March 18, 2015

HEALTHCARE/BIOTECHNOLOGY

Stock Rating:

OUTPERFORM

12-18 mo. Price Target	$20.00
LOXO - NASDAQ	$13.99

3-5 Yr. EPS Gr. Rate	NA
52-Wk Range	$16.45-$9.90
Shares Outstanding	15.9M
Float	6.5M
Market Capitalization	$232.7M
Avg. Daily Trading Volume	33,531
Dividend/Div Yield	NA/NM
Book Value	NA
Fiscal Year Ends	Dec
2014E ROE	NA
LT Debt	$0.0M
Preferred	$0.0M
Common Equity	$108M
Convertible Available	No

Trading range since August 1, 2014 IPO.

EPS Diluted	Q1	Q2	Q3	Q4	Year	Mult.
2014E	--	--	(0.68)A	(0.25)	(0.90)	NM
Prior (E)	--	--	*(0.24)*	--	--	*NM*
2015E	--	--	--	--	(1.10)	NM

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Loxo Oncology

LOXO-101 AACR Abstract - So Far, So Good

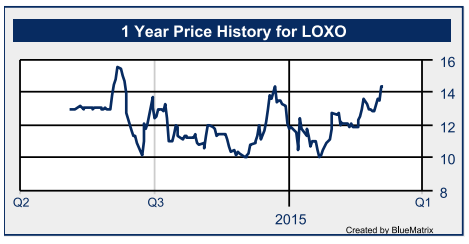
SUMMARY

2015 AACR abstracts were released online this afternoon. Loxo's Phase 1a abstract (# 4529) provides an initial glimpse into the safety and PK for lead asset and pan-TRK inhibitor LOXO-101. Data is available for 8 patients treated in the dose escalation at 50 mg QD and 100 mg QD. It appears that the initial human PK data reflecting 98% inhibition of TRKA/B/C at peak plasma concentrations indicates Loxo's pre-clinical PK modeling is playing out as anticipated, and possibly better (see below). That said, given the "all-comers" dose escalation and focus on safety/PK in the Phase 1a, we continue to see preliminary Phase 1b data (YE15/1H16) specifically enrolling TRK+ pts as the more relevant driver for the stock.

KEY POINTS

- **Early safety looks good.** LOXO-101 has been well-tolerated and the MTD has not been reached. Adverse events include 2 patients developing fatigue deemed drug-related but not serious and 2 patients with syncope (fainting) deemed unrelated but serious. It is unclear if the fatigue patients are distinct from the syncope patients.
- **Human PK data better than modeled?** We took another look at the PK modeling slide Loxo showed on the IPO (Exhibit 1). Modeled peak concentrations for 100mg *BID* appear just shy of TRKA's IC90. However, today's PK data suggest 98% inhibition of TRKA at half that daily dose (100mg *QD*), an interesting positive.
- **Efficacy.** As expected, the abstract does not contain any response rate data or discuss whether any enrolled patients are TRK+. As we have stated previously, while TRK+ pts are not expected in the Phase 1a, any early TRK+ data at AACR (April 18-22), if positive, could drive earlier than expected upside.
- **Phase 1a design.** The trial is enrolling advanced solid tumor patients with PD after >1 prior chemotherapy and ECOG PS 0-1. The dose escalation calls for 6 cohorts (N=3-6) with LOXO-101 administered orally in 28-cycles.
- **Catalyst recap. 1)** LOXO-101 Phase 1a data at the AACR conference (April 18-22), **2)** potential proof-of-concept for LOXO-101 in TRK+ pts (YE15/1H16), **3)** updates on new pre-clinical programs (2H15), **4)** narrow Array collaboration new targets to 4-5 (January 2016), **5)** new targets Phase 1 start (1H16).

