Zacks Small-Cap Research

January 27, 2012
Jason Napodano, CFA
312-265-9421
jnapodano@zacks.com

scr.zacks.com
111 North Canal Street, Chicago, IL 60606

Titan Pharmaceuticals, Inc. (TTNP-OTC)

TTNP: Staying Optimistic On Titan. Expected -811 Retreatment Data Shortly…

Current Recommendation	**Outperform**
Prior Recommendation	N/A
Date of Last Change	06/01/2011
Current Price (01/27/12)	$1.05
Target Price	**$3.00**

UPDATE

Titan's stock has come under heavy selling pressure in the past few months, despite what we see as positive fundamentals and an opportunity to partner post-phase 3 Probuphine later this year.

We are expecting the U.S. NDA filing in the second quarter 2012. We expect management to seek Priority Review, which could put the PDUFA action decision by the U.S. FDA later in 2012 or in early 2013.

We remain optimistic on the story and see the shares as meaningfully under-valued at today's price. Our target is $3 based on our DCF model.

SUMMARY DATA

52-Week High	**$2.16**
52-Week Low	**$1.07**
One-Year Return (%)	**-29.14**
Beta	**10.13**
Average Daily Volume (sh)	**72,064**
Shares Outstanding (mil)	**59**
Market Capitalization ($mil)	**$64**
Short Interest Ratio (days)	**0.25**
Institutional Ownership (%)	**1**
Insider Ownership (%)	**15**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2011 Estimate	**N/A**
P/E using 2012 Estimate	**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)
2010	2.4 A	1.3 A	3.6 A	2.7 A	10.1 A
2011	0.9 A	0.7 A	1.0 A	0.1 E	2.8 E
2012					20.0 E
2013					25.9 E

Earnings per Share
(EPS is operating earnings before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2010	-$0.01 A	-$0.03 A	-$0.01 A	-$0.05 E	-$0.09 E
2011	-$0.08 A	-$0.12 A	-$0.01 A	-$0.06 E	-$0.27 E
2012					$0.11 E
2013					$0.14 E

Zacks Projected EPS Growth Rate - Next 4 Years % **N/A**

© Copyright 2012, Zacks Investment Research. All Rights Reserved.

WHAT'S NEW

Stock Down, But Not Out

Titan's stock has come under heavy selling pressure in the past few months, despite what we see as positive fundamentals and an opportunity to partner Probuphine, a post-phase 3 asset, later this year. We initiated coverage on Titan Pharmaceuticals in June 2011 at $2.05 per share. Since that time, management has presented positive data from the second phase 3 trial, PRO-806, which confirms the previous positive data from PRO-805. We discuss data from both these trials in our report below.

Management has also met with the U.S. FDA in October 2011 to discuss plans for the new drug application (NDA). At that meeting, the FDA asked Titan for additional information relating to the manufacturing and non-clinical data on Probuphine. We believe these questions centered on the full characterization of the product and its components (buprenorphine and the polymer matrix). The FDA told Titan that no additional clinical efficacy or safety studies were necessary for the NDA submission, which will be via the 505(b)(2) pathway. To our surprised, the agency even provided Titan with guidance on what would be necessary to submit the application requesting a Priority Review. The FDA grants a Priority Review for products believed to address unmet medical needs. The designation shortens the average amount of time from completed application until approval decision from 10 months to 6 months as defined under the Prescription Drug User Fee Act (PDUFA).

Titan is currently in the processes of providing the FDA with this additional information, including the CMC package and manufacturing scale-up. We remind investors that the manufacturing for Probuphine will take place at a cGMP contract manufacturer, DPT Labs, in San Antonio, TX.

In November 2011, Titan also entered into an agreement with Deerfield Management whereby Titan will sell the vast majority of its remaining royalty stream on Fanapt in exchange for $5 million in cash and $10 million in debt forgiveness from the previous Deerfield transaction from March 2011. We have updated our financial model following this transaction, and forecast that Titan exited 2011 with $4.8 million in cash. We project this is enough cash to fund operations to the middle of 2012. By this time, the NDA should be under review. Our best guess is that management will be in position to file the NDA in the second quarter 2012.

