

Onconova Therapeutics, Inc. (ONTX)

Overweight

Good Cash Conservation and Near-Term Milestones Bode Well for 2014 News

CONCLUSION

Onconova reported 3Q13 financial results and updated the company's recent clinical progress. Quarter-end cash was \$116mn, and management guided to YE13 cash of ~\$98mn, in line with our projections. We currently model \$100mn in milestones from Baxter in both 2014 and 2015, and assuming these milestones are met, Onconova may achieve profitability without further financings, assuming no large increase in R&D or SG&A. The company announced three additional clinical trials initiated in 3Q, and we recently reviewed expected data at ASH (see our November 7 note regarding the abstracts). The major near-term catalysts remain top-line Phase III data for 2nd-line higher-risk MDS (YE13/1Q14) and an interim for the Phase III in pancreatic cancer (PC, December). We believe the market is likely giving Onconova little credit in PC, producing a favorable risk/reward. We reiterate our Overweight rating and \$38 target on Onconova.

- **Large database for rigosertib in MDS.** Onconova has treated more than 1,000 patients in the clinic. The company is running or has recently completed five studies in MDS, ranging from a Phase I/II in combination with Vidaza to determine a maximum tolerated dose (MTD) to the soon-to-read-out Phase III. Onconova will have a comprehensive view of the agent in MDS and we believe this clinical database in addition to a differentiated target profile (specificity for alpha- and beta-PI3K and PLKs) should support its uptake in the clinic, assuming an approval in late 2014 or early 2015.

RISKS TO ACHIEVEMENT OF PRICE TARGET

Principal risks include 1) failure of rigosertib to differentiate itself in clinical trials, 2) delay of rigosertib in reaching the market, 3) increased competition from similar drugs in development, including Celgene's oral Vidaza and Astex Pharmaceuticals' SGI-110.

COMPANY DESCRIPTION

Onconova focuses on cancer and radiation injury therapies

PRICE: US\$13.07

TARGET: US\$38.00

DCF of projected free cash flows for 2015-2026, with a 10% discount rate

Charles C. Duncan, PhD

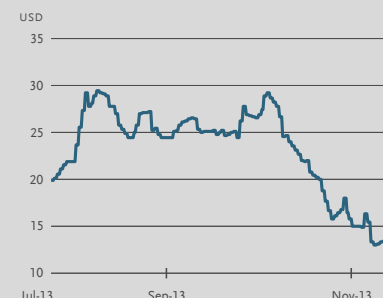
Sr. Research Analyst, Piper Jaffray & Co.
212 284-5025, charles.c.duncan@pjc.com

Roy Buchanan, Ph.D.

Research Analyst, Piper Jaffray & Co.
212 284-9458, roy.d.buchanan@pjc.com

Changes	Previous	Current
Rating	—	Overweight
Price Tgt	—	US\$38.00
FY13E Rev (mil)	US\$3.7	US\$3.8
FY14E Rev (mil)	—	US\$104.0
FY13E EPS	US\$(3.92)	US\$(6.63)
FY14E EPS	US\$1.08	US\$1.30
52-Week High / Low	US\$31.13 / US\$12.03	
Shares Out (mil)	20.8	
Market Cap. (mil)	US\$271.9	
Avg Daily Vol (ooo)	172	
Book Value/Share	US\$0.85	
Net Cash Per Share	US\$3.33	
Debt to Total Capital	0%	
Yield	0.00%	
Fiscal Year End	Dec	

Price Performance - 1 Year



Source: Bloomberg

YEAR	REVENUE (US\$ m)						EARNINGS PER SHARE (US\$)					
	Mar	Jun	Sep	Dec	FY	FY RM	Mar	Jun	Sep	Dec	FY	FY P/E
2012A	—	—	—	—	46.2	5.9x	—	—	—	—	(15.35)	NM
2013E	1.1A	0.6A	1.1A	1.0	3.8	71.5x	(5.69)A	(4.81)A	(1.33)A	(1.02)	(6.63)	NM
2014E	—	—	—	—	104.0	2.6x	—	—	—	—	1.30	10.1x

Piper Jaffray does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decisions. This report should be read in conjunction with important disclosure information, including an attestation under Regulation Analyst certification, found on pages 3 - 4 of this report or at the following site: <http://www.piperjaffray.com/researchdisclosures>.

