awards made to employees, directors and consultants. The fair value of share-based awards is estimated at the grant date based on the fair value of the award and is recognized as expense, net of estimated pre-vesting forfeitures, ratably over the vesting period of the award.

We use the Black-Scholes option pricing model to estimate the fair value method of our awards. Calculating stock-based compensation expense requires the input of highly subjective assumptions, including the expected term of the share-based awards, stock price volatility, and pre-vesting forfeitures. We estimate the expected term of stock options granted for the years ended December 31, 2017 and 2016 based on the historical experience of similar awards, giving consideration to the contractual terms of the share-based awards, vesting schedules and the expectations of future employee behavior. We estimate the volatility of our common stock at the date of grant based on the historical volatility of our common stock. The assumptions used in calculating the fair value of stock-based awards represent our best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. In addition, we are required to estimate the expected pre-vesting forfeiture rate and only recognize expense for those shares expected to vest. We estimate the pre-vesting forfeiture rate based on historical experience. If our actual forfeiture rate is materially different from our estimate, our stock-based compensation expense could be significantly different from what we have recorded in the current period.

Income Taxes

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expense for tax and financial statement purposes.

As part of the process of preparing our financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves us estimating our current tax exposure under the most recent tax laws and assessing temporary differences resulting from differing treatment of items for tax and accounting purposes.

We assess the likelihood that we will be able to recover our deferred tax assets. We consider all available evidence, both positive and negative, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. If it is not more likely than not that we will recover our deferred tax assets, we will increase our provision for taxes by recording a valuation allowance against the deferred tax assets that we estimate will not ultimately be recoverable.

Clinical Trial Accruals

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. The actual clinical trial costs for the Probuphine studies conducted in the past three years have not differed materially from the estimated projection of expenses.

Warrants Issued in Connection with Equity Financing

We generally account for warrants issued in connection with equity financings as a component of equity, unless there is a deemed possibility that we may have to settle warrants in cash. For warrants issued with deemed possibility of

cash settlement, we record the fair value of the issued warrants as a liability at each reporting period and record changes in the estimated fair value as a non-cash gain or loss in the Statements of Operations and Comprehensive Income (Loss).

Liquidity and Capital Resources

	2017	2016	2015
	(in thousands)		
As of December 31:			
Cash and cash equivalents	$7,522	$14,006	$7,857
Working capital	$3,846	$12,973	$7,391
Current ratio	1.9:1	3.7:1	2.5:1
Years Ended December 31:			
Cash provided by (used in) operating activities	$(13,038)	$6,293	$(7,466)
Cash used in investing activities	$(175)	$(171)	$(133)
Cash provided by (used in) financing activities	$6,729	$27	$(14)

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, the sale of royalty rights and government-sponsored research grants. At December 31, 2017, we had working capital of approximately $3.8 million compared to working capital of approximately $13.0 million at December 31, 2016.

Our operating activities used approximately $13.0 million of cash during the year ended December 31, 2017. This consisted primarily of the net loss for the period of approximately $14.3 million, approximately $0.6 million related to non-cash gains resulting from changes in the fair value of warrants and approximately $0.4 million related to net changes in other operating assets and liabilities. This was offset in part by approximately $0.6 million related to depreciation and amortization and non-cash charges of approximately $1.7 million related to share-based compensation expenses. Uses of cash in operating activities were primarily to fund product development programs and administrative expenses.

Net cash used in investing activities of approximately $175,000 during the year ended December 31, 2017 was primarily related to purchases of equipment.

Our financing activities provided approximately $6.7 million during the year ended December 31, 2017 from entering into the Horizon Loan.

In March 2018, we entered into the Purchase Agreement with Molteni pursuant to which Molteni acquired the European intellectual property related to Probuphine and exclusive commercialization rights in the Molteni Territory.

We received an initial payment of €2.0 million (approximately $2.4 million) for the purchased assets and will receive potential additional payments totaling up to €4.5 million (approximately $5.5 million) upon the achievement of certain regulatory and product label milestones. Additionally, we are entitled to receive earn-out payments for up to 15 years on net sales of Probuphine in the Molteni Territory ranging in percentage from the low-teens to the mid-twenties.

In July 2017, we entered into a venture loan and security agreement with Horizon (the “Loan Agreement”) pursuant to which we received an initial loan in the principal amount of $7.0 million. In February 2018, we entered into an amendment to the Loan Agreement pursuant to which we prepaid $3.0 million of the outstanding principal amount and agreed to make an additional $1.0 prepayment to Horizon no later than May 14, 2018. In March 2018, the Loan Agreement was amended and restated (the “Restated Loan Agreement”) by Titan, Horizon and Molteni. Pursuant to the Restated Loan Agreement, Molteni acquired $2.4 million of the $4.0 million principal balance of the loan and assumed majority and administrative control of the debt obligation and the interest only payment and forbearance periods were extended to December 31, 2019. In addition, Molteni has the right to convert its portion of the debt into

shares of our common stock at a conversion price of $1.20 per share and is required to effect this conversion of debt to equity if we complete an equity financing resulting in gross proceeds of at least $10.0 million at a price per share in excess of $1.20 and repay the $1.6 million principal balance of Horizon's loan amount.

In September 2016, we entered into an agreement with Cantor Fitzgerald & Co. to enable us to sell up to $20 million of shares in an at-the-market offering (the "ATM"). To date, we have elected not to sell any shares pursuant to the ATM given our current financial position and the market price of our stock.

At December 31, 2017, we had cash and cash equivalents of approximately $7.5 million. After giving effect to the prepayment under the amended Loan Agreement and the receipt of the initial payment under the Purchase Agreement, we believe we have cash and cash equivalents sufficient to fund our planned operations into the third quarter of 2018. We will require additional funds to advance our current ProNeura development programs to later stage clinical studies and to complete the regulatory approval process necessary to commercialize any products we might develop.

The following table sets forth the aggregate contractual cash obligations as of December 31, 2017 (in thousands):

	Payments Due by Period				
Contractual obligations	**Total**	**< 1 year**	**1-3 years**	**3-5 years**	**5 years+**
Operating leases	$1,049	$ 287	$ 607	$ 155	$ —
Debt obligations	$7,350	$ 3,000	$ 3,200	$ 1,150	$ —
Total contractual cash obligations	$8,499	$ 3,287	$ 3,807	$ 2,305	$ —

Results of Operations

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

License revenues were approximately $215,000 and $15.1 million for the years ended December 31, 2017 and 2016, respectively. 2017 license revenues reflect the recognition of royalties earned on net sales of Probuphine. License revenues for the year ended December 31, 2016 reflect approximately $65,000 from the recognition of royalties earned on net sales of Probuphine and approximately $15.0 million from the recognition of the milestone payment earned upon FDA approval of our Probuphine NDA in May 2016.

Research and development expenses for 2017 were approximately $9.6 million compared to approximately $6.1 million in 2016, an increase of approximately $3.5 million, or 57%. The increase in research and development costs was primarily associated with increases in external research and development expenses related to the support of our ProNeura product development programs, including the costs associated with the IND and commencement of clinical study of the ropinirole implant and the cost of preparing the Probuphine MAA for submission to the EMA, employee related expenses and other research and development expenses. External research and development expenses include direct expenses such as CRO charges, investigator and review board fees, patient expense reimbursements, expenses for NDA preparation and contract manufacturing expenses. During 2017, external research and development expenses relating to our product development programs were approximately $5.6 million compared to approximately $3.5 million in 2016. Other research and development expenses include internal operating costs such as clinical research and development personnel-related expenses, clinical trials related travel expenses, and allocation of facility and corporate costs. As a result of the risks and uncertainties inherently associated with pharmaceutical research and development activities described elsewhere in this 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 in connection with our current ProNeura development program and any other ProNeura technology based product development activities we may pursue.

General and administrative expenses for 2017 were approximately $5.1 million compared to approximately $4.6 million in 2016, an increase of approximately $0.5 million, or 11%. The increase in general and administrative expenses was primarily related to increases in non-cash stock-based compensation and employee-related costs of approximately $0.4 million and other expenses of approximately $0.1 million.

Net other income for the year ended December 31, 2017 was approximately $0.2 million, compared to approximately $0.8 million in 2016. Net other income in 2017 consisted primarily of $0.6 million related to non-cash gains on changes in the fair value of warrant liabilities offset by approximately $0.4 million consisting of interest expenses related to our Loan Agreement and other expenses. Net other income in 2016 consisted primarily of $0.8 million related to non-cash gains on changes in the fair value of warrant liabilities.

Our net loss applicable to common stockholders for the year ended December 31, 2017 was approximately $14.3 million, or approximately $0.67 per share, compared to our net income applicable to common stockholders of approximately $5.1 million, or approximately $0.25 per share, for the comparable period in 2016.

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

License revenues were approximately $15.1 million and $1.7 million for the years ended December 31, 2016 and 2015, respectively. License revenues for the year ended December 31, 2016 reflect approximately $65,000 from the recognition of royalties earned on net sales of Probuphine and approximately $15.0 million from the recognition of the milestone payment earned upon FDA approval of our Probuphine NDA in May 2016. License revenues for the year ended December 31, 2015 reflect the amortization of the upfront license fee received from Braeburn in December 2012.

Research and development expenses for 2016 were approximately $6.1 million compared to approximately $4.7 million in 2015, an increase of approximately $1.4 million, or 30%. The increase in research and development costs was primarily associated with increases in external research and development expenses related to the support of our ProNeura product development programs, employee related expenses and other research and development expenses. These increases were partially offset by the reimbursement by our development partner, Braeburn, of approximately $1.1 million of expenses related to Probuphine. External research and development expenses include direct expenses such as CRO charges, investigator and review board fees, patient expense reimbursements, expenses for NDA preparation and contract manufacturing expenses. During 2016, external research and development expenses relating to our product development programs were approximately $3.5 million compared to approximately $1.5 million in 2015. Other research and development expenses include internal operating costs such as clinical research and development personnel-related expenses, clinical trials related travel expenses, and allocation of facility and corporate costs. As a result of the risks and uncertainties inherently associated with pharmaceutical research and development activities described elsewhere in this 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 in connection with our current ProNeura development program and any other ProNeura technology based product development activities we may pursue.

General and administrative expenses for 2016 were approximately $4.6 million compared to approximately $3.8 million in 2015, an increase of approximately $0.8 million, or 21%. The increase in general and administrative expenses was primarily related to increases in non-cash stock-based compensation and employee-related costs of approximately $0.5 million, legal and professional fees of approximately $0.2 million and a contractual fee obligation in connection with payments received under the Probuphine license of approximately $0.2 million. This was partially offset by decreases of approximately $0.1 million in other administrative expenses.

Net other income for the year ended December 31, 2016 was approximately $0.8 million, compared to net other expense of approximately $4.5 million in 2015. Net other income in 2016 consisted primarily of $0.8 million related to non-cash gains on changes in the fair value of warrant liabilities. Net other expense in 2015 consisted primarily of $4.5 million related to non-cash losses on changes in the fair value of warrant liabilities.

Our net income applicable to common stockholders for the year ended December 31, 2016 was approximately $5.1 million, or approximately $0.25 per share, compared to our net loss applicable to common stockholders of approximately $11.3 million, or approximately $0.56 per share, for the comparable period in 2015.

Off-Balance Sheet Arrangements

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

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We held no marketable securities at December 31, 2017 and 2016.

Item 8. Financial Statements and Supplementary Data.

The response to this item is included in a separate section of this Report. See “Index to Financial Statements” on Page F-1.