The goal is to find a commercialization partner on Probuphine to generate non-dilutive cash. We note management continues to work with Woodside Capital Partners and Keelin Reeds Partners in its search for a commercialization partner on Probuphine. Woodside is focused on identifying potential partners and introducing them to the Probuphine story. Keelin Reeds is focused on the analytics and valuation of the asset. If management cannot get a deal done before the end of the second quarter 2012, we would expect a dilutive offering enough to bridge fund operations to the PDUFA data.

The only additional data we are waiting for is the PRO-811 follow-up (retreatment) study from PRO-806. On the third quarter conference call, held in November 2011, management noted that approximately 80% of the patients from PRO-806 elected to participate in PRO-811. We think this is clearly a good sign. Patients and physicians are comfortable with the product. More importantly, they like it. Probuphine provides added advantages in compliance, dosing, convenience, and no risk of diversion or misuse. We also believe Probuphine helps break the addictive habit of taking a daily pill. Once the product is implanted, both the patient and physician know the drug is always in, and always working. We are expecting data from the PRO-811 retreatment study in early February 2012.

…If You're Keeping Score…

Our 'Outperform' recommendation at $2.05 per share in June 2011 hasn't worked out. If you're keeping score, that's down nearly 50%. Quiet perplexing considering positive phase 3 data from PRO-806, a positive meeting with the U.S. FDA, potential opportunity for Priority Review, positive financial management with the reworked Deerfield agreement, encouraging sign that management is serious about finding a partner by hiring two investment banks to help in the search, and positive expected data from PRO-811 coming very soon.

Management is perplexed on the stock price as well. So much so that in late December 2011, a shareholder rights plans ("poison pill") was put into place to protect from an unsolicited low bid. Management thinks the stock is far under-valued down here and we agree.

…Time To Partner…

Now that Titan has a clear path toward the NDA filing, and potentially an application that the U.S. FDA could consider a Priority Review, the company is pursuing a commercialization partnership. Approval is the ultimate value driver, but we believe that two positive phase 3 trials and a NDA potentially under Priority Review by the end of the second quarter 2012 should provide enough of a road-map with a potential partner to sign a deal in 2012. We think Probuphine, with potential peak sales between $300 and $350 million, could fetch as much as $20 million upfront, with another $20 million for approval, along with a tiered royalty that pays Titan roughly 20% on U.S. sales.

We think there is significant demand for a product like Probuphine. We note that the phase 3 PRO-806 trial enrolled four months ahead of schedule. Over 500,000 patients are prescribed some formulation of Suboxone yearly. Reckitt Benckiser (RB) only actively promotes the film version. We estimate that is nearly 50% of the market. The transition from oral Suboxone to the film has been success for RB. We think Titan and its partner will find success converting the remaining 50% of the oral Suboxone prescribers, or even a good percent of the film market, over to the six-month implant. To achieve our peak sales forecast of $300 to $350 million, our financial model assumes only 10% market share (at $2,500 per implant). We think investors are under-estimating the size of the market. There are over 1.2 million patients seeking treatment for opioid addiction in the U.S. alone.

As noted above, management continues to work with Woodside Capital Partners and Keelin Reeds Partners in its search for a commercialization partner on Probuphine. We recently met with management face-to-face in January 2012. They report being engaged with several potential partners that are doing detailed due diligence.

Stock Looks Under-Valued

We see Titan shares as meaningfully under-valued today. Our scenario for Probuphine assumes a new drug application (NDA) during the second quarter of 2012, approval in late 2012, with a launch in early 2013. We expect a U.S. deal around the time of the NDA filing, which should bring upfront cash in the area of $20 million, a similar approval milestone in late 2012, backend milestone totaling $100 million, and a ~20% royalty on sales.

Under this scenario, we see the net present value (NPV) of Titan's cash from a deal, risk-adjusted backend milestones, and royalties on sales worth $200 million, or around $3.00 per share. We are using an aggressive 18% discount rate for these cash flows. This is similar to the company's cost of capital based on recent financings.

INVESTMENT THESIS

Second Phase 3 On Probuphine Hits!

