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Titan Pharmaceuticals, Inc. (TTNP-NASDAQ)

A New Hope for Probuphine

Based on our DCF model and a 15% discount rate, TTNP is valued at approximately $6.00 per share based on contributions from Probuphine in US/EU and ropinirole. We currently do not include any contribution from the triiodothyronine or other in-development programs. Valuation for pre-clinical programs will be included upon commencement of clinical trials.

Current Price (1/24/18)	$1.45
Valuation	**$6.00**

OUTLOOK

Titan Pharmaceuticals launched its first product, Probuphine, with Braeburn Pharmaceuticals; however, Titan is currently negotiating to find another partner. The company is also in the process of obtaining approval in Europe and has partnered to commercialize Probuphine in the EU and other regions.

Ropinirole is in clinical trials and several other candidates are about to enter the clinical phase of the development pipeline. All products use Titan's proprietary ProNeura drug delivery system. Consisting of ethylene-vinyl acetate and a drug substance, ProNeura is a novel approach to drug delivery that benefits from long-duration slow release and has characteristics beneficial to controlled substance programs.

Titan's development products include a treatment for Parkinson's Disease (ropinirole) and hypothyroidism (T3). The company is also working on a variety of other implants both in-house and with partners.

SUMMARY DATA

52-Week High	**$4.45**
52-Week Low	**$1.12**
One-Year Return (%)	**-65.1**
Beta	**1.68**
Average Daily Volume (sh)	**181,582**
Shares Outstanding (mil)	**21.2**
Market Capitalization ($mil)	**$30.7**
Short Interest Ratio (days)	**4.06**
Institutional Ownership (%)	**9.0**
Insider Ownership (%)	**13.9**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.0**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**6.0**
P/E using 2016 Estimate	**6.0**
P/E using 2017 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Average**
Type of Stock	**Small-Growth**
Industry	**Med-Biomed/Gene**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2016	$0.0 A	$15.0 A	$0.0 A	$0.0 A	$15.1 A
2017	$0.0 A	$0.1 A	$0.0 A	$0.4 E	$0.6 E
2018					$1.5 E
2019					$9.5 E

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2016	-$0.09 A	$0.55 A	-$0.12 A	-$0.11 A	$0.24*A
2017	-$0.14 A	-$0.16 A	-$0.20 A	-$0.18 E	-$0.68 E
2018					-$0.60 E
2019					-$0.27 E

*Quarterly totals do not sum to annual due to mix of diluted and undiluted shares

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WHAT'S NEW

Titan Negotiating with Braeburn for Probuphine

Titan Pharmaceuticals, Inc. (NASDAQ: TTNP) announced on January 22 that it is in discussions with Probuphine license holder Braeburn regarding the disposition of Probuphine. Sales of the implant have been disappointing since the 2Q:16 launch of the product as Braeburn has been working through payor, reimbursement, and Risk Evaluation and Mitigation Strategy (REMS) requirements among other complexities since first sales. Just prior to Titan's announcement, the FDA issued a Complete Response Letter (CRL) for CAM2038, Braeburn's lead development candidate for the treatment of adults with opioid abuse disorder. Due to the shift of Braeburn management's attention toward addressing the CRL, a transfer of the development license from Braeburn may be the most efficient path forward. There are also reports that are unsubstantiated by management suggesting that some or all of Braeburn's sales force has been let go.

As per the agreement between Titan and Braeburn, Braeburn is required to make commercially reasonable efforts to sell Probuphine. More specifically this means that the company must use its skill, effort, expertise and resources to commercialize the drug.[1] Reducing the sales force appears to violate this standard and we believe a likely path forward may be to return the licenses to Titan. A legal fight could ensue regarding the license; however, with scant credibility for developing Probuphine, a better strategy for Braeburn may be to focus on addressing the issues in the recently issued CRL and allow the license to revert back to Titan.

Titan management has not yet had a chance to fully discuss all of the details of Probuphine's current commercialization status with Braeburn nor have they developed a plan yet regarding the path forward following a transfer of the license for the drug. We anticipate that Titan will vigorously negotiate to have the licenses retuned as soon as possible and simultaneously seek a partner with experience in opioid based pharmaceuticals, product reimbursement and the complexities of the addiction medicine commercialization process. The primary issue that must be addressed is the reimbursement structure for the implant. The process to begin Probuphine treatment requires the patient and provider to surmount many hurdles including prior authorization, upfront outlay for the implants and delays in reimbursement from payors. We expect the partner will be selected based on its ability to address this.