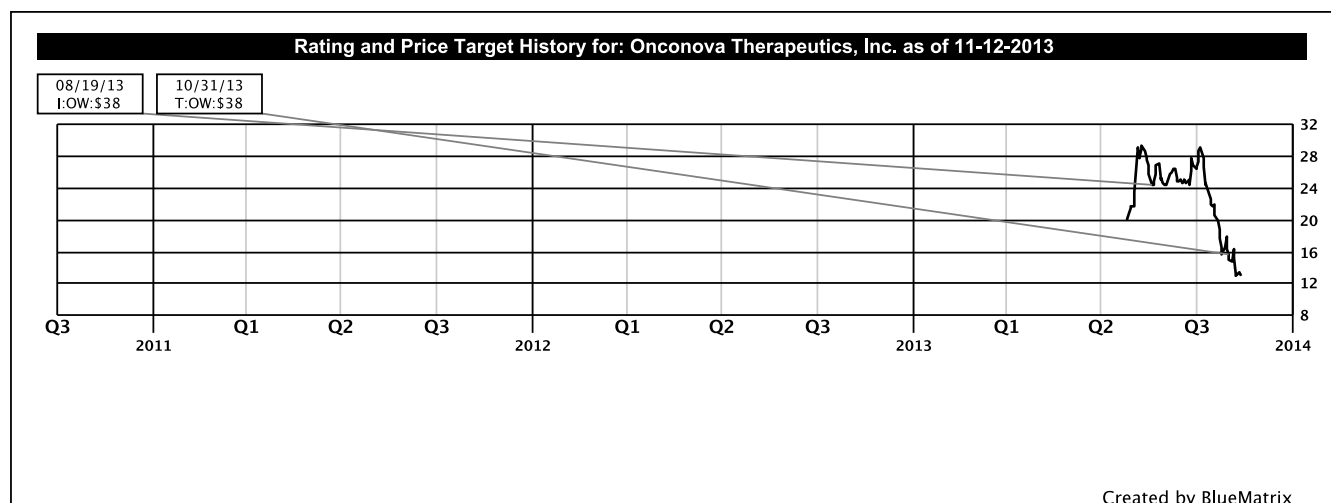
Onconova Earnings Model	2012A	1Q 13A	2Q 13A	3Q 13A	4Q 13E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
(\$ in thousands, except per share amounts)																			
US Rigosertib Sales		0	0	0	0	0	0	21,930	82,400	152,317	228,856	311,675	390,362	452,161	522,121	581,562	632,689	670,246	709,534
Int'l Rigosertib Sales		0	0	0	0	0	0	0	55,587	127,572	187,431	239,444	321,632	369,073	426,819	473,666	515,704	560,140	598,755
Total Rigosertib Sales		0	0	0	0	0	0	21,930	137,987	279,889	416,287	551,119	711,994	821,234	948,939	1,055,228	1,148,393	1,230,386	1,308,289
US Rigosertib Sales		0	0	0	0	0	0	21,930	82,400	152,317	228,856	311,675	390,362	452,161	522,121	581,562	632,689	670,246	709,534
Ex-US Royalty		0	0	0	0	0	0	0	7,782	22,963	37,486	52,678	77,192	95,959	110,973	123,153	134,083	145,636	155,676
License and milestone revenues		0	0	0	0	0	100,000	100,000	50,000	50,000	100,000	0	0	0	0	0	0	0	0
Collaboration R&D revenues		1,116	591	1,116	1,000	3,823	4,000	4,000	4,000	3,000	0	0	0	0	0	0	0	0	0
Total Revenues	46,190	1,116	591	1,116	1,000	3,823	104,000	125,930	144,182	228,280	366,342	364,353	467,553	548,120	633,094	704,715	766,772	815,883	865,210
Costs & Expenses:																			
Cost of Goods Sold	0	0	0	0	0	0	0	2,193	14,008	25,894	37,761	49,868	62,458	67,824	78,318	87,234	94,903	100,537	106,430
R&D	52,762	12,756	10,047	15,293	16,058	54,154	61,852	80,408	92,469	101,716	110,361	115,880	121,673	127,757	134,145	140,852	147,895	155,290	163,054
SG&A	15,707	3,346	3,117	5,927	6,046	18,436	15,170	32,980	46,171	55,406	63,716	71,362	78,499	84,778	89,865	94,358	99,076	104,030	109,232
Total Operating Expenses	68,469	16,102	13,164	21,220	22,103	72,589	77,022	115,580	152,648	183,015	211,839	237,110	262,630	280,360	302,328	322,445	341,875	359,857	378,716
Operating Income	(22,279)	(14,986)	(12,573)	(20,104)	(21,103)	(68,766)	26,978	10,350	(8,466)	45,265	154,503	127,243	204,923	267,760	330,765	382,270	424,897	456,026	486,494
Interest and Other Income (Expense), net	(7,633)	141	11	15	175	342	681	983	1,407	1,317	1,687	2,894	3,834	5,314	7,137	9,361	11,897	14,733	17,800
Interest Income	0	0	101	0	175	276	681	983	1,407	1,317	1,687	2,894	3,834	5,314	7,137	9,361	11,897	14,733	17,800
Interest Expense	(8,608)	0	0	(1)	0	(1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Income (Expense)	975	141	0	16	0	157	0	0	0	0	0	0	0	0	0	0	0	0	0
Pretax Income (Loss)	(29,912)	(14,845)	(12,562)	(20,089)	(20,928)	(68,424)	27,659	11,333	(7,059)	46,581	156,190	130,136	208,757	273,074	337,902	391,631	436,794	470,759	504,294
Income Expense (Benefit)	0	0	0	432	0	0	0	567	(529)	6,987	31,238	32,534	62,627	95,576	118,266	137,071	152,878	164,766	176,503
Tax Rate	0.0%	0.0%	0.0%	-2.2%	0.0%	0.0%	0.0%	5.0%	7.5%	15.0%	20.0%	25.0%	30.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Other (Accr of preferred stock)	(3,953)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Income (Loss) GAAP	(33,865)	(14,845)	(12,562)	(20,521)	(20,928)	(68,424)	27,659	10,766	(6,529)	39,594	124,952	97,602	146,130	177,498	219,636	254,560	283,916	305,993	327,791
Stock option expense	0	600	(1,032)	613	600	781	2,640	2,759	2,955	2,987	3,092	3,189	3,274	3,344	3,678	4,046	4,451	4,896	5,386
Other	2,978	(141)	0	(16)	0	(157)	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Income (Loss) Non-GAAP	(30,887)	(14,386)	(13,594)	(19,924)	(20,328)	(67,800)	30,299	13,525	(3,574)	42,581	128,044	100,791	149,404	177,498	219,636	254,560	283,916	305,993	327,791
Diluted Earnings Per Share Non-GAAP	(\$14.00)	(\$5.52)	(\$5.21)	(\$1.29)	(\$0.99)	(\$6.56)	\$1.43	\$0.61	(\$0.15)	\$1.73	\$4.96	\$3.72	\$5.25	\$5.94	\$7.00	\$7.73	\$8.21	\$8.43	\$8.60
Basic Earnings Per Share Non-GAAP	(\$14.00)	(\$5.52)	(\$5.21)	(\$1.29)	(\$0.99)	(\$6.56)	\$1.43	\$0.61	(\$0.15)	\$1.73	\$4.96	\$3.72	\$5.25	\$5.94	\$7.00	\$7.73	\$8.21	\$8.43	\$8.60
Diluted Earnings Per Share GAAP	(\$15.35)	(\$5.69)	(\$4.81)	(\$1.33)	(\$1.02)	(\$6.63)	\$1.30	\$0.48	(\$0.28)	\$1.61	\$4.84	\$3.60	\$5.14	\$5.94	\$7.00	\$7.73	\$8.21	\$8.43	\$8.60
Basic Earnings Per Share GAAP	(\$15.35)	(\$5.69)	(\$4.81)	(\$1.33)	(\$1.02)	(\$6.63)	\$1.30	\$0.48	(\$0.28)	\$1.61	\$4.84	\$3.60	\$5.14	\$5.94	\$7.00	\$7.73	\$8.21	\$8.43	\$8.60
Diluted Shares Outstanding (th)	2,207	2,607	2,609	15,480	20,614	10,328	21,233	22,294	23,409	24,580	25,808	27,099	28,454	29,877	31,370	32,939	34,586	36,315	38,131
Basic Shares Outstanding (th)	2,207	2,607	2,609	15,480	20,614	10,328	21,233	22,294	23,409	24,580	25,808	27,099	28,454	29,877	31,370	32,939	34,586	36,315	38,131