Item 9. Changes and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

(a) *Evaluation of Disclosure Controls and Procedures* : Our principal executive and financial officers reviewed and evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this Annual Report on Form 10-K. Based on that evaluation, our principal executive and financial officers concluded that our disclosure controls and procedures are effective in timely providing them with material information relating to the Company, as required to be disclosed in the reports we file under the Exchange Act.

(b) *Management's Annual Report on Internal Control Over Financial Reporting*:

Internal control over financial reporting refers to the process designed by, or under the supervision of, our principal executive officer and principal financial officer, and effected by our Board, management and other personnel, 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, and includes those policies and procedures that:

(1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;

(2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and

(3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisitions, use or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management overrides. Due to such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Management is responsible for establishing and maintaining adequate internal control over financial reporting for the company.

Management has used the framework set forth in the report entitled *Internal Control—Integrated Framework* published by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), known as COSO, to evaluate the effectiveness of the Company's internal control over financial reporting. Based on this assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2017.

(c) *Changes in Internal Control Over Financial Reporting* : There were no changes in our internal control over financial reporting (as defined in Rules 13(a)-15(f) and 15(d)-15(f) under the Securities Act) during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

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PART III

Item 10. Directors; Executive Officers and Corporate Governance

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

Name	Age	Office	Director Since
Marc Rubin	63	Executive Chairman of the Board	November 2007
Sunil Bhonsle	68	Chief Executive Officer, President and Director	February 2004
Joseph A. Akers (1)(2)	72	Director	November 2014
Rajinder Kumar (3)	62	Director	January 2017
M. David MacFarlane (1)(2)(3)	77	Director	May 2002
James R. McNab, Jr. (1)(3)	74	Director	November 2014
Scott A. Smith (2)	56	Director	January 2017

(1) Member of Audit Committee
(2) Member of Compensation Committee
(3) Member of Governance Committee

Marc Rubin, M.D. served as our President and Chief Executive from October 2007 until December 2008 and was re-engaged as our Executive Chairman in May 2009. Until February 2007, Dr. Rubin served as Head of Global Research and Development for Bayer Schering Pharma, as well as a member of the Executive Committee of Bayer Healthcare and the Board of Management of Bayer Schering Pharma. Prior to the merger of Bayer Pharmaceuticals and Schering AG in June 2006, Dr. Rubin was a member of the Executive Board of Schering AG since joining the Company in October 2003, as well as Chairman of Schering Berlin Inc. and President of Berlex Pharmaceuticals, a division of Schering AG. From 1990 until August 2003, Dr. Rubin was employed by GlaxoSmithKline where he held positions of increasing responsibility in global clinical and commercial development overseeing programs in the United States, Europe, Asia and Latin America. From 2001 through 2003, he was Senior Vice President of Global Clinical Pharmacology & Discovery Medicine. Dr. Rubin holds an M.D. from Cornell University Medical College. Dr. Rubin currently serves on the board of directors of Curis Inc. and Galectin Therapeutics. Based on Dr. Rubin's position as our Executive Chairman, his extensive senior management experience and service on boards of directors in the biotechnology and pharmaceutical industries and his medical background, our Board believes that Dr. Rubin has the appropriate set of skills to serve as a member of the Board.

Sunil Bhonsle served as our Executive Vice President and Chief Operating Officer from September 1995 until December 2008 and was re-engaged as our President in May 2009. Mr. Bhonsle was appointed as our Chief Executive Officer in November 2015. Mr. Bhonsle served in various positions, including Vice President and General

Manager — Plasma Supply and Manager — Inventory and Technical Planning, at Bayer Corporation from July 1975 until April 1995. Mr. Bhonsle holds an M.B.A. from the University of California at Berkeley and a B.Tech. in chemical engineering from the Indian Institute of Technology. Based on Mr. Bhonsle's position as our principal executive officer and his substantial experience in the pharmaceutical industry, particularly in the areas of clinical development and manufacturing, our Board believes that Mr. Bhonsle has the appropriate set of skills to serve as a member of the Board.

Joseph A. Akers was employed in various capacities by Bayer Corporation, Bayer Healthcare and certain related entities, including as president of the Hematology/Cardiology Business Unit from 2004 to 2007, president and chief executive officer of Bayer Business and Corporate Services from July 2002 through 2003 and executive vice president and chief administrative and financial officer from 1999 to July 2002. Mr. Akers received a B.S. in marketing and an M.B.A. in finance from the University of California at Berkeley. Based on Mr. Akers' extensive management experience in the pharmaceutical industry, particularly in the areas of administration and finance, our Board believes that Mr. Akers has the appropriate set of skills to serve as a member of the Board.

Rajinder Kumar, Ph.D. has served as the Chairman and Chief Executive Officer of MeRaD Pharmaceutical Ltd. in Cambridge U.K. since May 2009. He has also served as President and Chief Medical Officer of Vitas Pharma in Hyderabad, India since he founded such company in 2010. For the decade prior to joining MeRaD, he served in various executive capacities with Dr. Reddy's Labs, Ranbaxy Laboratories Limited, Synaptic Pharmaceutical LLP and Glaxo SmithKline Beecham. Dr. Kumar is a member of scientific advisory boards in neuroscience, anti-infectives and metabolic disorders He received a B.S. in Human Biology from the University of London, a Masters in Ethology from the University of Birmingham, a MBChB in Medicine from the University of Dundee and an advanced diploma in Psychological Medicine from The Royal College of Surgeons and Physicians in Ireland. Based on Dr. Kumar's management experience in the pharmaceutical industry, our Board believes that Dr. Kumar has the appropriate set of skills to serve as a member of the Board.

M. David MacFarlane, Ph.D. served as Vice President and Responsible Head of Regulatory Affairs of Genentech, Inc. from 1989 until his retirement in August 1999. Prior to joining Genentech, Inc., he served in various positions with Glaxo Inc., last as Vice President of Regulatory Affairs. Based on Dr. MacFarlane's management experience in the pharmaceutical industry, particularly in the area of clinical and regulatory affairs, our Board believes that Dr. MacFarlane has the appropriate set of skills to serve as a member of the Board.

James R. McNab, Jr. has served since June 2014 as chief executive officer of JT Pharmaceuticals, Inc., a privately-held drug discovery company he founded. Since 2009, Mr. McNab has served as executive chairman of FirstString Research, Inc., a privately-held biopharmaceutical company. Mr. McNab has co-founded several privately-held companies, including Sontra Medical Corporation, a drug delivery company, and Parker Medical Associates, a manufacturer and worldwide supplier of orthopedic and sports-related products. He received a B.A. in economics from Davidson College and an M.B.A. from the University of North Carolina at Chapel Hill. Based on Mr. McNab's extensive management experience in the pharmaceutical industry, our Board believes that Mr. McNab has the appropriate set of skills to serve as a member of the Board.

Scott A. Smith has served since April 2017 as President and Chief Operating Officer of Celgene Corporation. Prior to this he served in various management capacities with Celgene Corporation since 2008, including as President, Inflammation and Immunology since August 2014. From 2003 to 2008, he served in various executive capacities with Biovail Pharmaceuticals, Inc. and prior thereto spent 16 years Pharmacia & Upjohn Company. Mr. Smith holds a BSc in Chemistry and Biology and an HBSc in Pharmacology and Toxicology from the University of Western Ontario and a Masters in International Management from the American Graduate School of International Management in Arizona. Based on Mr. Smith's extensive management experience in the pharmaceutical industry, our Board believes that Mr. Smith has the appropriate set of skills to serve as a member of the Board.

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

Directors serve until the next annual meeting or until their successors are elected and qualified. Officers serve at the discretion of the Board, subject to rights, if any, under contracts of employment. See “Item 6. Executive Compensation—Employment Agreements.”

Board Leadership Structure

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

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act, requires our executive officers, directors and persons who beneficially own more than 10% of a registered class of our equity securities to file with the Securities and Exchange Commission initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Such executive officers, directors, and greater than 10% beneficial owners are required by SEC regulation to furnish us with copies of all Section 16(a) forms filed by such reporting persons.

Based solely on our review of such forms furnished to us and written representations from certain reporting persons, we believe that all filing requirements applicable to our executive officers, directors and greater than 10% beneficial owners were complied with during 2017.

Code of Ethics

We adopted a Code of Business Conduct and Ethics (the "Code") in February 2013 that applies to all directors, officers and employees. The Code was filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2012 and is available on our website at *www.titanpharm.com.* A copy of our code of ethics will also be provided to any person without charge, upon written request sent to us at our offices located at 400 Oyster Point Blvd, Suite 505, South San Francisco, California 94080.

Changes in Director Nomination Process for Stockholders

None.

Item 11. Executive Compensation

Overview

During 2017, the compensation packages of Dr. Rubin, our Executive Chairman, and Sunil Bhonsle, our Chief Executive Officer and President continued to reflect our current level of operations and resources. The key objectives for 2017 were to support our ProNeura product development programs, the submission of our Probuphine product for approval with the EMA in Europe and its potential licensing with a European partner and the support of Braeburn in the commercial launch of Probuphine. This compensation discussion describes the material elements of compensation awarded to, earned by, or paid to each of our executive officers who served as named executive officers during the year ended December 31, 2017. This compensation discussion focuses on the information contained in the following tables and related footnotes and narrative for primarily the last completed fiscal year; however, we also describe compensation actions taken before or after the last completed fiscal year to the extent it enhances the understanding of our executive compensation disclosure.

Compensation Program Objectives and Philosophy

Our Compensation Committee currently oversees the design and administration of our executive compensation program. It reviews and approves all elements of compensation for each of our named executive officers taking into consideration recommendations from our principal executive officer (for compensation other than his own), as well as competitive market guidance. We define our competitive markets for executive talent to be the pharmaceutical and biotechnology industries in northern California. To date, we have utilized the Radford Biotechnology Surveys, a third party market specific compensation survey, and, when applicable, other independent third-party compensation consultants to benchmark our executive compensation.

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

Base Salaries

During 2017, the base salary of our named executives was reflective of the availability of resources and level of continuing operations. Dr. Rubin received an annual salary of $295,000 and Mr. Bhonsle received an annual salary of $395,000.

As we continue to evaluate the strategic alternatives for us going forward and our related human resource requirements, our Compensation Committee will continue to review appropriate base salaries for our executive officers. In making its determination, the Compensation Committee will consider the time commitment necessary and the roles our executives will play in implementing our plans.

Long-term Equity Incentives

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

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

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

Event	Award Vesting	Exercise Term

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

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

In February 2017, Dr. Rubin and Mr. Bhonsle were granted options to purchase 70,000 shares and 80,000 shares of common stock, respectively, which vest monthly over 24 months from the grant date.

Compensation Committee Interlocks and Insider Participation

Members of our Compensation Committee of the board of directors are Joseph A. Akers, M. David MacFarlane and Scott A. Smith. No member of our Compensation Committee was, or has been at any time in the last 10 years, an officer or employee of Titan or any of our former subsidiaries.

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

SUMMARY COMPENSATION TABLE

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

Name and Principal Position	Year	Salary ($)	Bonus ($)	Options Awards ($) (1)	Stock Awards ($) (1)	All Other Compensation ($)(2)	Total Compensation ($)
Marc Rubin, M.D.	2017	$295,000	$—	$207,100	$ —	$ —	$ 502,100
Executive Chairman	2016	295,000	73,000	245,311	—	—	613,311
	2015	210,000	—	473,719	—	—	683,719
Sunil Bhonsle	2017	$395,000	$—	$236,686	$ —	$ 91,881	$ 723,567
Chief Executive Officer, President and Principal Financial Officer	2016	395,000	96,000	276,323	—	—	767,323
	2015	300,000	—	496,767	—	—	796,767

(1) Amounts shown represent the grant date fair value computed in accordance with FASB ASC 718. The assumptions used by us with respect to the valuation of option grants and stock awards are set forth in "Titan Pharmaceuticals, Inc. Financial Statements—Notes to Financial Statements—Note 13—Stock Plans."

