

September 10, 2015

CALA-NASDAQ--Outperform (1) / V

Biotechnology

CALA: Quick Takes From The Wells Fargo Securities Healthcare Conference

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Sector Rating: Biotechnology, Market Weight

****Summary:** With an enterprise value of roughly \$30 million, an experienced management team, a broad CB-839 clinical program with six Phase I(b) combination studies underway/planned and key proof-of-concept data expected by mid-2016, and a unique immuno-oncology (IO) asset in CB-1158, we continue to see CALA as over-sold following a productive Spring/Summer for CB-839 at various medical meetings.

****CALA's CEO Dr. Susan Molineaux** was a participant on a 9/10/15 Hematology/Oncology panel with Infinity (INFI), TG Therapeutics (TGTX), Traccon (TCON), and OncoMed (OMED).

****Updated CB-839 data** are expected at the November/December "Triple" and American Society of Hematology Meetings. While there is the potential for improved clinical efficacy (e.g., cases of objective responses) for the monotherapy expansion cohorts testing the 600mg twice-daily dose across multiple cancers, the key inflection point for CB-839 is the initial Ph. I(b) combination data at the American Society of Clinical Oncology and European Hematology Association Meetings in June 2016. While objective responses as monotherapy would be welcome-and potentially catalyze shares when announced-CALA's strategy has always been to develop CB-839 as part of synergistic combinations, in an attempt to capitalize on cancer cells' mutated growth factor signaling pathways and their reliance/addiction on the glutamine pathway as a source of energy. Thus we view these combination data as critical for assessing CB-839's long-term potential.

****CB-1158 preclinical data** are expected at the "Triple" Meeting in November and this arginase inhibitor represents CALA's initial foray into IO. As part of the 9/9 and 9/10 hematology/oncology panels a number of our participants noted it is early days for IO and they expect it will take a number of years to determine which combinations work best for specific solid tumors/hematologic malignancies. CB-1158 Ph. I initiation is expected during H1 2016, and assuming a positive study, we believe CALA will consider assessing CB-1158 in combination with a programmed death-1 (PD-1)/PD-1 ligand antibody in 2017, similar to INCY and Merck's approach for INCB24360 (indoleamine dioxygenase-1 (IDO1) inhibitor) with Keytruda.

Calithera Biosciences, Inc. (CALA-NASDAQ)

Price as of 9/10/2015: \$6.50

FY 15 EPS: \$-2.02

FY 16 EPS: \$-2.31

Shares Out.: 17.9 MM

Market Cap.: \$116.35 MM

Please see Disclosure Appendix for rating definitions, important disclosures, and required analyst certifications.

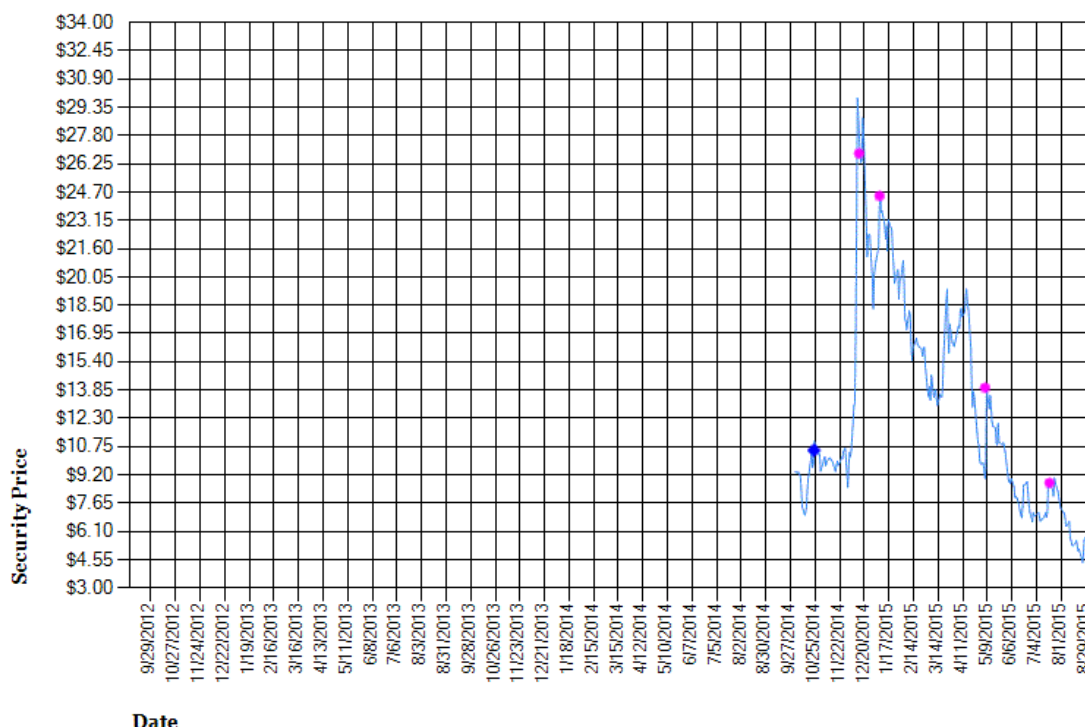
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DISCLOSURE APPENDIX

Required Disclosures

Calithera Biosciences, Inc. (CALA) 3-yr. Price Performance



Date	Published Price (\$)	Rating Code	Val. Rng. Low	Val. Rng. High	Close Price (\$)
10/27/2014		Andrews			
10/27/2014	11.04	1	19.00	20.00	10.40
12/15/2014	29.85	1	50.00	55.00	26.75
1/7/2015	23.85	1	35.00	40.00	24.40
5/8/2015	9.52	1	27.00	30.00	13.87
7/20/2015	8.66	1	19.00	20.00	8.66

Source: Wells Fargo Securities, LLC estimates and Reuters data

Symbol Key

- ▼ Rating Downgrade
- ▲ Rating Upgrade
- ◆ Valuation Range Change
- ◆ Initiation, Resumption, Drop or Suspend
- ◆ Analyst Change
- Split Adjustment

Rating Code Key

- 1 Outperform/Buy
- 2 Market Perform/Hold
- 3 Underperform/Sell
- SR Suspended
- NR Not Rated
- NE No Estimate

Additional Information Available Upon Request

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CALA: Key risks include clinical trial failure, a safety signal for CB-839, and financing risk.

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O = Overweight: Industry expected to outperform the relevant broad market benchmark over the next 12 months.

M = Market Weight: Industry expected to perform in-line with the relevant broad market benchmark over the next 12 months.

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As of: September 10, 2015

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