Proprietary to Piper Jaffray & Co. November 13, 2013

ONTX: Charles Duncan; 212-284-5025

Current disclosure information for this company can be found at <http://www.piperjaffray.com/researchdisclosures>.

IMPORTANT RESEARCH DISCLOSURES



Notes: The boxes on the Rating and Price Target History chart above indicate the date of the Research Note, the rating, and the price target. Each box represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first Note written during the past three years.

Legend:

I: Initiating Coverage
R: Resuming Coverage
T: Transferring Coverage
D: Discontinuing Coverage
S: Suspending Coverage
OW: Overweight
N: Neutral
UW: Underweight
NA: Not Available
UR: Under Review

Distribution of Ratings/IB Services Piper Jaffray				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OW]	338	56.81	72	21.30
HOLD [N]	231	38.82	15	6.49
SELL [UW]	26	4.37	1	3.85

Note: Distribution of Ratings/IB Services shows the number of companies currently in each rating category from which Piper Jaffray and its affiliates received compensation for investment banking services within the past 12 months. FINRA rules require disclosure of which ratings most closely correspond with "buy," "hold," and "sell" recommendations. Piper Jaffray ratings are not the equivalent of buy, hold or sell, but instead represent recommended relative weightings. Nevertheless, Overweight corresponds most closely with buy, Neutral with hold and Underweight with sell. See Stock Rating definitions below.