(2) Amounts shown represent the payment of accrued vacation compensation.

GRANTS OF PLAN-BASED AWARDS

The following table shows information concerning grants of plan based awards to named executive officers during the year ended December 31, 2017**.**

Name	Grant Date	Approval Date(1)	Number of Shares of Common Stock Underlying Awards (#)		Exercise or Base Price of Option Awards ($/Sh)		Grant Date Fair Value of Stock and Option Awards($)(2)
Marc Rubin, M.D.	2/13/2017	2/08/2017	70,000	(3)	$	—	$ 207,100
Sunil Bhonsle	2/13/2017	2/08/2017	80,000	(3)	$	—	$ 236,686

(1) All grants were approved by the Compensation Committee on the dates indicated.

(2) Valuation assumptions are found under “Titan Pharmaceuticals, Inc. Financial Statements—Notes to Financial Statements—Note 13—Stock Plans.”

(3) These option grants vest monthly over 24 months from the grant date.

Employee Benefits Plans

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

2001 Stock Option Plan

In August 2001, we adopted the 2001 Employee Non-Qualified Stock Option Plan, or the 2001 NQ Plan, pursuant to which 318,182 shares of common stock were authorized for issuance for option grants to employees and consultants who are not officers or directors of Titan. The 2001 NQ Plan expired by its terms in August 2011. On December 31, 2017, options to purchase an aggregate of 193,465 shares of our common stock were outstanding under the 2001 NQ Plan.

2002 Stock Incentive Plan

In July 2002, we adopted the 2002 Stock Incentive Plan, or the 2002 Plan. Under the 2002 Plan, as amended, a total of approximately 1.3 million shares of our common stock were authorized for issuance to employees, officers, directors, consultants, and advisers. The 2002 Plan expired by its terms in July 2012. On December 31, 2017, options to purchase an aggregate of 583,758 shares of our common stock were outstanding under the 2002 Plan.

2014 Incentive Plan

In February 2014, our Board adopted the 2014 Incentive Plan, or the 2014 Plan, pursuant to which 454,546 shares of our common stock were authorized for issuance to employees, directors, officers, consultants and advisors. On December 31, 2017, options to purchase 278,925 shares of our common stock were outstanding under the 2014 Plan.

2015 Omnibus Equity Incentive Plan

In August 2015, our stockholders approved the 2015 Omnibus Equity Incentive Plan, or the 2015 Plan. The 2015 Plan, as amended in August 2016, authorized a total of 2.5 million shares of our common stock for issuance to employees, directors, officers, consultants and advisors. On December 31, 2017, options to purchase 1,504,000 shares of our common stock were outstanding under the 2015 Plan.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following table summarizes the number of securities underlying outstanding plan awards for each named executive officer as of December 31, 2017.

	Option Awards				
Name	Number of Securities Underlying Unexercised Awards (#) Exercisable	Number of Securities Underlying Unexercised Awards (#) Unexercisable		Exercise Price ($)	Expiration Date
Marc Rubin, M.D.	1,364	—		8.36	5/30/2018
	18,182	—		4.34	5/17/2019
	2,729	—		4.34	5/17/2019
	51,818	—		4.34	5/17/2019
	111,819	—		4.34	5/17/2019
	27,273	—		7.70	4/15/2021
	45,455	—		6.32	1/3/2022
	36,364	—		3.30	3/16/2025
	90,900	—		5.10	12/14/2025
	72,508	6,592	(1)	5.10	02/02/2026
	29,167	40,833	(1)	3.90	02/13/2027
Sunil Bhonsle	909	—		8.36	5/30/2018
	18,182	—		4.34	5/17/2019
	1,819	—		4.34	5/17/2019
	70,910	—		4.34	5/17/2019
	56,364	—		4.34	5/17/2019
	36,364	—		7.70	4/15/2021
	54,546	—		6.32	1/3/2022
	43,637	—		3.30	3/16/2025
	90,900	—		5.10	12/14/2025
	81,675	7,425	(1)	5.10	2/02/2026
	33,333	46,667	(1)	3.90	02/13/2027

(1) These option grants vest monthly over 24 months from the grant date.

There were no option exercises by our named executive officers during 2017.

Pension Benefits

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

Nonqualified Deferred Compensation

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

Employment Agreements

In September 2016, we entered into employment agreements with Dr. Rubin and Mr. Bhonsle providing for base annual salaries of $295,000 and 395,000, respectively. The employment agreements contain the following terms:

- Bonuses. The executive may, at the sole discretion of the board of directors or the compensation committee, be considered for an annual bonus of up to 50% of his then base salary, payable in cash or awards under the Company's equity incentive plan.

- Term; Termination. The Employment Agreements have a two-year term but may be terminated by the Company for any reason at any time. In the event of termination by the Company without cause or by the executive for good reason not in connection with a change of control, as those terms are defined in such agreements, the executive is entitled to (i) severance for the greater of 12 months or the balance of the term, (ii) a pro rata portion of any annual bonus, (iii) 12 months of COBRA payments, and (iv) the immediate accelerated vesting of any unvested restricted shares and stock options. In the event such a termination is within 30 days prior to or six months following a change of control, the executive is entitled to an additional six months of COBRA payments.

- Restrictive Covenants. The Employment Agreements contain one-year post-termination noncompetition and non-solicitation provisions.

- Clawback. The Employment Agreements contain a two-year post-termination clawback of benefits provision in the event of a restatement of financial results upon which such benefits were based.

DIRECTOR COMPENSATION

Summary of Director Compensation

The following table summarizes compensation that our directors earned during 2017 for services as members of our Board.

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)	Options Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)	Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Joseph A. Akers (2)	$ 57,500	$ —	$ 40,127	$ —	$ —	$ —	$ 96,627
Eurelio M. Cavalier (3)	9,588	—	28,781	—	—	—	36,389
Rajinder Kumar (4)	48,333	—	26,502	—	—	—	74,835
M. David MacFarlane, Ph.D. (5)	58,333	—	40,127	—	—	—	98,460
James R. McNab, Jr. (6)	57,500	—	40,127	—	—	—	97,627
Scott A. Smith (7)	51,250	—	26,502	—	—	—	77,752

(1) Valuation assumptions are found under “Titan Pharmaceuticals, Inc. Financial Statements—Notes to Financial Statements—Note 13—Stock Plans.”
(2) The aggregate number of option awards held at December 31, 2017 was 36,819.
(3) The aggregate number of option awards held at December 31, 2017 was 55,462. Mr. Cavalier retired from the Board effective February 28, 2017.
(4) The aggregate number of option awards held at December 31, 2017 was 15,000.
(5) The aggregate number of option awards held at December 31, 2017 was 60,916.
(6) The aggregate number of option awards held at December 31, 2017 was 36,819.
(7) The aggregate number of option awards held at December 31, 2017 was 15,000.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The following table sets forth as of March 23, 2018, the number of shares of our common stock beneficially owned by (i) each person who is known by us to be the beneficial owner of more than five percent of our common stock; (ii) each director and director nominee; (iii) each of the named executive officers in the Summary Compensation Table; and (iv) all directors and executive officers as a group. As of March 23, 2018, we had 21,203,744 shares of common stock issued and outstanding.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission (the "SEC") and generally includes voting or investment power with respect to securities. Unless otherwise indicated, the stockholders listed in the table have sole voting and investment power with respect to the shares indicated.

Name and Address of Beneficial Owner [1]	**Shares Beneficially Owned** [2]		Percent of Shares Beneficially Owned	
Joseph A. Akers	46,486	(3)	*	
Sunil Bhonsle	745,496	(4)	3.4	%
Rajinder Kumar, Ph.D.	11,667	(5)	*	
M. David MacFarlane, Ph.D.	79,858	(6)	*	
James R. McNab, Jr.	133,486	(7)	*	
Marc Rubin, M.D.	725,757	(8)	3.3	
Scott A. Smith	11,667	(9)	*	
All executive officers and directors as a group (7) persons	1,669,417		7.8	%

*Less than one percent.

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

(2) In computing the number of shares beneficially owned by a person and the percentage ownership of a person, shares of our common stock subject to options held by that person that are currently exercisable or exercisable within 60 days of March 23, 2018 are deemed outstanding. Such shares, however, are not deemed outstanding for purposes of computing the percentage ownership of each other person. Except as indicated in the footnotes to this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock.

(3) Includes 33,486 shares issuable upon exercise of outstanding options.

(4) Includes (i) 555,234 shares issuable upon exercise of outstanding options and (ii) 54,684 shares held in a family trust for which he serves as trustee.

(5) Includes 11,667 shares issuable upon exercise of outstanding options.

(6) Includes 57,583 shares issuable upon exercise of outstanding options.

(7) IncludesK3,486 shares issuable upon exercise of outstanding options.

(8) Includes 569,440 shares issuable upon exercise of outstanding options.

(9) Includes 11,667 shares issuable upon exercise of outstanding options.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Certain Relationships and Related Transactions.

None.

Independence of Directors

The following members of our Board meet the independence requirements and standards currently established by the NYSE MKT: Joseph A. Akers, Rajinder Kumar, M. David MacFarlane, James R. McNab, Jr. and Scott A. Smith.

Board Committees

Our Board has established the following three standing committees: audit committee; compensation committee; and nominating and governance committee, or nominating committee.

The audit committee was formed in compliance with Section 3(a)(58)(A) of the Exchange Act and consists of Joseph A. Akers, M. David MacFarlane and James R. McNab, Jr., each of whom meets the independence requirements and standards currently established by the NYSE MKT and the SEC. In addition, the Board has determined that Messr. Akers is an “audit committee financial expert” and “independent” as defined under the relevant rules of the SEC and the NYSE MKT. The audit committee assists the Board by overseeing the performance of the independent auditors and the quality and integrity of Titan’s internal accounting, auditing and financial reporting practices. The audit committee is responsible for retaining (subject to stockholder ratification) and, as necessary, terminating, the independent auditors, annually reviews the qualifications, performance and independence of the independent auditors and the audit plan, fees and audit results, and pre-approves audit and non-audit services to be performed by the auditors and related fees. During the fiscal year ended December 31, 2017, the audit committee met five times.

The compensation committee makes recommendations to the Board concerning salaries and incentive compensation for our officers, including our Principal Executive Officer, and employees and administers our stock option plans. The compensation committee consists of Joseph A. Akers, M. David MacFarlane and Scott A. Smith, each of whom meets the independence requirements and standards currently established by the NYSE MKT. The compensation committee did not meet as a separate committee, but took action by written consent three times during the fiscal year ended

December 31, 2017.

The purpose of the governance committee is to assist the Board in identifying qualified individuals to become Board members, in determining the composition of the Board and in monitoring the process to assess Board effectiveness. The governance committee consists of James R. McNab, Jr., Rajinder Kumar and M. David MacFarlane who meet the independence requirements and standards currently established by the NYSE MKT. The nominating committee did not meet as a separate committee or take action by written consent during the fiscal year ended December 31, 2017.