Stock Price Performance

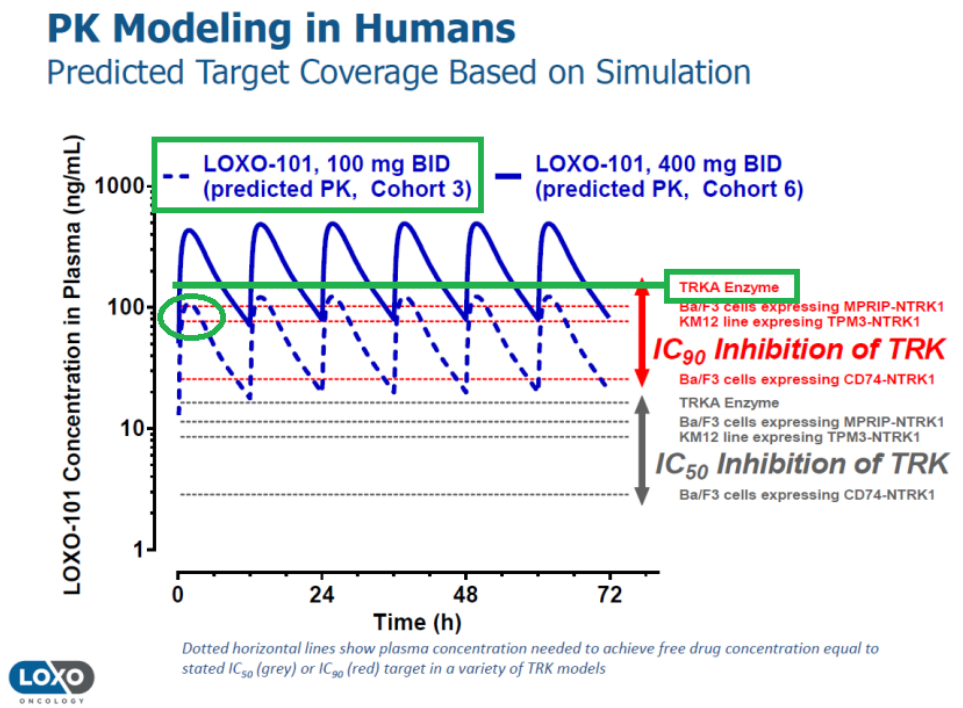


Company Description

Loxo Oncology is developing targeted drugs for the treatment of cancer in genetically defined patient populations. The company's lead product candidate, LOXO-101, is an oral, selective and potent inhibitor of TRK, a family of signaling molecules that appear to play an important role in the development of a range of cancers.

Exhibit 1

LOXO-101 PK modeling



Source: Loxo reports. Green color added by Oppenheimer Research.

Investment Thesis

Loxo is an early-stage biotechnology company executing a business plan for targeted cancer drugs that benefit from **1)** clear precedent for clinical and commercial success, **2)** a rapid development path and **3)** well-defined chemistry, potency and selectivity around the target of interest (TRK). However, Loxo has yet to generate clinical data. Therefore, the investment thesis relies heavily on a belief that Loxo's targeted approach to the treatment of TRK-translocations will mirror a trajectory for successfully commercialized targeted agents, a prime example being Xalkori. We believe this thesis has merit and provides indirect proof-of-concept that lead asset LOXO-101 should generate enriched efficacy in TRK+ tumors.

Price Target Calculation

We value Loxo using a discounted cash flow (DCF) analysis with a weighted average cost of capital (WACC) of 15% and a 0% terminal growth rate post 2032, generating a price target of $20 and yielding a terminal value of ~$68 million. Our valuation framework utilizes a 15% discount rate for pre-commercial stage companies that have not achieved clear Phase 2 proof-of-concept.

Key Risks to Price Target

Key risks to our price target include: **1)** Loxo has not generated any clinical data for LOXO-101, and the investment thesis relies entirely on preclinical results, conviction in a novel mechanism, and precedent from approved drugs targeting fusion oncogenes. **2)** Limited clinical efficacy for LOXO-101 and/or unacceptable toxicity in Phase 1a/1b may indicate further development is unwarranted. **3)** More rapid development and approval of competitive TRK inhibitors (for example, RXDX-101) could pressure LOXO-101's share of the TRK market.