In July 2011, Titan Pharma announced positive results from its phase 3 trial, PRO-806, evaluating Probuphine in treating patients with opioid dependence. PRO-806 was the second, confirmatory, phase 3 program evaluating Probuphine vs. placebo for safety and efficacy. The phase 3 clinical trial was a randomized, placebo and active-controlled, multi-center study conducted at 20 sites in the U.S. that treated 287 patients, aged 18 to 60 years across three dosing arms: Probuphine (114 patients), the approved and widely-used sublingual formulation of buprenorphine, Suboxone, (119 patients) and placebo implants (54 patients). Patients were treated for up to 24 weeks and the Probuphine and placebo dosing arms were double-blinded, while the Suboxone arm was open-label.

The trial had two primary analyses:

1) Cumulative Distribution Function of the percentages of opioid-negative urines (CDF-ONU) over the 24-week treatment period ➔ Results were statistical significance at $p<0.0001$ vs. placebo, and were consistent with the previously reported phase 3 data (from PRO-805), and published in JAMA, October 2010. In fact, in August 2011, management provided some additional color on the CDF-ONU endpoint, breaking down the 24-week period into two sections, weeks 1-16 and weeks 17-24. The statistical significance for weeks 1-16 was $p<0.0001$, whereas for weeks 17-24 it was $p=0.0002$.

2) Cumulative Distribution Function of the percentages of opioid-negative urines incorporating patient self-reported opioid use over the 24-week treatment period ➔ Results were statistical significance at $p<0.0001$ vs. placebo.

Probuphine demonstrated statistical and clinical superiority over placebo for the 24-week treatment period in the mean percentages of urine samples negative for illicit opioids, 36% vs. 14% (p<0.0001). Probuphine treatment resulted in significant improvement in clinician-rated global severity of opioid dependence (p=0.0003) and clinician-rated global improvement in opioid dependence (p=0.0002) vs. placebo at the end of the 24-week treatment period.

Probuphine also met a key trial secondary objective by demonstrating non-inferiority to Suboxone (12-16 mg) over the 24-week treatment period. There was no statistically significant difference between Probuphine and Suboxone on the clinician-rated global severity (p=0.7831) and clinician-rated global improvement (p=0.9881). We remind investors that Suboxone is used by over 500,000 patients in the U.S. each year, with annualized sales over $1 billion. Worldwide, Suboxone is a $1.2 billion drug.

Pro-806	Probuphine (n=114)	Suboxone (12-16mg) (n=119)	Placebo (n=54)
Negative Urine Samples	36%	35%	14%
Trial Retention	64%	64%	26%

The trial further demonstrated that Probuphine was well tolerated, with an overall safety profile similar to that seen in previous studies. There were no serious treatment-related adverse events or discontinuations due to drug. We present the most common adverse events below:

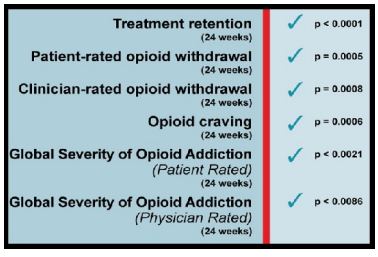
Headache	13.2%	16.0%	9.3%
Up Resp. Tract Infection	8.8%	9.2%	7.4%
Depression	8.8%	2.5%	3.7%
Insomnia	7.9%	13.4%	14.8%
Sore Throat	7.0%	3.4%	1.9%
Nausea	6.1%	6.7%	1.9%
Vomiting	6.1%	4.2%	1.9%

Titan has submitted the data from PRO-806 for publication. We remind investors that Titan is still conducting an open-label, 6-month re-treatment trail, PRO-811, for patients that completed PRO-806. Management noted that over 80% of the eligible patients have elected to enroll in the study. Data is expected in early February 2012.