The charters for the audit, compensation and governance committees, which have been adopted by our Board, contain detailed descriptions of the committees' duties and responsibilities and are available in the Investor Relations section of our website at *www.titanpharm.com.*

Role of the Board in Risk Oversight

Our audit committee is primarily responsible for overseeing our risk management processes on behalf of the full Board. The audit committee receives reports from management at least quarterly regarding our assessment of risks. In addition, the audit committee reports regularly to the full Board, which also considers our risk profile. The audit committee and the full Board focus on the most significant risks we face and our general risk management strategies. While the Board oversees our risk management, management is responsible for day-to-day risk management processes. Our Board expects management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-day activities and to effectively implement risk management strategies adopted by the audit committee and the Board. We believe this division of responsibilities is the most effective approach for addressing the risks we face and that our Board leadership structure, which also emphasizes the independence of the Board in its oversight of its business and affairs, supports this approach.

Board Meetings

Our business and affairs are managed under the direction of our Board, which is currently composed of eight members. The primary responsibilities of the Board are to provide oversight, strategic guidance, counseling and direction to our management. During the fiscal year ended December 31, 2017, the Board met six times and took action by written consent two times and no director attended fewer than 75% of the meetings of the Board and Board committees of which the director was a member.

Item 14. Principal Accounting Fees and Services.

Aggregate fees billed by OUM & Co. LLP, an independent registered public accounting firm, during the fiscal years ended December 31, 2017 and 2016 were as follows:

	2017	2016
Audit Fees	$210,824	$164,688
Audit-Related Fees	6,693	41,037
Tax Fees	15,000	26,000
All Other Fees	—	—
Total	$232,517	$231,725

Audit Fees —This category includes aggregate fees billed by our independent auditors for the audit of our annual financial statements, audit of management's assessment and effectiveness of internal controls over financial reporting, review of financial statements included in our quarterly reports on Form 10-Q and services that are normally provided by the auditor in connection with statutory and regulatory filings for those fiscal years.

Audit-Related Fees —This category consists of services by our independent auditors that, including accounting consultations on transaction related matters, are reasonably related to the performance of the audit or review of our financial statements and are not reported above under Audit Fees.

Tax Fees —This category consists of professional services rendered for tax compliance and preparation of our corporate tax returns and other tax advice.

All Other Fees —During the years ended December 31, 2017 and 2016, OUM & Co. LLP did not incur any fees for other professional services.

The audit committee reviewed and approved all audit and non-audit services provided by OUM & Co. LLP and concluded that these services were compatible with maintaining its independence. The audit committee approved the provision of all non-audit services by OUM & Co. LLP. Of the total number of hours expended during OUM & Co. LLP's engagement to audit our financial statements for the year ended December 31, 2017, none of the hours were attributed to work performed by persons other than permanent, full-time employees of OUM & Co. LLP.

Pre-Approval Policies and Procedures

In accordance with the SEC's auditor independence rules, the audit committee has established the following policies and procedures by which it approves in advance any audit or permissible non-audit services to be provided to us by our independent auditor.

Prior to the engagement of the independent auditors for any fiscal year's audit, management submits to the audit committee for approval lists of recurring audit, audit-related, tax and other services expected to be provided by the independent auditors during that fiscal year. The audit committee adopts pre-approval schedules describing the recurring services that it has pre-approved, and is informed on a timely basis, and in any event by the next scheduled meeting, of any such services rendered by the independent auditor and the related fees.

The fees for any services listed in a pre-approval schedule are budgeted, and the audit committee requires the independent auditor and management to report actual fees versus the budget periodically throughout the year. The audit committee will require additional pre-approval if circumstances arise where it becomes necessary to engage the independent auditor for additional services above the amount of fees originally pre-approved. Any audit or non-audit service not listed in a pre-approval schedule must be separately pre-approved by the audit committee on a case-by-case basis.

Every request to adopt or amend a pre-approval schedule or to provide services that are not listed in a pre-approval schedule must include a statement by the independent auditors as to whether, in their view, the request is consistent with the SEC's rules on auditor independence.

The audit committee will not grant approval for:

- any services prohibited by applicable law or by any rule or regulation of the SEC or other regulatory body applicable to us;
- provision by the independent auditors to us of strategic consulting services of the type typically provided by management consulting firms; or
- the retention of the independent auditors in connection with a transaction initially recommended by the independent auditors, the tax treatment of which may not be clear under the Internal Revenue Code and related regulations and which it is reasonable to conclude will be subject to audit procedures during an audit of our financial statements.

Tax services proposed to be provided by the auditor to any director, officer or employee of Titan who is in an accounting role or financial reporting oversight role must be approved by the audit committee on a case-by-case basis where such services are to be paid for by us, and the audit committee will be informed of any services to be provided to such individuals that are not to be paid for by us.

In determining whether to grant pre-approval of any non-audit services in the "all other" category, the audit committee will consider all relevant facts and circumstances, including the following four basic guidelines:

- whether the service creates a mutual or conflicting interest between the auditor and us;

- whether the service places the auditor in the position of auditing his or her own work;

- whether the service results in the auditor acting as management or an employee of our company; and

- whether the service places the auditor in a position of being an advocate for our company.

PART IV

Item 15. Exhibits and Financial Statements Schedules.

(a) 1. Financial Statements

An index to Financial Statements appears on page F-1.

2. Schedules

All financial statement schedules are omitted because they are not applicable, not required under the instructions or all the information required is set forth in the financial statements or notes thereto.

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TITAN PHARMACEUTICALS, INC.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors

Titan Pharmaceuticals, Inc.

South San Francisco, California

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Titan Pharmaceuticals, Inc. (the “Company”) as of December 31, 2017 and 2016, the related statements of operations and comprehensive income (loss), stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017**,** in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ OUM & CO. LLP

San Francisco, California

March 30, 2018

We have served as the Company's auditor since 2004.

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TITAN PHARMACEUTICALS, INC.

BALANCE SHEETS

	December 31,	
	2017	2016
	(in thousands, except share and per share data)	
Assets		
Current assets:		
Cash and cash equivalents	$7,522	$14,006
Restricted cash	361	—
Receivables	65	3,587
Prepaid expenses and other current assets	362	237
Total current assets	8,310	17,830
Property and equipment, net	595	837
Total Assets	$8,905	$18,667
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$821	$3,015
Accrued clinical trials expenses	289	1,387
Other accrued liabilities	354	455
Current portion of long-term debt	3,000	—
Total current liabilities	4,464	4,857
Long-term debt, net of debt discount of $497,000	3,584	—
Warrant liability	—	619
Total Liabilities	8,048	5,476
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value per share; 5,000,000 shares authorized, none issued and outstanding at December 31, 2017 and 2016.	—	—
Common stock, at amounts paid-in, $0.001 par value per share; 125,000,000 shares authorized, 21,203,744 and 21,198,879 shares issued and outstanding at December 31, 2017 and 2016, respectively.	297,855	297,855
Additional paid-in capital	26,273	24,300
Accumulated deficit	(323,271)	(308,964)
Total stockholders' equity	857	13,191
Total Liabilities and Stockholders' Equity	$8,905	$18,667

See accompanying notes to financial statements.

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TITAN PHARMACEUTICALS, INC.

STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

	Years ended December 31,		
	2017	**2016**	**2015**
	(in thousands, except per share amount)		
Revenue:			
License revenue	$ 215	$ 15,065	$ 1,671
Total revenue	215	15,065	1,671
Operating expenses:			
Research and development	9,648	6,126	4,675
General and administrative	5,069	4,596	3,755
Total operating expenses	14,717	10,722	8,430
Income (loss) from operations	(14,502)	4,343	(6,759)
Other income (expense):			
Interest income (expense), net	(369)	37	—
Other expense, net	(55)	(70)	(8)
Non-cash gain (loss) on changes in the fair value of warrants	619	825	(4,512)
Other income (expense), net	195	792	(4,520)
Net income (loss) and comprehensive income (loss) applicable to common stockholders	$ (14,307)	$ 5,135	$ (11,279)
Basic net income (loss) per common share	$ (0.67)	$ 0.25	$ (0.56)
Diluted net income (loss) per common share	$ (0.70)	$ 0.20	$ (0.56)
Weighted average shares used in computing basic net income (loss) per common share	21,203	20,744	20,053
Weighted average shares used in computing diluted net income (loss) per common share	21,228	21,459	20,053

See accompanying notes to financial statements.

TITAN PHARMACEUTICALS, INC

STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands)

	Common Stock		Additional Paid-In	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Capital	Deficit	Income (Loss)	Equity
Balances at December 31, 2014	20,000	$289,196	$ 22,235	$ (302,820)	$ —	$ 8,611
Net loss				(11,279)		(11,279)
Reclassification of warrants from liabilities to stockholders' equity		8,646				8,646
Issuance of common stock upon vesting of restricted stock awards, net	60	(14)				(14)
Stock-based compensation			1,026			1,026
Balances at December 31, 2015	20,060	297,828	23,261	(314,099)	—	6,990
Net income				5,135		5,135
Issuance of common stock upon exercise of warrants, net	1,131					—
Issuance of common stock upon exercise of options, net	8	27				27
Stock-based compensation			1,039			1,039
Balances at December 31, 2016	21,199	297,855	24,300	(308,964)	—	13,191
Net loss				(14,307)		(14,307)
Issuance of warrants to purchase common stock, net			286			286
Issuance of common stock, net	5					—
Stock-based compensation			1,687			1,687
Balances at December 31, 2017	21,204	$297,855	$ 26,273	$ (323,271)	$ —	$ 857

See accompanying notes to financial statements.

TITAN PHARMACEUTICALS, INC.

STATEMENTS OF CASH FLOWS

	Years ended December 31,		
	2017	2016	2015
	(in thousands)		
Cash flows from operating activities:			
Net income (loss)	$(14,307)	$5,135	$(11,279)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation and amortization	417	377	358
Non-cash interest expense	141	—	—
Non-cash (gain) loss on changes in fair value of warrants	(619)	(825)	4,512
Stock-based compensation	1,687	1,039	1,026
Changes in operating assets and liabilities:			
Receivables	3,522	626	(245)
Prepaid expenses and other assets	(486)	(63)	(29)
Accounts payable	(2,194)	(1,143)	(250)
Other accrued liabilities	(1,199)	1,147	112
Deferred contract revenue	—	—	(1,671)
Net cash provided by (used in) operating activities	(13,038)	6,293	(7,466)
Cash flows from investing activities:			
Purchases of furniture and equipment	(175)	(171)	(133)
Net cash used in investing activities	(175)	(171)	(133)
Cash flows from financing activities:			
Proceeds from the issuance of debt	6,729	—	—
Proceeds from issuance of common stock from the exercise of stock options	—	27	—
Issuance of common stock from the vesting of restricted shares	—	—	(14)
Net cash provided by (used in) financing activities	6,729	27	(14)
Net increase (decrease) in cash	(6,484)	6,149	(7,613)
Cash and cash equivalents at beginning of period	14,006	7,857	15,470
Cash and cash equivalents at end of period	$7,522	$14,006	$7,857
Supplemental disclosure of cash flow information			
Interest paid	$298	$—	$—
Fair value of warrants at the time of reclassification to equity	$—	$—	$8,646

See accompanying notes to financial statements.

TITAN PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS

1. Organization and Summary of Significant Accounting Policies

The Company

We are a pharmaceutical company developing proprietary therapeutics for the treatment of serious medical disorders. Our product development programs utilize our proprietary long-term drug delivery platform, ProNeura™, and focus primarily on innovative treatments for select chronic diseases for which steady state delivery of a drug provides an efficacy and/or safety benefit. We are directly developing our product candidates and also utilize corporate, academic and government partnerships as appropriate. We operate in only one business segment, the development of pharmaceutical products. All share and per share amounts give retroactive effect to a 1 for 5.5 reverse stock split effected in September 2015. See Note 12 “Stockholders’ Equity – Reverse Stock Split.”