Analyst Certification — Charles C. Duncan, PhD, Sr. Research Analyst — Roy Buchanan, Ph.D., Research Analyst

The views expressed in this report accurately reflect my personal views about the subject company and the subject security. In addition, no part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this report.

Research Disclosures

Piper Jaffray expects to receive or intends to seek compensation for investment banking services from Onconova Therapeutics, Inc. in the next 3 months.

Piper Jaffray has received compensation for investment banking services from or has had a client relationship with Onconova Therapeutics, Inc. within the past 12 months.

Within the past 12 months Piper Jaffray was a managing underwriter of a public offering of, or dealer manager of a tender offer for, the securities of Onconova Therapeutics, Inc. or the securities of an affiliate.

Within the past 3 years Piper Jaffray participated in a public offering of, or acted as a dealer manager for, Onconova Therapeutics, Inc. securities.

Piper Jaffray usually provides bids and offers for the securities of Onconova Therapeutics, Inc. and will, from time to time, buy and sell Onconova Therapeutics, Inc. securities on a principal basis.

Piper Jaffray research analysts receive compensation that is based, in part, on overall firm revenues, which include investment banking revenues.

Rating Definitions

Stock Ratings: Piper Jaffray ratings are indicators of expected total return (price appreciation plus dividend) within the next 12 months. At times analysts may specify a different investment horizon or may include additional investment time horizons for specific stocks. Stock performance is measured relative to the group of stocks covered by each analyst. Lists of the stocks covered by each are available at www.piperjaffray.com/researchdisclosures. Stock ratings and/or stock coverage may be suspended from time to time in the event that there is no active analyst opinion or analyst coverage, but the opinion or coverage is expected to resume. Research reports and ratings should not be relied upon as individual investment advice. As always, an investor's decision to buy or sell a security must depend on individual circumstances, including existing holdings, time horizons and risk tolerance. Piper Jaffray sales and trading personnel may provide written or oral commentary, trade ideas, or other information about a particular stock to clients or internal trading desks reflecting different opinions than those expressed by the research analyst. In addition, Piper Jaffray technical research products are based on different methodologies and may contradict the opinions contained in fundamental research reports.

- **Overweight (OW):** Anticipated to outperform relative to the median of the group of stocks covered by the analyst.
- **Neutral (N):** Anticipated to perform in line relative to the median of the group of stocks covered by the analyst.
- **Underweight (UW):** Anticipated to underperform relative to the median of the group of stocks covered by the analyst.

Other Important Information

The material regarding the subject company is based on data obtained from sources we deem to be reliable; it is not guaranteed as to accuracy and does not purport to be complete. This report is solely for informational purposes and is not intended to be used as the primary basis of investment decisions. Piper Jaffray has not assessed the suitability of the subject company for any person. Because of individual client requirements, it is not, and it should not be construed as, advice designed to meet the particular investment needs of any investor. This report is not an offer or the solicitation of an offer to sell or buy any security. Unless otherwise noted, the price of a security mentioned in this report is the market closing price as of the end of the prior business day. Piper Jaffray does not maintain a predetermined schedule for publication of research and will not necessarily update this report. Piper Jaffray policy generally prohibits research analysts from sending draft research reports to subject companies; however, it should be presumed that the analyst(s) who authored this report has had discussions with the subject company to ensure factual accuracy prior to publication, and has had assistance from the company in conducting diligence, including visits to company sites and meetings with company management and other representatives.

Notice to customers: This material is not directed to, or intended for distribution to or use by, any person or entity if Piper Jaffray is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to such person or entity. Customers in any of the jurisdictions where Piper Jaffray and its affiliates do business who wish to effect a transaction in the securities discussed in this report should contact their local Piper Jaffray representative. **Europe:** This material is for the use of intended recipients only and only for distribution to professional and institutional investors, i.e. persons who are authorised persons or exempted persons within the meaning of the Financial Services and Markets Act 2000 of the United Kingdom, or persons who have been categorised by Piper Jaffray Ltd. as professional clients under the rules of the Financial Conduct Authority. **United States:** This report is distributed in the United States by Piper Jaffray & Co., member SIPC, FINRA and NYSE, Inc., which accepts responsibility for its contents. The securities described in this report may not have been registered under the U.S. Securities Act of 1933 and, in such case, may not be offered or sold in the United States or to U.S. persons unless they have been so registered, or an exemption from the registration requirements is available.

This report is produced for the use of Piper Jaffray customers and may not be reproduced, re-distributed or passed to any other person or published in whole or in part for any purpose without the prior consent of Piper Jaffray & Co. Additional information is available upon request.

Copyright 2013 Piper Jaffray. All rights reserved.