…Confirms Previous Positive Data With First Phase 3 Trial…

Titan successfully completed the first phase 3 study (Study PRO-805) and presented the data at U.S. and international scientific meetings held during 2008 and 2009. PRO-805 enrolled a total of 163 subjects (2-1 randomization) from 18 clinical sites all in the U.S. participated in the program. In this study, Probuphine showed a clinically and statistically significant difference over placebo in illicit opioid use as measured by urine testing performed three times per week, for the entire duration of the 6 month treatment (p=0.0117). As agreed with the FDA, the statistical analysis was an evaluation of the Cumulative Distribution Function of the percent opioid negative urines (CDF-ONU) analyzed using the Wilcoxon Rank Sum Test conducted twice, specifically, the primary endpoint compared the CDF-ONU of percent negative urines for weeks 1-16 (p=0.0361) and the key secondary endpoint compared the CDF-ONU of the percent negative urine samples for weeks 17-24 (p=0.0004).

We note that approximately 66% of the Probuphine patients completed the study vs. only 31% on the placebo. There is often a mixed bag of reasons why patients discontinue, from lack of response to such a great response that patients opted out of the return visits prior to the trials completion. We think it is important to note, however, that there were no treatment failures in the test group, vs. approximately 31% on the placebo. We believe this evaluation demonstrates the effectiveness of Probuphine compared to placebo for the entire treatment period, as well as emphasizes that patients who are compliant to treatment with Probuphine show even better results (compared to placebo) over time. We remind investors that discontinuation, for any reason, is considered treatment-failure, so patients that opt-out of follow-up visits because they feel like they are doing well enough on their own, are considered to have failed the trial. It's an odd statistical analysis plan, but that's how the trial was set up.

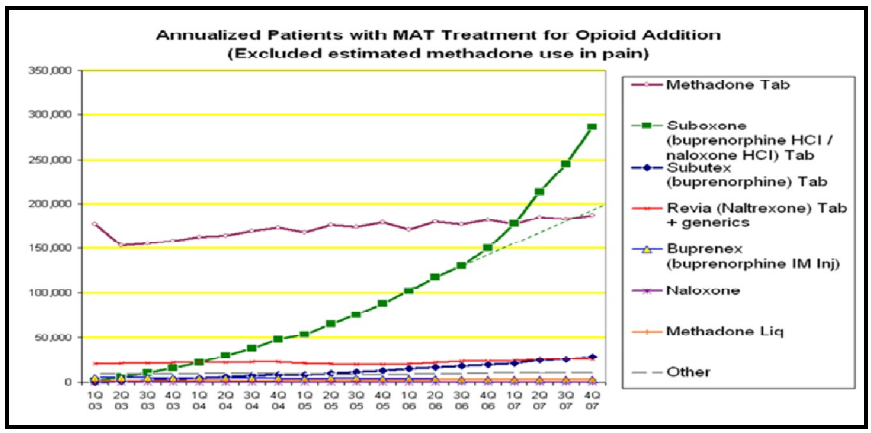


Additional secondary analysis demonstrated things like, comparison of the mean percent negative urines, retention in treatment, patient and clinician opioid withdrawal, opioid craving, and patient and clinician rated improvement and disease severity all showed highly statistically significant differences in favor of Probuphine. We believe this emphasizes the clear effectiveness of the product, and should help drive sales in the real-world setting. Safety parameters including adverse events, vital signs, and clinical laboratory testing demonstrated that Probuphine was generally well tolerated in this patient population.

Following completion of the PRO-805 program, patients were eligible to enroll into a six-month, open-label, multi-center retreatment trial, dubbed PRO-807. This trial was completed in the second quarter 2009. We note that 70% of the eligible test subjects from PRO-805 elected to participate in the open-label safety extension. Approximately 74% of these patients completed the 6 month follow-up. Results show that Probuphine was safe and well-tolerated. During PRO-805 and PRO-807, implant insertion and removal procedures were safe and well-tolerated. Results from these studies have been presented at the American Society of Addiction Medicine (ASAM), the California Society of Addiction Medicine (CSAM), and the American College of Neuropsychopharmacology (ACNP) meeting all in 2009.

…Large Market Opportunity…

Sublingual buprenorphine sales are just over $1 billion in the U.S., with another $250 million outside the U.S.