The accompanying financial statements have been prepared assuming we will continue as a going concern.

In May 2016, the U.S. Food and Drug Administration (“FDA”) approved our Probuphine New Drug Application (“NDA”) and pursuant to our license agreement with Braeburn Pharmaceuticals, Inc. (“Braeburn”), as amended to date, we received a $15 million milestone payment and subsequently transferred the NDA to Braeburn.

At December 31, 2017, we had cash and cash equivalents of approximately $7.5 million, which we believe, along with the approximately $2.4 million received from Molteni in March 2018 less the $3.0 million prepayment of our loan from Horizon in February 2018, is sufficient to fund our planned operations into the third quarter of 2018. We will require additional funds, either through payments from Braeburn under the license agreement or through other financing arrangements, to advance our current ProNeura development programs to later stage clinical studies and to complete the regulatory approval process necessary to commercialize any products we might develop.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Going concern assessment

With the implementation of FASB's standard on going concern, Accounting Standard Update, or ASU No. 2014-15, beginning with the year ended December 31, 2016 and all annual and interim periods thereafter, we will assess going concern uncertainty in our 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 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.

Stock-Based Compensation

We recognize compensation expense using a fair-value based method, for all stock-based payments including stock options and restricted stock awards and stock issued under an employee stock purchase plan. These standards require companies to estimate the fair value of stock-based payment awards on the date of grant using an option pricing model. See Note 13 “Stock Plans,” for a discussion of our stock-based compensation plans. Our non-cash stock-based compensation expense related to employees, non-employee members of our Board and consultants totaled approximately $1.7 million, $1.0 million and $1.0 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Warrants Issued in Connection with Equity Financing

We generally account for warrants issued in connection with equity financings as a component of equity, unless there is a deemed possibility that we may have to settle the warrants in cash. For warrants issued with deemed possibility of cash settlement, we record the fair value of the issued warrants as a liability at each reporting period and record changes in the estimated fair value as a non-cash gain or loss in the Statements of Operations and Comprehensive Income (Loss).

Cash, Cash Equivalents and Marketable Securities

Our investment policy emphasizes liquidity and preservation of principal over other portfolio considerations. We select investments that maximize interest income to the extent possible given these two constraints. We satisfy liquidity requirements by investing excess cash in securities with different maturities to match projected cash needs and limit concentration of credit risk by diversifying our investments among a variety of high credit-quality issuers and limit the amount of credit exposure to any one issuer. The estimated fair values have been determined using available market information. We do not use derivative financial instruments in our investment portfolio.

All investments with original maturities of three months or less are considered to be cash equivalents. Marketable securities, consisting primarily of high-grade debt securities, U.S. government and corporate notes and bonds, and commercial paper, are classified as available-for-sale at time of purchase and carried at fair value. If the fair value of a security is below its amortized cost and we plan to sell the security before recovering its cost, the impairment is considered to be other-than-temporary. Other-than-temporary declines in fair value of our marketable securities are charged against interest income. We had money market funds of approximately $7.4 million and $13.7 million as of December 31, 2017 and 2016, respectively, included in our cash and cash equivalents. We did not hold any marketable securities as of December 31, 2017 and 2016.

Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful lives of the assets ranging from three to five years. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the assets.

Revenue Recognition

We generate revenue principally from collaborative research and development arrangements, technology licenses, and government grants. Consideration received for revenue arrangements with multiple components is allocated among the separate units of accounting based on their respective selling prices. The selling price for each unit is based on vendor-specific objective evidence, or VSOE, if available, third party evidence if VSOE is not available, or estimated selling price if neither VSOE nor third party evidence is available. The applicable revenue recognition criteria are then applied to each of the units.

Revenue is recognized when the four basic criteria of revenue recognition are met: (1) a contractual agreement exists; (2) transfer of technology has been completed or services have been rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured. For each source of revenue, we comply with the above revenue recognition criteria in the following manner:

- Technology license agreements typically consist of non-refundable upfront license fees, annual minimum access fees or royalty payments. Non-refundable upfront license fees and annual minimum payments received with separable stand-alone values are recognized when the technology is transferred or accessed, provided that the technology transferred or accessed is not dependent on the outcome of our continuing research and development efforts.

- Royalties earned are based on third-party sales of licensed products and are recorded in accordance with contract terms when third-party results are reliably measurable and collectability is reasonably assured. We no longer recognize royalty income related to the Fanapt royalty payments received from Novartis (see Note 8, "Royalty Liability" for further discussion).

- Government grants, which support our research efforts in specific projects, generally provide for reimbursement of approved costs as defined in the notices of grants. Grant revenue is recognized when associated project costs are incurred.

- Collaborative arrangements typically consist of non-refundable and/or exclusive technology access fees, cost reimbursements for specific research and development spending, and various milestone and future product royalty payments. If the delivered technology does not have stand-alone value, the amount of revenue allocable to the delivered technology is deferred. Non-refundable upfront fees with stand-alone value that are not dependent on future performance under these agreements are recognized as revenue when received, and are deferred if we have continuing performance obligations and have no evidence of fair value of those obligations. Cost reimbursements for research and development spending are recognized when the related costs are incurred and when collections are reasonably expected. Payments received related to substantive, performance-based "at-risk" milestones are recognized as revenue upon achievement of the clinical success or regulatory event specified in the underlying contracts, which represent the culmination of the earnings process. Amounts received in advance are recorded as deferred revenue until the technology is transferred, costs are incurred, or a milestone is reached.

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 clinical research organization 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.

Net Income (Loss) Per Share

Basic net income (loss) per share excludes the effect of dilution and is computed by dividing net income (loss) by the weighted-average number of shares outstanding for the period. Diluted net income (loss) per share reflects the potential dilution that could occur if securities or other contracts to issue shares were exercised into shares. In calculating diluted net income (loss) per share, the numerator is adjusted for the change in the fair value of the warrant liability (only if dilutive) and the denominator is increased to include the number of potentially dilutive common shares assumed to be outstanding during the period using the treasury stock method.

The following table sets forth the reconciliation of the numerator and denominator used in the computation of basic and diluted net income (loss) per common share for the years ended December 31, 2017, 2016 and 2015:

	Years ended December 31,		
(in thousands, except per share amounts)	2017	2016	2015
Numerator:			
Net income (loss) used for basic earnings per share	$(14,307)	$5,135	$(11,279)
Less change in fair value of warrant liability	619	825	—
Net income (loss) used for diluted earnings per share	$(14,926)	$4,310	$(11,279)
Denominator:			
Basic weighted-average outstanding common shares	21,203	20,744	20,053
Effect of dilutive potential common shares resulting from options	—	141	—
Effect of dilutive potential common shares resulting from warrants	25	574	—
Weighted-average shares outstanding—diluted	21,228	21,459	20,053
Net income (loss) per common share:			
Basic	$(0.67)	$0.25	$(0.56)
Diluted	$(0.70)	$0.20	$(0.56)

The table below presents common shares underlying stock options and warrants that are excluded from the calculation of the weighted average number of shares of common stock outstanding used for the calculation of diluted net income (loss) per common share. These are excluded from the calculation due to their anti-dilutive effect for the years ended December 31, 2017, 2016 and 2015:

	Years ended December 31,		
(in thousands)	2017	2016	2015
Weighted-average anti-dilutive common shares resulting from options and awards	2,355	1,286	1,346
Weighted-average anti-dilutive common shares resulting from warrants	1,220	—	231
	3,574	1,286	1,577

Comprehensive Income (Loss)

Comprehensive income and loss for the periods presented is comprised solely of our net income and loss. Comprehensive loss for the year ended December 31, 2017 was $ 14.3 million. Comprehensive income for the year ended December 31, 2016 was $5.1 million. Comprehensive loss for the year ended December 31, 2015 was $ 11.3 million.

Recent Accounting Pronouncements

In July 2017, the Financial Accounting Standards Board, or FASB, issued a two-part Accounting Standards Update, or ASU, No. 2017-11, *I. Accounting for Certain Financial Instruments With Down Round Features and II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests With a Scope Exception* amending guidance in FASB ASC 260, Earnings Per Share, FASB ASC 480, Distinguishing Liabilities from Equity, and FASB ASC 815, Derivatives and Hedging. The amendments in Part I of ASU 2017-11 change the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features. The amendments in Part II of ASU 2017-11 re-characterize the indefinite deferral of certain provisions of Topic 480 that now are presented as pending content in the Codification, to a scope exception. Those amendments do not have an accounting effect. ASU 2017-11 is effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted. We adopted ASU 2017-11 for the year ended December 31, 2017, and retrospectively applied ASU 2017-11 as required. There was no retrospective impact as a result of the adoption of ASU 2017-11 on the financial statements. See Note 10, “Debt Agreements”.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments,* addressing eight specific cash flow issues in an effort to reduce diversity in practice. The amended guidance is effective for fiscal years beginning after December 31, 2017, and for interim periods within those years. Early adoption is permitted. We do not expect the amended guidance to have a material impact on our statements of cash flows.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation - Stock Compensation: Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). ASU 2016-09 addresses several aspects of the accounting for share-based payment award transactions, including: (a) income tax consequences; (b) classification of awards as either equity or liabilities; (c) classification on the statement of cash flows; and (d) accounting for forfeitures. We adopted the provisions of ASU 2016-09 in the first quarter of 2017. We have elected to continue to estimate forfeitures based on the estimated number of awards expected to vest. In addition, the adoption of ASU 2016-09 resulted in the recognition of $12.0 million of previously unrecognized excess tax benefits in deferred tax assets, fully offset by a valuation allowance. All tax-related cash flows resulting from stock-based compensation, including the excess tax benefits related to the settlement of stock-based payment awards, are now classified as cash flows from operating activities on our statements of cash flows. The adoption of ASU 2016-09 did not have a material impact on our results of operations or financial condition.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This ASU requires most lessees to recognize right of use assets and lease liabilities, but recognize expenses in a manner similar with current accounting standards. The new standard is effective for fiscal years and interim periods beginning after December 15, 2018. Entities are required to use a modified retrospective approach, with early adoption permitted. We are currently evaluating the impact of this new standard on the financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* and has subsequently issued several supplemental or clarifying ASUs (collectively, "ASC 606"), ASC 606 supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASC 606 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASC 606 defines a five step process to achieve this core principle and, in doing so, more judgment and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP.

The standard is effective for annual periods beginning after December 15, 2017, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASC 606 recognized at the date of adoption. We expect to adopt the standard using the modified retrospective method.

We assessed the impact that the future adoption of ASC 606 will have on our financial statements by analyzing our current portfolio of customer contracts, including a review of historical accounting policies and practices to identify potential differences in the application of ASC 606. Additionally, we performed a comprehensive review of our current processes and systems to determine and implement changes required to support the adoption of ASC 606 on January 1, 2018. We do not expect the adoption of this new standard to have a material impact on our financial

statements.

Subsequent Events

We have evaluated events that have occurred subsequent to December 31, 2017 and through the date that the financial statements are issued.

Fair Value Measurements

We measure the fair value of financial assets and liabilities based on authoritative guidance which defines fair value, establishes a framework consisting of three levels for measuring fair value, and requires disclosures about fair value measurements. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. There are three levels of inputs that may be used to measure fair value:

Level 1 – quoted prices in active markets for identical assets or liabilities;

Level 2 – quoted prices for similar assets and liabilities in active markets or inputs that are observable;

Level 3 – inputs that are unobservable (for example cash flow modeling inputs based on assumptions).