We believe that it will take one or two quarters to work through the transition and find a new partner. It is likely that Titan will be able to obtain an upfront payment from another partner if the rights are returned; however, it will likely fall below the $15 million milestone that was provided by Braeburn. Additionally, we do not know the extent of any costs or payments to Braeburn for Titan to regain the licenses. With Titan's limited cash levels, and apparent violation of the contract provisions it will be difficult for Braeburn to make demands.

Braeburn is required to continue support for the patients that are already using Probuphine and we anticipate that there will be a small stream of royalty income continuing from product sales in the interim prior to a new partner taking over.

Model Assumptions

While a change in licensee will disrupt revenues and management attention in the short term, we believe a more experienced and motivated partner may be able to grow Probuphine sales more in line with our original estimates prior to launch. However, there is still much that is not known regarding the outcome of the discussions between Titan and Braeburn.

We maintain our price target assuming that anticipated short-term disruptions for Probuphine will be offset by the adjusted probability of greater sales in the future. As management provides more guidance regarding the outcome of negotiations we will adjust our model accordingly.

[1] https://www.sec.gov/Archives/edgar/data/910267/000114420413061109/v360394_ex10-2.htm

Conclusion

The trajectory for Probuphine has consistently fallen behind our estimates due to a variety of difficulties which have been discussed in our reports. The potential for finding a new partner that can address these issues is a positive; however, there is little detail on how this may eventually be resolved. In a worst case scenario, the transfer of the licenses gets tied up for an extended duration; while in a best case scenario an effective partner provides an upfront payment and is immediately able to effectively build off of the work Braeburn has done to provide a rapid ramp up in sales.

Given the lack of detail available, we maintain our previous estimates as we believe that there are a wide variety of outcomes that until quantified are no better than our previous estimates. We maintain our $6 price target.

PROJECTED FINANCIALS

Titan Pharmaceuticals, Inc. - Income Statement

Titan Pharmaceuticals, Inc.	2016 A	Q1 A	Q2 A	Q3 A	Q4 E	2017 E	2018 E	2019 E
Probuphine Royalty	**$0.1**	**$0.0**	**$0.1**	**$0.0**	**$0.4**	**$0.6**	**$1.5**	**$3.9**
YOY Growth	-	-	*1825.0%*	*53.8%*	*1042.9%*	*756.9%*	*163.9%*	*162.5%*
Probuphine Molteni	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$5.6**
YOY Growth								
Licensing & Grant Revenue	**$15.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
Total Revenues	**$15.1**	**$0.0**	**$0.1**	**$0.0**	**$0.4**	**$0.6**	**$1.5**	**$9.5**
YOY Growth	*801.6%*	-	*-99.5%*	*53.8%*	*1042.9%*	*-96.3%*	*163.9%*	*543.2%*
R&D	$6.1	$2.1	$2.5	$2.7	$2.4	$9.7	$8.5	$9.0
G&A	$4.6	$1.4	$1.2	$1.4	$1.4	$5.3	$6.5	$6.8
Operating Income	$4.3	($3.4)	($3.6)	($4.1)	($3.4)	($14.5)	($13.5)	($6.3)
Operating Margin	*28.8%*	-	*-4702.6%*	*-10175.0%*	*-850.0%*	*-2608.3%*	*-920.4%*	*-67.1%*
Total Other Income	$0.8	$0.4	$0.2	($0.1)	$0.9	$0.0	$0.0	$0.0
Pre-Tax Income	$5.1	($3.0)	($3.5)	($4.2)	($3.9)	($14.5)	($13.5)	($6.3)
Taxes & Other	$0	$0	$0	$0	$0	$0	$0	$0
Tax Rate	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
Net Income	$5.1	($3.0)	($3.5)	($4.2)	($3.9)	($14.5)	($13.5)	($6.3)
Net Margin	-	-	-	-	-	-	-	-
Reported EPS	**$0.24**	**($0.14)**	**($0.16)**	**($0.20)**	**($0.18)**	**($0.68)**	**($0.60)**	**($0.27)**
YOY Growth	*-142.5%*	*55.4%*	*-129.9%*	*59.9%*	*66.8%*	*-384.5%*	*-11.3%*	*-55.3%*
Weight Ave. Shares Out	21.5	21.4	21.2	21.2	21.6	21.3	22.4	23.5

Source: Company Filing // Zacks Investment Research, Inc. Estimates

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