Probuphine has several key advantages over Suboxone. On Titan's second quarter update call, management hosted two of the lead investigators in the PRO-806 phase 3 study. They were Dr. Walter Ling, M.D., Professor of Psychiatry and Director, Integrated Substance Abuse Programs at the David Geffen School of Medicine at UCLA and Dr. Richard N. Rosenthal, M.D., Chairman of Psychiatry at St. Luke's-Roosevelt Hospital Center, a teaching hospital of Columbia University, past president of the American Academy of Addiction Psychiatry. Both doctors expressed their enthusiasm for Probuphine and why they believe it will see meaningful commercial uptake.

We do not see the implant procedure as greatly limiting uptake for Probuphine. Management full acknowledges that there will be some patients adverse to an implantable drug, but we suspect that it will be only a small percent of the patients seeking treatment. In our view, and the views of Dr. Ling and Dr. Rosenthal, Probuphine improves compliance greatly over the once daily oral medication, as well as eliminates the risk for diversion or misuse.

It eliminates the need for monthly visits to the clinic or the need for the physician to actively monitor the patient to make sure dosing is on schedule. Once Probuphine is implanted, the drug goes to work unencumbered for six months. Dr. Rosenthal called Probuphine, "The right drug with the right delivery system."

Opioid addiction is a major health and social issue, especially in the U.S. An estimated 5+ million people worldwide, nearly 4 million of which are in the U.S., are abusing or addicted to opioids. In the U.S. alone, opioid abuse has increased 140% from 1992 to 2003. It's a $10+ billion burden to the U.S. healthcare market.

The World Health Organization estimates that between 4.6 and 5.2 million individuals in the U.S. and Europe use illicit opioids such as heroin, and more than 2.0 million individuals in the U.S. alone are addicted to prescription opioid medications. It is estimated that more than 1.0 million people in the U.S. and Europe currently receive pharmacological treatment for opioid addiction. A six month prescription of Suboxone costs roughly $2000, with patients averaging duration between 8 and 10 months. At a similar price of $2000 per implant, if Probuphine can capture 10% market share, the drug is a $300+ million opportunity for Titan.

- Estimated 5 million individuals addicted to opioids…
  - 25% seeking treatment (Suboxone does 500,000+ Rx per year)…
    - 10% try Probuphine (six month implant)…
      - Probuphine costs $2500 per implant…
        - 5 million * 25% * 10% * $2500 per implant ~ $300 million