Financial instruments, including receivables, accounts payable and accrued liabilities are carried at cost, which we believe approximates fair value due to the short-term nature of these instruments. The $7.4 million and $13.7 million fair values of money market funds as of December 31, 2017 and 2016 included in our cash and cash equivalents, are classified as Level 1 and were derived from quoted market prices as active markets for these instruments exists. Our warrant liabilities are classified within level 3 of the fair value hierarchy because the value is calculated using significant judgment based on our own assumptions in the valuation of these liabilities.

As a result of the fair value adjustment of the warrant liabilities, during the years ended December 31, 2017 and 2016 we recorded a non-cash gain on decreases in the fair value of $619,000 and $825,000, respectively, in our Statements of Operations and Comprehensive Income (Loss). See Note 9, “Warrant Liability” for further discussion on the calculation of the fair value of the warrant liability.

The following table rolls forward the fair value of the Company’s warrant liability, the fair value of which is determined by Level 3 inputs for the years ended December 31, 2017 and 2016 (in thousands):

	December 31,	
	2017	2016
Fair value, beginning of period	$619	$1,444
Change in fair value	(619)	(825)
Fair value, end of period	$—	$619

2. Property and Equipment

Property and equipment consisted of the following at December 31, 2017 and 2016 (in thousands):

	2017	2016
Furniture and office equipment	$388	$388
Leasehold improvements	408	408
Laboratory equipment	2,690	2,548
Computer equipment	1,168	1,135
	4,654	4,479
Less accumulated depreciation and amortization	(4,059)	(3,642)
Property and equipment, net	$595	$837

Depreciation and amortization expense was $417,000, $377,000 and $358,000 for the years ended December 31, 2017, 2016 and 2015, respectively.

3. Research and License Agreements

We have entered into various agreements with research institutions, universities, clinical research organizations and other entities for the performance of research and development activities and for the acquisition of licenses related to those activities. Expenses under these agreements totaled approximately $3,000 in the year ended December 31, 2015.

We have no annual payment requirements to maintain our current licenses after 2015. Certain licenses provide for the payment of royalties by us on future product sales, if any. In addition, in order to maintain these licenses and other rights during product development, we must comply with various conditions including the payment of patent-related costs.

4. Agreement with Sanofi-Aventis SA

In 1997, we entered into an exclusive license agreement with Sanofi-Aventis. The agreement gave us a worldwide license to the patent rights and know-how related to the antipsychotic agent iloperidone, including the ability to develop, use, sublicense, manufacture and sell products and processes claimed in the patent rights. The license agreement provided that we pay royalties based on net sales. The underlying patent rights expired in November 2016.

5. Iloperidone Sublicense

In November 1997, we granted Novartis a worldwide sublicense to iloperidone (Fanapt®) in exchange for tiered royalties on net sales ranging from 8% to 10% and assumption of responsibility for all clinical development, registration, manufacturing and marketing of the product. Novartis had the right to commercialize Fanapt in the United States and Canada. In June 2004, Novartis transferred all rights to commercialize Fanapt in the United States and Canada to Vanda Pharmaceuticals, Inc. and in December 2014 assigned the agreement to Vanda. Our rights under the agreements have not changed. Pursuant to agreements entered into during 2011, we sold substantially all of our future royalties on the sales of Fanapt ® to a third party and, accordingly, we no longer recognize revenue related to Fanapt. See Note 8, “Royalty Liability” for further discussion of our royalty liabilities.

6. Braeburn License

In December 2012, we entered into the Agreement with Braeburn granting Braeburn exclusive commercialization rights to Probuphine in the United States and its territories, including Puerto Rico, and Canada. As part of the Agreement, we received a non-refundable up-front license fee of $15.75 million (approximately $15.0 million, net of expenses), and would have received $45.0 million upon approval by the FDA of the NDA as well as up to an additional $130.0 million upon achievement of specified sales milestones and up to $35.0 million in regulatory milestones for additional indications, including chronic pain. We would have received tiered royalties on net sales of Probuphine ranging from the mid-teens to the low twenties.

On May 28, 2013, we entered into the Amendment to the Agreement primarily to modify certain of the termination provisions of the Agreement. The Amendment gives Braeburn the right to terminate the Agreement in the event that (A) after May 28, 2013, based on written or oral communications from or with the FDA, Braeburn reasonably determines either that the FDA will require significant development to be performed before approval of the Probuphine™ NDA can be given, such as, but not limited to, one or more additional controlled clinical studies with a clinical efficacy endpoint, or substantial post-approval commitments that may materially impact the product’s financial returns or that the FDA will require one or more changes in the proposed label, which change(s) Braeburn reasonably determines will materially reduce the authorized prescribed patient base, or (B) the NDA has not been approved by the FDA on or before June 30, 2014. The Amendment also provides that we will share in legal and consulting expenses in excess of a specified amount prior to approval of the NDA.

On July 2, 2013, we entered into the Second Amendment to the Agreement primarily to establish and provide the parameters for a committee comprised of representatives of Titan and Braeburn responsible for and with the authority to make all decisions regarding the development and implementation of a strategic plan to seek approval from the FDA of Probuphine® for subdermal use in the maintenance treatment of adult patients with opioid dependence, including development of the strategy for all written and oral communications with the FDA. The Second Amendment

also makes Braeburn the primary contact for FDA communications regarding the Probuphine NDA.

On November 12, 2013, we entered into the stock purchase agreement pursuant to which Braeburn made a $5 million equity investment in our company and the Third Amendment primarily to modify the amount and timing of the approval and sales milestone payments payable under the Agreement. Under the Third Amendment, we are entitled to receive a $15 million payment upon FDA approval of the NDA and royalties on net sales of Probuphine ranging in percentage from the mid-teens to the low twenties. The agreement also provides for up to $165 million in sales milestones and $35 million in regulatory milestones. In addition, we are entitled to receive a low single digit royalty, up to an aggregate of $50 million, on sales by Braeburn, if any, of other continuous delivery treatments for opioid dependence as defined in the Third Amendment and can elect to receive a low single digit royalty on sales by Braeburn, if any, of other products in the addiction market in exchange for a similar reduction in our royalties on Probuphine.

We have evaluated the revenue components of the agreement, which includes multiple elements, to determine whether the components of the arrangement represent separate units of accounting. We have determined that the non-refundable, up-front license fee of $15.75 million (approximately $15.0 million, net of expenses) and our costs up to the PDUFA date to be one deliverable which will be accounted for as a single unit of accounting. This amount was recognized on a straight-line basis over the estimated period during which we expected to meet the contract deliverables. Based on our understanding of subsequent steps to be performed following the PDUFA date related to the completion of the transition of production and supply services to Braeburn, we estimated the revenue recognition period from the up-front payment to be approximately 12 months from the date of the Agreement. Accordingly, we recognized revenue for the up-front payment ratably from December 14, 2012, the date of the Agreement, through March 31, 2013 at an amount equal to approximately $1.25 million per month. Following the receipt of the CRL in April 2013, we estimated the revenue recognition period for the up-front payment would be approximately 18 months from the date of the Agreement. Accordingly, we recognized the remaining revenue from the up-front payment ratably from April 1, 2013 through September 30, 2013 at an amount equal to approximately $733,000 per month. Following our meeting with the FDA in November 2013 and subsequent discussions in which an agreement in principle with respect to a path forward was reached with the FDA, we estimated the revenue recognition period for the up-front payment to be approximately 30 months from the date of the Agreement. Accordingly, we recognized the remaining revenue from the up-front payment ratably from September 30, 2013 at an amount equal to approximately $304,000 per month. As of December 31, 2017, we have recognized approximately $15.0 million in license revenue related to the up-front payment. Internal and external research and development costs related to this product have been expensed in the period incurred.

Under the Agreement, we received a $15.0 million milestone payment from Braeburn following the achievement of FDA approval of the product NDA. As such, upon receipt of FDA approval our obligation was fulfilled and we recognized the $15.0 million regulatory milestone payment from Braeburn in accordance with the milestone method of revenue recognition. We will be reimbursed by Braeburn for any development services and activities performed by us at Braeburn’s request.

The Agreement also provides for a development committee. The duties of the development committee are to periodically report to each other, exchange information, and confer with and review the clinical development of the product and matters pertaining to regulatory approval. The development committee has no authority to approve or direct either party to take action, approve or withhold approval for any plan, budget, timeline or strategies, amend, modify or waive compliance with the Agreement, create new obligations or alter, increase or expand, or waive compliance with the Agreement, create new obligations not specified in the Agreement, or alter, increase or expand, or waive compliance by a party with obligations under the Agreement. The development committee can be disbanded upon mutual agreement of the parties and shall automatically disband six years after the NDA transfer date. Based on the above, we have determined that participation in the development committee is perfunctory and inconsequential, and is not considered a separate deliverable in the Agreement.

7. Commitments and Contingencies

Lease Commitments

We lease our facilities under an operating lease that expires in June 2021. Rent expense was $293,000, $257,000, and $211,000 for years ended December 31, 2017, 2016, and 2015, respectively.

The following is a schedule of future minimum lease payments at December 31, 2017 (in thousands):

2018	$287
2019	299
2020	308
2021	155
2022 and thereafter	—
	$1,049

Legal Proceedings

There are no ongoing legal proceedings against our company.

8. Royalty Liability

On March 28, 2013, we amended the agreements with Deerfield terminating our option to repurchase the Fanapt royalty rights. As a result, we recognized a gain on the extinguishment of the royalty liability of approximately $9.0 million, which was recorded in other income, because we are no longer required to account for it as a liability. Additionally, we will no longer recognize royalty income related to the Fanapt royalty payments received from Novartis.

9. Warrant Liability

On March 15, 2011, in connection with the facility agreement, we issued Deerfield six-year warrants to purchase 1,090,910 shares of our common stock at an initial exercise price of $8.64 per share. As a result of our April 2012 sale of equity, and pursuant to the terms of the Deerfield Warrants, the exercise price of the Deerfield Warrants was adjusted to $6.88 per share. The Deerfield Warrants contain a provision where the warrant holder has the option to receive cash, equal to the Black-Scholes fair value of the remaining unexercised portion of the warrant, as cash settlement in the event that there is a fundamental transaction (contractually defined to include various merger, acquisition or stock transfer activities). Due to this provision, ASC 480, *Distinguishing Liabilities from Equity* requires that these warrants be classified as liabilities. The fair values of these warrants have been determined using the Binomial Lattice ("Lattice") valuation model, and the changes in the fair value are recorded in the Statements of Operations and Comprehensive Income (Loss). The Lattice model provides for assumptions regarding volatility and risk-free interest rates within the total period to maturity.

On February 6, 2013, the facility agreement was amended to provide that the exercise price of the Deerfield Warrants could be satisfied through a reduction in the principal amount of our outstanding indebtedness to Deerfield. In February and March 2013, Deerfield exercised all of the Deerfield Warrants resulting in a $7.5 million reduction in the amount owed to Deerfield.

