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Onconova Therapeutics, Inc.

ONTX - BUY

November 8, 2013

Biotechnology

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(ONTX) - BUY

Price: Fair Value Esti 52-Week Rang Market Cap (M Shr.O/S-Dilute Average Daily	ge: IM): ed (mm):	\$13.25 \$40.00 \$13.16-\$31.13 \$284 21.4 159,425		
FYE: Dec EPS: Prior EPS: P/E Ratio:	2011A NC 	2012A \$(11.50)A NA		
Quarterly EPS: Q1 Q2 Q3 Q4	: 	 	\$(1.03)E \$(1.05)E \$(0.84)E \$(0.91)E	
FYE: Dec Revenue (M):	2011A 	2012A \$46.0A	2013E \$4.4E	
Quarterly Reve Q1 Q2 Q3 Q4	enue (M): 	 	\$1.1E \$1.1E \$1.1E \$1.1E	



Equity Research **Note**

ONTX: Key Takeaways From ASH Abstracts; Buy on Weakness

INVESTMENT CONCLUSION:

We highlight key points from the ASH abstracts which were released yesterday. Overall, we were pleased with the level of response from rigosertib-treated patients. From the data, we continue to believe that rigosertib is a well-tolerated, highly differentiated small molecule therapy targeting significant market opportunities. The key differentiating factors for this drug are its lack of myelosuppression, its ability to target numerous different cancer types safely with high selectivity and its unique mechanism of action that allows for improved efficacy and reduced toxicity, all important factors in treating MDS patients. We recommend shares on any weakness and ahead of nearing catalysts and consider ONTX a compelling investment based on a burgeoning pipeline, near-term milestones, strong management team and compelling valuation. Thus, we reiterate our \$40 fair value estimate, which is based on a DCF analysis of cash flows through 2021.

KEY POINTS:

- We highlight the main takeaways from the ASH abstracts. Transfusion independence (TI) data similar to prior datasets. Of 33 patients (3 with del5q) on intermittent dosing treated for at least 8 consecutive weeks, 15 (45%) achieved transfusion independence (TI or no RBC transfusion for at least 8 consecutive weeks) lasting 8 to 53+ weeks (median=17 weeks). Intent-to-treat analysis showed 17/48 (35%) patients achieved TI. Recall that 50% of patients (13 patients out of 26) achieved transfusion independence in an earlier analysis.
- Safety profile improved. Continuous dosing was stopped after 9 patients due to a higher urinary toxicity resulting in 39 patients receiving intermittent dosing. Six out of 48 patients (12%) experienced reversible Grade 3 urinary toxicity (dysuria, hematuria, cystitis, and urinary urgency) while 17/48 (35%) experienced Grade 2 urinary toxicity. Importantly, there were no signs of significant treatment emergent myelosuppression. Dosing was modified to a total daily dose of 840 mg (560 mg am/280 mg afternoon) to improve urinary tolerability. Other measures to manage urinary symptoms include hydration, sodium bicarbonate and dose reduction or interruption. In prior datasets, there were higher rates of Grade 2 and 3 urinary events (56% Grade 2 and 3 hematuria/cystitis/bladder inflammation; 44% Grade 2 and 3 urinary urgency/frequence; 22% Grade 2 and 3 dysuria).
- Effect of erythrocyte stimulating agents (ESAs) unclear from top-line data. Await more detailed results at ASH. We were hoping to gain clarity on the impact of ESAs on transfusion independence. However, that data was not elucidated in the abstracts. We understand that this phenomenon may be addressed at the ASH presentation. We await clarity on what role ESAs play in response rate.
- Genomic methylation signature may help pre-select potential responders. Pre-therapy bone marrow mononuclear cells from 32 patients (including 4 from the prior Phase I study previously reported in ASH 2011) were analyzed. Seven had complete response or CR (TI + increase in Hb >2Gm/dL), 10 had partial response or PR (TI without Hb increase) and 15 had no response or NR. Functional annotation of the hypo and hypermethylated genes demonstrated that the genes most affected by methylation were related to regulation of transcription followed by genes involved in cell-cell adhesion, inflammatory response, apoptosis and proliferation.

Research Analyst Certifications and Important Disclosures are on pages 2 - 3 of this report

IMPORTANT DISCLOSURES

Research Analyst Certification

I, Kimberly Lee, the Primarily Responsible Analyst for this research report, hereby certify that all of the views expressed in this research report accurately reflect my personal views about any and all of the subject securities or issuers. No part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views I expressed in this research report.

Janney Montgomery Scott LLC ("Janney") Equity Research Disclosure Legend

Onconova Therapeutics, Inc. currently is, or during the past 12 months was, a Janney Montgomery Scott LLC client. Janney Montgomery Scott LLC, provided investment banking related services.

Janney Montgomery Scott LLC currently acts as a market-maker in the securities of Onconova Therapeutics, Inc..

Janney Montgomery Scott LLC managed or co-managed a public offering of securities for Onconova Therapeutics, Inc. in the past 12 months.

Janney Montgomery Scott LLC received compensation for investment banking services from Onconova Therapeutics, Inc. in the past 12 months.

Janney Montgomery Scott LLC intends to seek or expects to receive compensation for investment banking services from Onconova Therapeutics, Inc. in the next three months.

The research analyst is compensated based on, in part, Janney Montgomery Scott's profitability, which includes its investment banking revenues.

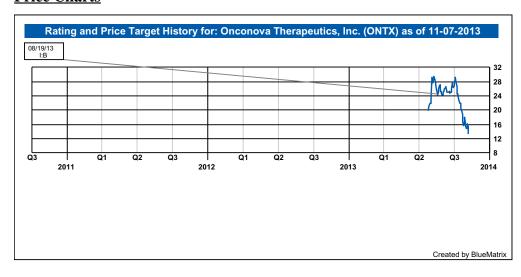
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BUY: Janney expects that the subject company will appreciate in value. Additionally, we expect that the subject company will outperform comparable companies within its sector.

NEUTRAL: Janney believes that the subject company is fairly valued and will perform in line with comparable companies within its sector. Investors may add to current positions on short-term weakness and sell on strength as the valuations or fundamentals become more or less attractive.

SELL: Janney expects that the subject company will likely decline in value and will underperform comparable companies within its sector.

Price Charts



Janney Montgomery Scott Ratings Distribution as of 9/30/13

IB Serv./Past 12 Mos.

Rating	Count	Percent	Count	Percent
BUY [B]	244	51.80	38	15.60
NEUTRAL [N]	221	46.90	21	9.50
SELL [S]	6	1.30	0	0.00

*Percentages of each rating category where Janney has performed Investment Banking services over the past 12 months.

Other Disclosures

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