PROJECTED FINANCIALS

Titan Pharmaceuticals, Inc.
Income Statement

	2009 A	2010 E	Q1 A	Q2 A	Q3 A	Q4 E	2011 E	2012 E	2013 E	2014 E
Probuphine Royalty	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$5.9**	**$18.1**
YOY Growth	-	-	-	-	-	-	-	-	-	*206.0%*
Fanapt Sales (at Novartis)	*$0*	*$31*	*$9*	*$7*	*$12*	*$13.0*	*$41.2*	*$70.0*	*$85.0*	*$110.0*
YOY Growth	-	-	*-56.5%*	*900.0%*	*148.2%*	*154.9%*	*31.1%*	*70.1%*	*21.4%*	*29.4%*
Fanapt Royalty	**$0**	**$2.5**	**$0.7**	**$0.6**	**$1.0**	**$0**	**$2.3**	**$0**	**$0**	**$0**
YOY Growth	-	-	*-56.7%*	*994.5%*	*145.7%*	*-100.0%*	*-8.8%*	-	-	-
Licensing & Grant Revenue	**$0.1**	**$7.6**	**$0.2**	**$0.1**	**$0.0**	**$0.1**	**$0.5**	**$20.0**	**$20.0**	**$0**
Total Revenues	**$0.1**	**$10.1**	**$0.9**	**$0.7**	**$1.0**	**$0.1**	**$2.8**	**$20.0**	**$25.9**	**$18.1**
YOY Growth	-	-	-	-	-	-	*-72.7%*	*626.0%*	*29.6%*	*-30.1%*
CoGS	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Product Gross Margin	*100%*	*100.0%*	-	-	-	-	*100.0%*	*#DIV/0!*	*100.0%*	*100.0%*
R&D	$2.5	$12.9	$3.7	$3.9	$2.2	$2.5	$12.4	$8.0	$10.0	$10.0
% R&D	-	*127.4%*	-	-	-	-	*450.6%*	*40.0%*	*38.6%*	*55.2%*
SG&A	$3.4	$3.3	$0.8	$0.9	$0.7	$0.9	$3.4	$3.6	$4.0	$4.0
% SG&A	-	*32.3%*	-	-	-	-	*122.7%*	*18.0%*	*15.4%*	*22.1%*
Operating Income	($5.8)	($6.0)	($3.6)	($4.2)	($2.0)	($3.3)	($13.0)	$8.4	$11.9	$4.1
Operating Margin	*0%*	*0.0%*	-	-	-	-	*-473.3%*	*42.0%*	*46.0%*	*22.7%*
Total Other Income	($0.1)	($0.8)	($0.9)	($2.8)	$1.2	($0.4)	($3.0)	($1.5)	($1.0)	$1.0
Pre-Tax Income	($5.9)	($6.8)	($4.5)	($7.0)	($0.8)	($3.7)	($16.0)	$6.9	$10.9	$5.1
Taxes & Other	$0	($1.2)	$0	$0	$0	$0	$0	$0	$1.6	$1.5
Tax Rate	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*5%*	*15%*	*30%*
Net Income	($5.9)	($5.6)	($4.5)	($7.0)	($0.8)	($3.7)	($16.0)	$6.9	$9.3	$3.6
Net Margin	*0%*	*0.0%*	-	-	-	-	*-580.9%*	*34.5%*	*35.8%*	*19.7%*
Reported EPS	**($0.10)**	**($0.09)**	**($0.08)**	**($0.12)**	**($0.01)**	**($0.06)**	**($0.27)**	**$0.11**	**$0.14**	**$0.05**
YOY Growth	-	*-6.2%*	-	-	-	-	*185.7%*	*-140.9%*	*31.3%*	*-62.6%*
Weight Ave. Shares Out	58.5	59.2	59.2	59.3	59.4	59.5	59.4	62.5	64.0	66.0

Source: Zacks Small-Cap Research, Inc. *Jason Napodano, CFA*

© Copyright 2012, Zacks Investment Research. All Rights Reserved.

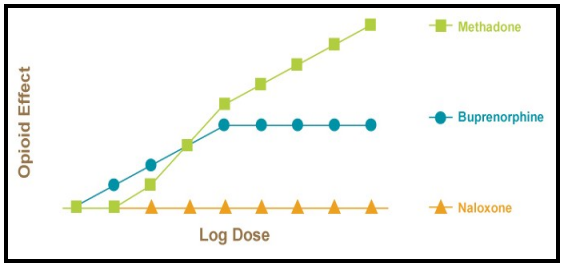
APPENDIX

…Background on buprenorphine…

Buprenorphine is a synthetic derivative of opium, chemically similar to both morphine and codeine, but has stimulatory rather than depressant effects. Buprenorphine is 25-50X more potent than morphine and is sometimes used recreationally by insufflations (crushing and inhaling the powder).

Buprenorphine is commonly used to treat addiction to heroin, and has proven superior in its efficacy and convenience to methadone. Withdrawal from buprenorphine after short-term use is generally far milder than other potent opioids, but can have a longer duration of abuse. The drug has a pharmacologic ceiling effect, which provides an increased safety margin when compared to methadone. As a result, the drug is now generally recognized as the gold standard for the treatment of opioid addiction. There are an estimated 3.7 million people addicted to opioids in the U.S., over 80% of which are prescription drugs.

	U.S.	EU
All Opioid Addiction	**3.7M**	**1.8M**
Heroin	0.6M	1.6M
Prescription Drugs	3.1M	0.2M



The product was first marketed in 1980 by British firm, Reckitt & Colman as an analgesic, available as Temgesic 0.2 mg sublingual tablets, and as Buprenex in a 0.3 mg/ml injectable formulation. In October 2002, the U.S. FDA approved Subutex as high-dose (2 mg & 8 mg) sublingual pill preparations indicated for detoxification and long-term replacement therapy in opioid dependency. As a result, the drug is now predominantly used for this purpose. Approval in France first came in 1997, and has since followed to the majority of the EU. Buprenorphine is a Schedule III controlled substance under the United Nations' Convention on Psychotropic Substances.