On April 9, 2012, in connection with subscription agreements with certain institutional investors for the purchase and sale of 1,185,034 shares of our common stock, we issued (i) six-year warrants ("Series A Warrants") to purchase 1,185,034 shares of common stock at an exercise price of $6.32 per share and (ii) six-month warrants to purchase 1,185,034 shares of common stock at an exercise price of $4.67 per share which expired in October 2012. As a result of our public offering in October 2014 and anti-dilution provisions contained in the outstanding Series A Warrants, the exercise price of such warrants was reduced from $6.32 to $4.89 per share. As a result of warrants issued as part of the Horizon Loan in July 2017 and anti-dilution provisions contained in the outstanding Series A Warrants, the exercise price of such warrants was reduced from $4.89 to $4.85 per share. The Series A Warrants contain a provision where the warrant holder has the option to receive cash, equal to the Black Scholes fair value of the remaining unexercised portion of the warrant, as cash settlement in the event that there is a fundamental transaction

(contractually defined to include various merger, acquisition or stock transfer activities). Due to this provision, ASC 480, *Distinguishing Liabilities from Equity* requires that these warrants be classified as liabilities. The fair values of these warrants have been determined using the Lattice valuation model, and the changes in the fair value are recorded in the Statements of Operations and Comprehensive Income (Loss). The Lattice model provides for assumptions regarding volatility and risk-free interest rates within the total period to maturity.

During the year ended December 31, 2013, Series A Warrants to purchase 201,639 shares of common stock were exercised resulting in gross proceeds of approximately $1,275,000. The remaining Series A Warrants to purchase 983,395 shares of common stock will expire in April 2018.

The key assumptions used to value the Series A Warrants were as follows:

Assumption	December 31, 2017	
Expected price volatility	84	%
Expected term (in years)	0.27	
Risk-free interest rate	1.40	%
Dividend yield	0.00	%
Weighted-average fair value of warrants	$ 0.00	

In October 2014, we completed an underwritten public offering (the "2014 Offering") of units consisting of one share of common stock and 0.75 of a warrant ("Class A Warrant"). The Class A Warrants entitle the holders thereof to purchase an aggregate of 2,863,643 shares of our common stock at an initial exercise price of $3.30 per share of common stock.

We agreed to hold a stockholders meeting no later than August 31, 2015 in order to seek stockholder approval for an amendment to our certificate of incorporation to either (i) increase the number of shares of common stock we are authorized to issue or (ii) effect a reverse split of the common stock, in either case in an amount sufficient to permit the exercise in full of the Class A Warrants in accordance with their terms. Failure to effect an increase in our authorized shares of common stock or effect a reverse split of our common stock prior to October 9, 2015 would have required us to pay liquidated damages in the aggregate amount of $2.5 million. In September 2015, we effected a 1-for-5.5 reverse split of our common stock (the "Reverse Split"), which was within the range approved by our stockholders at the annual meeting held on August 24, 2015.

We also agreed to issue to the underwriter warrants to purchase 114,546 shares of common stock (the "Underwriter Warrants"). The Underwriter Warrants have an exercise price per share of $3.30 and may be exercised on a cashless basis. The Underwriter Warrants are not redeemable by us. The Underwriter Warrants are substantially the same form as the Class A Warrants included in the units except that they do not include certain liquidated damages rights contained in the Class A Warrants and will expire on the fifth anniversary of the date of effectiveness of the registration statement.

At the time these warrants were issued, we did not have adequate authorized and unissued common shares to be able to satisfy the exercise of these warrants. ASC 480, *Distinguishing Liabilities from Equity* requires that these warrants be classified as liabilities. The fair values of these warrants have been determined using the Lattice valuation model, and the changes in the fair value are recorded in the Statements of Operations and Comprehensive Income (Loss). The Lattice model provides for assumptions regarding volatility and risk-free interest rates within the total period to maturity. On September 29, 2015, we effected the Reverse Split, which permits the exercise in full of the Class A Warrants in accordance with their terms and, accordingly, the associated warrant liability was reclassified to stockholders' equity.

10. Debt Agreements

In July 2017, we entered into a venture loan and security agreement ("Loan Agreement") with Horizon Technology Finance Corporation ("Horizon"), which provides for up to $10.0 million in loans, including an initial loan in the amount of $7.0 million funded upon signing of the Loan Agreement. An additional $3.0 million loan is subject to our achievement of the following milestones on or prior to March 31, 2018:

- Revenue resulting from royalty payments of not less than $750,000;
- Execution of a partnership or similar agreement for the marketing and sale of Probuphine in Europe; and
- Market capitalization of not less than $50.0 million.

Repayment of the loans is on an interest-only basis through December 31, 2018, 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 a prepayment penalty fee, based on a percentage of the then outstanding principal balance, equal to 4% if the prepayment occurs during the interest-only payment period, 3% if the prepayment occurs during the 12 months following such period, and 2% thereafter.

Our obligations under the Loan Agreement are secured by a first priority security interest in all of our assets, with the exception of our intellectual property. We agreed not to pledge or otherwise encumber our intellectual property assets, subject to certain exceptions.

The Loan Agreement includes customary affirmative and restrictive covenants, excluding any covenants to attain or maintain certain financial metrics, and also includes customary events of default, including for payment failures, breaches of covenants, change of control and material adverse changes. Upon the occurrence of an event of default and following any applicable cure periods, a default interest rate of an additional 5% may be applied to the outstanding loan balances, and Horizon may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement.

In connection with the Loan Agreement, we issued Horizon seven-year warrants to purchase an aggregate of 280,612 shares of our common stock ("Horizon Warrants"). The per share exercise price of the Horizon Warrants is the lower of (i) $1.96 or (ii) the price per share of any securities that may be issued by the Company in an equity financing during the next 18 months. We issued Horizon an additional warrant that will only become exercisable upon the funding of the second tranche of the loan, the number of shares and exercise price to be calculated at such time. We agreed to file a registration statement covering the resale of the shares underlying the Horizon Warrants. In accordance with ASC 480, *Distinguishing Liabilities from Equity*, as amended by ASU, No. 2017-11, which we early adopted during 2017, these warrants have been classified as equity. The fair value of these warrants at the time of issuance was determined using a Lattice valuation model and was recorded in the Condensed Balance Sheet.

The key assumptions used to value the Horizon Warrants were as follows:

Assumption		
Date of issuance	July 27, 2017	
Expected price volatility	47	%
Expected term (in years)	7.00	
Risk-free interest rate	2.12	%
Dividend yield	0.00	%
Weighted-average fair value of warrants	$1.02	

The anti-dilution provisions contained in the outstanding Series A warrants were triggered by the Horizon Warrant issuance, resulting in a reduction of the exercise price of such warrants from $4.89 to $4.85 per share.

11. Guarantees and Indemnifications

As permitted under Delaware law and in accordance with our Bylaws, we indemnify our officers and directors for certain events or occurrences while the officer or director is or was serving at our request in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum amount of potential future indemnification is unlimited; however, we have a director and officer insurance policy that limits our exposure and may enable us to recover a portion of any future amounts paid. We believe the fair value of these indemnification agreements is minimal. Accordingly, we have not recorded any liabilities for these agreements as of December 31, 2017.

In the normal course of business, we have commitments to make certain milestone payments to various clinical research organizations in connection with our clinical trial activities. Payments are contingent upon the achievement of specific milestones or events as defined in the agreements, and we have made appropriate accruals in our financial

statements for those milestones that were achieved as of December 31, 2017. We also provide indemnifications of varying scope to our CROs and investigators against claims made by third parties arising from the use of our products and processes in clinical trials. Historically, costs related to these indemnification provisions were immaterial. We also maintain various liability insurance policies that limit our exposure. We are unable to estimate the maximum potential impact of these indemnification provisions on our future results of operations.

12. Stockholders' Equity (Deficit)

Reverse Stock Split

On September 29, 2015, pursuant to prior stockholder authorization, our Board effected the Reverse Split of the outstanding shares of our common stock at a ratio of one (1) share for every five and one-half (5.5) shares outstanding, so that every five and one-half (5.5) outstanding shares of common stock before the Reverse Split represents one (1) share of common stock after the Reverse Split. Pursuant to their respective terms, the number of shares underlying our outstanding options and warrants was reduced by the Reverse Split ratio.

All share and per share amounts in the accompanying financial statements have been restated for all periods presented to give retroactive effect to the Reverse Split. The shares of common stock retained a par value of $0.001 per share.

Common Stock

In May and June 2016, 1,072,307 shares of common stock were issued upon the cashless net exercise of 2,016,075 Class A Warrants in accordance with their terms. There were 847,569 Class A Warrants outstanding at December 31, 2017.

In May and June 2016, 58,569 shares of common stock were issued upon the cashless net exercise of 114,546 Underwriter Warrants in accordance with their terms. There were no remaining Underwriter Warrants outstanding at December 31, 2017.

In October 2014, we completed the 2014 Offering. Net proceeds were approximately $9.6 million after deducting underwriting discounts, commissions and other related expenses. As a result of the 2014 Offering, and pursuant to the terms of the existing Series A Warrants, the exercise price of the Series A Warrants (See Note 9, “Warrant Liability” for further discussion) was adjusted to $4.89 per share.

As of December 31, 2017, warrants to purchase shares of common stock consisted of the following (in thousands, except per share price):

Date Issued	Expiration Date	Exercise Price	Outstanding
04/13/2012	04/13/2018	$ 4.85	983
10/08/2014	10/08/2020	$ 3.30	848
07/27/2017	07/27/2024	$ 1.96	281
			2,112

Shares Reserved for Future Issuance

As of December 31, 2017, shares of common stock reserved by us for future issuance consisted of the following (in thousands):

Stock options outstanding	2,728
Shares issuable upon the exercise of warrants	2,112
	4,840

13. Stock Plans

In August 2015, our stockholders approved the 2015 Omnibus Equity Incentive Plan, or the 2015 Plan. The 2015 Plan, as amended in August 2016, authorized a total of 2,500,000 shares of our common stock for issuance to employees, directors, officers, consultants and advisors. On December 31, 2017, options to purchase 1,504,000 shares of our common stock were outstanding under the 2015 Plan.

In February 2014, our Board adopted the 2014 Incentive Plan, or the 2014 Plan, pursuant to which 454,546 shares of our common stock were authorized for issuance to employees, directors, officers, consultants and advisors. On December 31, 2017, options to purchase 278,925 shares of our common stock were outstanding under the 2014 Plan. Upon receipt of stockholder approval of the 2015 Plan, the 2014 Plan was terminated.

In May 2009, we granted 111,819 and 56,364 non-qualified stock options outside of our stock option plans to Dr. Rubin and Mr. Bhonsle, respectively, at an exercise price of $4.34 that vested over 48 months from the grant date.

In October 2007, we granted 79,546 non-qualified stock options outside of our stock option plans to Dr. Rubin, at an exercise price of $13.20 per share that vested over 48 months from the grant date. These options expired by their terms in October 2017.

In July 2002, we adopted the 2002 Stock Incentive Plan ("2002 Plan"). The 2002 Plan, as amended in 2005, authorized a total of approximately 1.3 million shares of our common stock for issuance to employees, officers, directors, consultants, and advisers. The exercise prices of options granted under the 2002 Plan were 100% of the fair market value of our common stock on the date of grant. The 2002 Plan expired by its terms in July 2012. On December 31, 2017, options to purchase an aggregate of 583,758 shares of our common stock were outstanding under the 2002 Plan.

In August 2001, we adopted the 2001 Employee Non-Qualified Stock Option Plan ("2001 NQ Plan") pursuant to which 318,182 shares of common stock were authorized for issuance for option grants to employees and consultants who are not officers or directors of Titan. The exercise prices of options granted under the 2001 NQ Plan were 100% of the fair market value of our common stock on the date of grant. The 2001 Stock Option Plan expired by its terms in August 2011. On December 31, 2017, options to purchase an aggregate of 193,465 shares of our common stock were outstanding under the 2001 NQ Plan.