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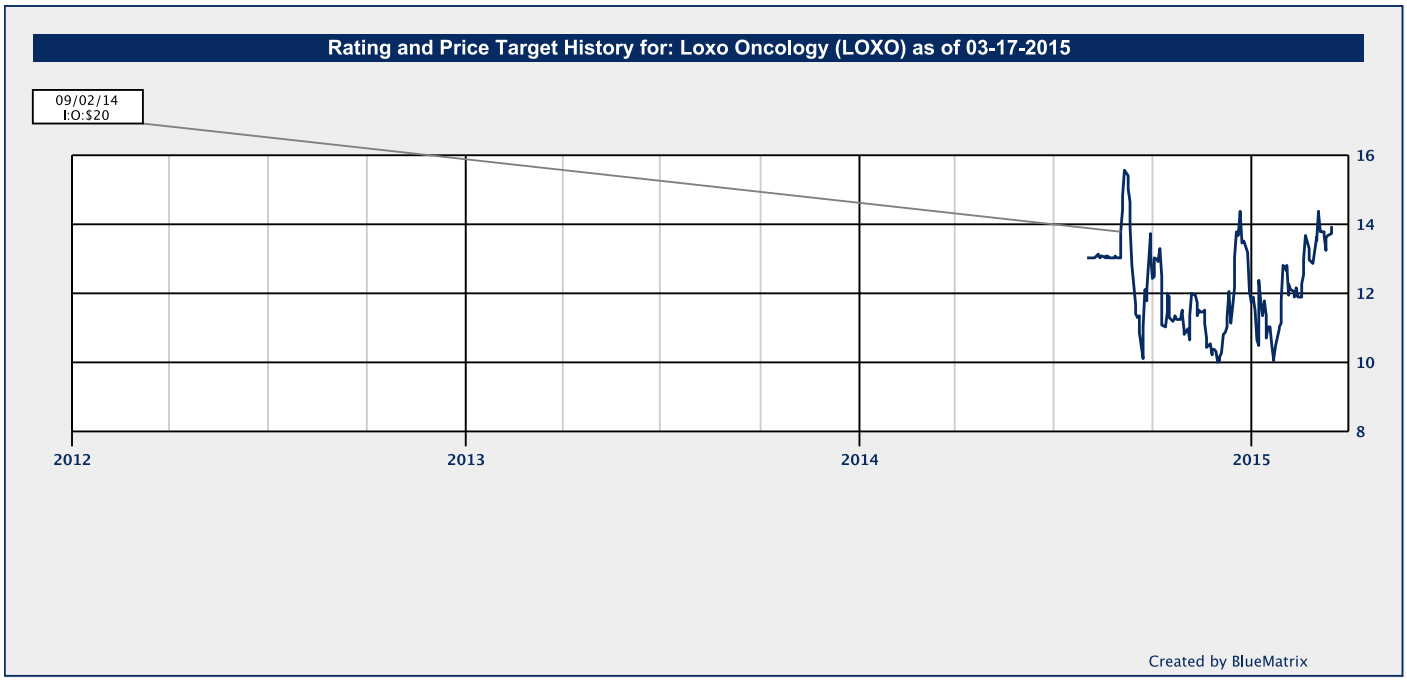

All price targets displayed in the chart above are for a 12- to- 18-month period. Prior to March 30, 2004, Oppenheimer & Co. Inc. used 6-, 12-, 12- to 18-, and 12- to 24-month price targets and ranges. For more information about target price histories, please write to Oppenheimer & Co. Inc., 85 Broad Street, New York, NY 10004, Attention: Equity Research Department, Business Manager.

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			IB Serv/Past 12 Mos.	
Rating	Count	Percent	Count	Percent
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PERFORM [P]	251	43.20	93	37.05
UNDERPERFORM [U]	10	1.72	2	20.00

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