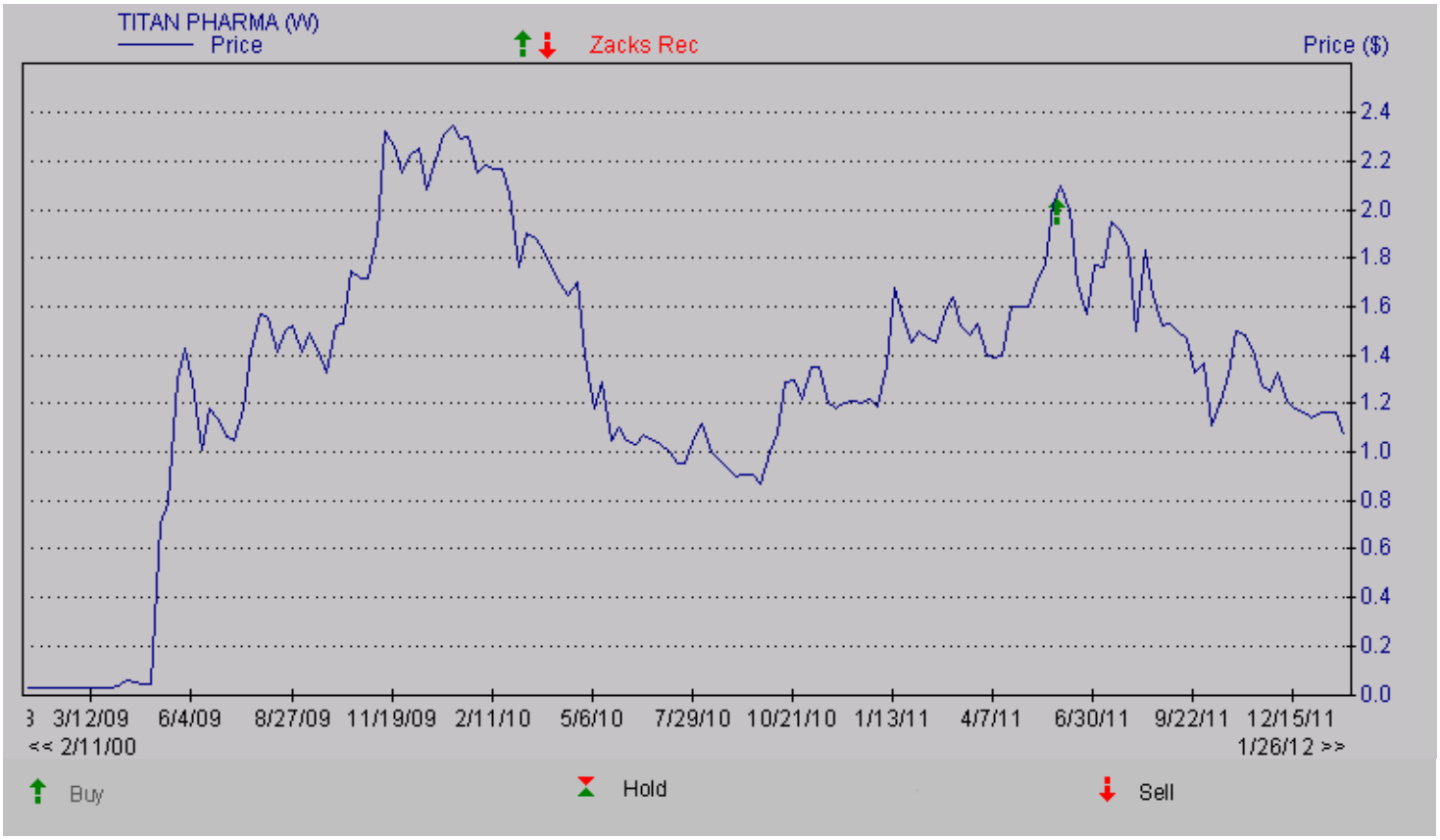
In October 2002, the U.S. FDA also approved Suboxone, a novel formulation of buprenorphine and naloxone, to increase the deterrence of abuse through intravenous injection. Naloxone is an opioid antagonist that blocks the high or euphoric effects for opioids such as heroine that leads to withdrawal symptoms. In October 2009, the FDA approved a generic preparation of 2 mg and 8 mg sublingual dosages of buprenorphine. Demand was so high that pharmacies began to run out of supply and Roxane Labs, the first generic filer, was unable to meet demand. In April 2010, the FDA approved a second supplier in Teva Pharmaceutical. Reckitt is now marketing a Suboxone Film, approved in August 2010, to counter generic the pending availability to the sublingual tablet.