Activity under our stock plans, as well as non-plan activity, is summarized below (shares in thousands):

	Shares or Awards Available For Grant	Number of Options and Awards Outstanding	Weighted Average Exercise Price
Balance at December 31, 2014	282	1,269	$ 6.40
Increase in shares reserved	1,364	—	—
Options granted	(700)	700	$ 4.46
Options expired	—	(20)	$ 13.27
Awards issued	—	(66)	$ —
Termination of option plan	(32)	—	$ —
Balance at December 31, 2015	914	1,883	$ 5.83
Increase in shares reserved	1,136	—	—
Options granted	(168)	168	$ 5.10
Options exercised	—	(8)	$ 3.37
Options expired	—	(41)	$ 10.85
Balance at December 31, 2016	1,882	2,002	$ 5.67
Options granted	(946)	946	$ 2.55
Options cancelled	60	(114)	$ 5.27
Options expired	—	(106)	$ 13.11
Balance at December 31, 2017	996	2,728	$ 4.32

Options to purchase approximately 2.1 million and 1.7 million shares were exercisable at December 31, 2017 and 2016, respectively. The options outstanding at December 31, 2017 have been segregated into five ranges for additional disclosure as follows (options in thousands):

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$1.25 - $2.89	519	5.96	$ 1.42	122	$ 1.37
$2.90 - $3.95	666	8.28	$ 3.67	458	$ 3.57
$3.96 - $4.72	421	1.56	$ 4.33	420	$ 4.33
$4.73 - $5.41	588	7.99	$ 5.10	574	$ 5.10
$5.42 - $12.98	534	3.22	$ 7.07	534	$ 7.07
$1.25 - $12.98	2,728	5.75	$ 4.32	2,108	$ 4.90

We use the Black-Scholes-Merton option-pricing model with the following assumptions to estimate the stock-based compensation expense for the years ended December 31, 2017, 2016 and 2015:

	Years Ended December 31,		
	2017	2016	2015
Weighted-average risk-free interest rate	2.13 %	1.53 %	1.88 %
Expected dividend payments	—	—	—
Expected holding period (years)(1)	5.90	6.53	6.48
Weighted-average volatility factor(2)	0.90	0.92	1.16
Estimated forfeiture rates for options granted	27 %	29 %	30 %

(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.

During the year ended December 31, 2017, options to purchase 946,000 shares were granted to employees, directors and consultants. Based upon the above methodology, the weighted-average fair value of options and awards granted during the years ended December 31, 2017, 2016 and 2015 was $1.91, $3.10 and $3.67, respectively.

The following table summarizes the stock-based compensation expense and impact on our basic and diluted loss per share for the years ended December 31, 2017, 2016 and 2015:

	Years Ended December 31,		
(in thousands, except per share amounts)	2017	2016	2015
Research and development	$519	$386	$341
General and administrative	1,168	653	685
Total stock-based compensation expenses	$1,687	$1,039	$1,026
Increase in basic net income (loss) per share	$(0.08)	$(0.05)	$(0.05)
Increase in diluted net income (loss) per share	$(0.08)	$(0.05)	$(0.05)

The following table summarizes option activity for the year ended December 31, 2017:

(in thousands, except per share amounts)	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at January 1, 2017	2,002	$ 5.67	5.68	$ 203
Granted	946	2.55		
Cancelled	(114)	5.27		
Expired	(106)	13.11		
Outstanding at December 31, 2017	2,728	$ 4.32	5.75	$ 30
Exercisable at December 31, 2017	2,108	$ 4.90	5.34	$ 8

As of December 31, 2017, there was approximately $710,000 of total unrecognized compensation expense related to non-vested stock options. This expense is expected to be recognized over a weighted-average period of 1.2 years.

There were no outstanding stock awards at December 31, 2017.

14. Income Taxes

As of December 31, 2017, we had net operating loss carryforwards for federal income tax purposes of approximately $261.0 million that expire at various dates through 2037, and federal research and development tax credits of approximately $8.9 million that expire at various dates through 2037. We also had net operating loss carryforwards for California income tax purposes of approximately $107.1 million that expire at various dates through 2033 and state research and development tax credits of approximately $8.8 million which do not expire.

Current federal and California tax laws include substantial restrictions on the utilization of net operating losses and tax credits in the event of an ownership change of a corporation. We have performed a change in ownership analysis through December 31, 2017 and all of our net operating loss and tax credit carryforwards are available to offset future taxable income, if any.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and operating loss and credit carryforwards. Significant components of our deferred tax assets are as follows (in thousands):

	December 31,	
	2017	2016
Deferred tax assets:		
Net operating loss carryforwards	$62,295	$87,267
Research credit carryforwards	15,873	14,322
Other, net	1,705	2,637
Total deferred tax assets	79,873	104,226
Valuation allowance	(79,873)	(104,226)
Net deferred tax assets	$—	$—

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. The valuation

allowance decreased by $24.4 million during 2017, decreased by $4.4 million during 2016 and increased by $2.7 million during 2015.

The provision for income taxes consists of state minimum taxes due. The effective tax rate of our provision (benefit) for income taxes differs from the federal statutory rate as follows (in thousands):

	Year Ending December 31,		
	2017	**2016**	**2015**
Computed at 34%	$(4,832)	$1,758	$(3,840)
State taxes	(157)	(187)	(268)
Change in valuation allowance	(28,555)	(4,439)	2,740
Other	388	659	(20)
Revaluation of warrant liability	(210)	(280)	1,534
Research and development credits	(250)	(252)	(146)
Net operating loss carryforward expirations	1,007	2,741	—
Impact of 2017 Tax Act	32,609	—	—
Total	$—	$—	$—

We had no unrecognized tax benefits or any amounts accrued for interest and penalties for the three year period ended December 31, 2017. Our policy is to recognize interest and penalties related to income taxes as a component of income tax expense. We do not expect the amount of unrecognized tax benefits will materially change in the next twelve months.

We file tax returns in the U.S. federal jurisdiction and some state jurisdictions. We are subject to the U.S. federal and state income tax examination by tax authorities for such years 1998 through 2017, due to net operating losses that are being carried forward for tax purposes.

The Tax Cuts and Jobs Act ("2017 Tax Act") was enacted in December 2017. The 2017 Tax Act, among other things, reduces the U.S. federal corporate tax rate from 35% to 21%, effective January 1, 2018, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign earnings. We revalued our deferred tax assets as of December 31, 2017 based on a U.S. federal tax rate of 21%, which resulted in a reduction to our deferred tax assets of $32.6 million fully offset by a reduction to the valuation allowance.

15. Subsequent Events

On February 2, 2018, we entered into an amendment to our venture loan and security agreement (the "Amendment") with Horizon. Pursuant to the Amendment, we prepaid $3.0 million of the outstanding $7.0 million principal amount and provided Horizon with a lien on our intellectual property.

Loan Restructure

On March 21, 2018, we entered into an Amended and Restated Venture Loan and Security Agreement (the "Restated Loan Agreement") with Horizon Technology Finance Corporation ("Horizon") and L. Molteni & C. Dei Frattelli Alitti Società Di Esercizio S.P.A. ("Molteni") pursuant to which Horizon assigned approximately $2.4 million of the $4.0 million outstanding principal balance of the loan to Molteni and Molteni was appointed collateral agent and assumed majority and administrative control of the debt. Under the Restated Loan Agreement, the interest only payment and forbearance periods were extended to December 31, 2019. In addition, Molteni has the right to convert its portion of the debt into shares of our common stock at a conversion price of $1.20 per share and is required to effect this conversion of debt to equity if we complete an equity financing resulting in gross proceeds of at least $10.0 million at a price per share of common stock in excess of $1.20 and repay the $1.6 million balance of Horizon's loan amount. The lien on our intellectual property remains in place

In connection with the Restated Loan Agreement, we issued Horizon seven-year warrants to purchase 40,000 shares of our common stock at an exercise price of $1.20 per share, which warrants are in addition to those issued to Molteni described below under “Rights Agreement.”

Asset Purchase, Supply and Support Agreement

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

We received an initial payment of €2.0 million (approximately $2.4 million) for the purchased assets and will receive the following additional potential payments totaling up to €4.5 million (approximately $5.5 million) upon the achievement of certain regulatory and product label milestones, including: (i) a €1.0 million milestone payment upon the issuance by the European Medical Authority (“EMA”) of the MAA and (ii) an aggregate of € 2.0 million of milestone payments upon approval of the product reimbursement price in certain key countries, provided that the payments in (i) and (ii) are subject to a 50% reduction if the EMA marketing authorization is not received on or prior to September 30, 2019 and shall not be payable in the event such authorization is not received on or prior to March 31, 2020. Additionally, we are entitled to receive earn-out payments for up to 15 years on net sales of Probuphine in the Molteni Territory ranging in percentage from the low-teens to the mid-twenties.

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

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

Rights Agreement

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

16. Quarterly Financial Data (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in thousands, except per share amount)			
2017				
Total revenue	$ 40	$ 77	$ 40	$ 58
Net loss	$ (3,005)	$ (3,451)	$ (4,191)	$ (3,660)
Basic net loss per share	$ (0.14)	$ (0.16)	$ (0.20)	$ (0.17)
Diluted net loss per share	$ (0.16)	$ (0.17)	$ (0.20)	$ (0.17)
2016				
Total revenue	$ —	$ 15,004	$ 26	$ 35
Net income (loss)	$ (1,846)	$ 11,928	$ (2,620)	$ (2,327)
Basic net income (loss) per share	$ (0.09)	$ 0.58	$ (0.12)	$ (0.11)
Diluted net income (loss) per share	$ (0.09)	$ 0.55	$ (0.12)	$ (0.15)

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(b) Exhibits

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3.1(2)	Certificate of Amendment to the Restated Certificate of Incorporation dated September 24, 2015 [14]
3.2	By-laws of the Registrant [1]
4.1	Form of Series A Warrant [7]
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10.5	Amendment to lease for Registrant's facilities dated June 15, 2010 [6]
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10.7	Amendment dated May 28, 2013 to License Agreement by and between Titan Pharmaceuticals, Inc. and Braeburn Pharmaceuticals Sprl [9]
10.8	Second Amendment dated July 2, 2013 to License Agreement by and between Titan Pharmaceuticals, Inc. and Braeburn Pharmaceuticals

	Sprl [10]	
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23.1	Consent of OUM & Co., LLP, Independent Registered Public Accounting Firm
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SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 30, 2018 TITAN PHARMACEUTICALS, INC.

By: /S/ SUNIL BHONSLE
Name: **Sunil Bhonsle**
Title: **President and Chief Executive Officer**

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons in the capacities and on the dates stated.

Signature	**Title**	**Date**
/s/ Marc Rubin, M.D. Marc Rubin, M.D.	Executive Chairman	March 30, 2018
/s/ Sunil Bhonsle Sunil Bhonsle	President, Chief Executive Officer and Director (principal executive officer and principal financial officer)	March 30, 2018
/s/ Joseph A. Akers Joseph A. Akers	Director	March 30, 2018
/s/ Rajinder Kumar, Ph.D. Rajinder Kumar, Ph.D.	Director	March 30, 2018
/s/ M. David MacFarlane, Ph.D. M. David MacFarlane, Ph.D.	Director	March 27, 2018
/s/ James R. McNab, Jr. James R. McNab, Jr.	Director	March 30, 2018
/s/ Scott A. Smith Scott A. Smith	Director	March 30, 2018
/s/ Brian E. Crowley Brian E. Crowley	Vice President, Finance (principal accounting officer)	March 30, 2018

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