In 2001, Grunenthal introduced Transtec (buprenorphine transdermal patch) in Europe for the treatment of chronic pain. The product is available as a 35, 52.5 and 70 ug (micrograms) per hour transdermal patches that deliver the dose over ninety-six hours. It is also used for the treatment of moderate to severe cancer pain and severe non-cancer pain not responding to non-opioids. Purdue Pharma markets Butrans in the U.S., a 5, 10, and 20 ug, 7-day transdermal patch for the management of moderate to severe chronic pain in patients requiring a continuous, around-the-clock opioid analgesic for an extended period of time. A similar transdermal product is marketed by collaboration between Mundipharma and Grunenthal in Australia under the name Norspan. We note that buprenorphine is not administered orally due to very high first-pass metabolism. The transdermal patch products can typically be worn for 3 to 7 days.

BioDelivery Sciences is currently in phase 3 trials with BEMA buprenorphine. The company's BEMA technology utilizes a small, bioerodible polymer film for application to the mucosal membranes (inner lining of cheek). BEMA films were designed to rapidly deliver a dose of drug across the mucous membranes for time sensitive conditions or to facilitate administration of drugs with poor oral (pill) absorption. BEMA buprenorphine is being designed to eliminate abuse potential by crushing sublingual tablets, a similar concept to Titan's Probuphine. However, BDSI's BEMA product requires daily dosing whereas Probuphine is a six month implant.

© Copyright 2012, Zacks Investment Research. All Rights Reserved.

HISTORICAL RECOMMENDATIONS



DISCLOSURES

The following disclosures relate to relationships between Zacks Investment Research ("ZIR") and Zacks Small-Cap Research ("Zacks SCR") and the issuers covered by the Zacks SCR analysts in the Small-Cap Universe.

ZIR or Zacks SCR Analysts do not hold or trade securities in the issuers which they cover. Each analyst has full discretion on the rating and price target based on their own due diligence. Analysts are paid in part based on the overall profitability of Zacks SCR. Such profitability is derived from a variety of sources and includes payments received from issuers of securities covered by Zacks SCR for non-investment banking services. No part of analyst compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in any report or blog.

ZIR and Zacks SCR do not make a market in any security nor do they act as dealers in securities. Zacks SCR has never received compensation for investment banking services on the small-cap universe. Zacks SCR does not expect received compensation for investment banking services on the small-cap universe. Zacks SCR has received compensation for non-investment banking services on the small-cap universe, and expects to receive additional compensation for non-investment banking services on the small-cap universe, paid by issuers of securities covered by Zacks SCR. Non-investment banking services include investor relations services and software, financial database analysis, advertising services, brokerage services, advisory services, investment research, and investment management.

Additional information is available upon request. Zacks SCR reports are based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Because of individual objectives, the report should not be construed as advice designed to meet the particular investment needs of any investor. Any opinions expressed by Zacks SCR Analysts are subject to change. Reports are not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. Zacks SCR uses the following rating system for the securities it covers. Buy/Outperform: The analyst expects that the subject company will outperform the broader U.S. equity market over the next one to two quarters. Hold/Neutral: The analyst expects that the company will perform in line with the broader U.S. equity market over the next one to two quarters. Sell/Underperform: The analyst expects the company will underperform the broader U.S. Equity market over the next one to two quarters.

The current distribution of Zacks Ratings is as follows on the 1055 companies covered: Buy/Outperform- 16.2%, Hold/Neutral- 76.0%, Sell/Underperform – 6.0%. Data is as of midnight on the business day immediately prior to this publication.