June 3, 2013

OUTPERFORM

Reason for report:

FLASH NOTE

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HEALTHCARE EQUITY RESEARCH

KALOBIOS PHARMACEUTICALS, INC.

Positive Readthrough from GSK/MorphoSys Anti-GM-CSF Deal

Key Stats:	(Symbol:KBIO)
S&P 600 Health Care Index:	981.46
Price:	$5.66
52 Week High:	$8.25
52 Week Low:	$5.42
Shares Outstanding (mil):	27.5
Market Capitalization (mil):	$155.7

• **Bottom Line**: **This morning, MorphoSys AG (FSE: MOR) announced that it has entered into a global agreement with GSK (MP) to develop and commercialize MOR103--** MorphoSys' proprietary antibody against GM-CSF. **We view the deal as a positive for KBIO since it validates partnering interest for GM-CSF-targeted therapies**. KBIO has to our knowledge one of only three other GM-CSF antibodies in clinical development, and the only one targeting asthma.

• **Under the terms of the agreement, GSK will assume responsibility for all subsequent development** and commercialization of MOR103. As part of the agreement, MorphoSys receives an immediate upfront payment of EUR 22.5MM and up to EUR 423MM in milestones, in addition to tiered, double-digit royalties on net sales. MOR103 is MorphoSys' proprietary antibody against GM-CSF, which concluded a Phase I study in healthy volunteers and a Phase I/II clinical trial in mild-to-moderate rheumatoid arthritis patients.

• **We continue to think KBIO shares are attractive here, ahead of key value inflection points**. KB003 (anti-GM-CSF) Phase II asthma data is expected in 1Q:14. KBIO now has over 50% of patients recruited in its severe asthma Phase II study and reaffirmed the target date of top-line data for 1Q:14. KB003 is proprietary to KBIO and we believe positive Phase II data would make this agent highly attractive to potential partners. The Phase II trial is a 150-patient randomized, double-blind, placebo-controlled, monthly dose study in asthma patients inadequately controlled by corticosteroids.

• **The clinical and commercial potential of KBIO's proprietary Humaneered antibody platform has already been validated by SNY (OP),** who has agreed to develop and commercialize KBIO's mAb KB001-A for the treatment of *Pseudomonas Aeruginosa* induced pneumonia infections in hospitalized, ventilator-assisted patients *(Pa* VAP).

• **In addition to *Pa VAP,* KB001-A is currently enrolled in a 180-patient, Phase II trial examining its safety and efficacy in controlling *Pa* infections in cystic fibrosis (CF) patients**. SNY holds the right to co-develop KB001-A in CF; we anticipate that it will exercise its option after KB001-A's Ph II CF data are read-out in mid-2014

Please refer to pages 2 - 5 for Important Disclosures, Price Charts and Analyst Certification.

Disclosures Appendix

Analyst Certification

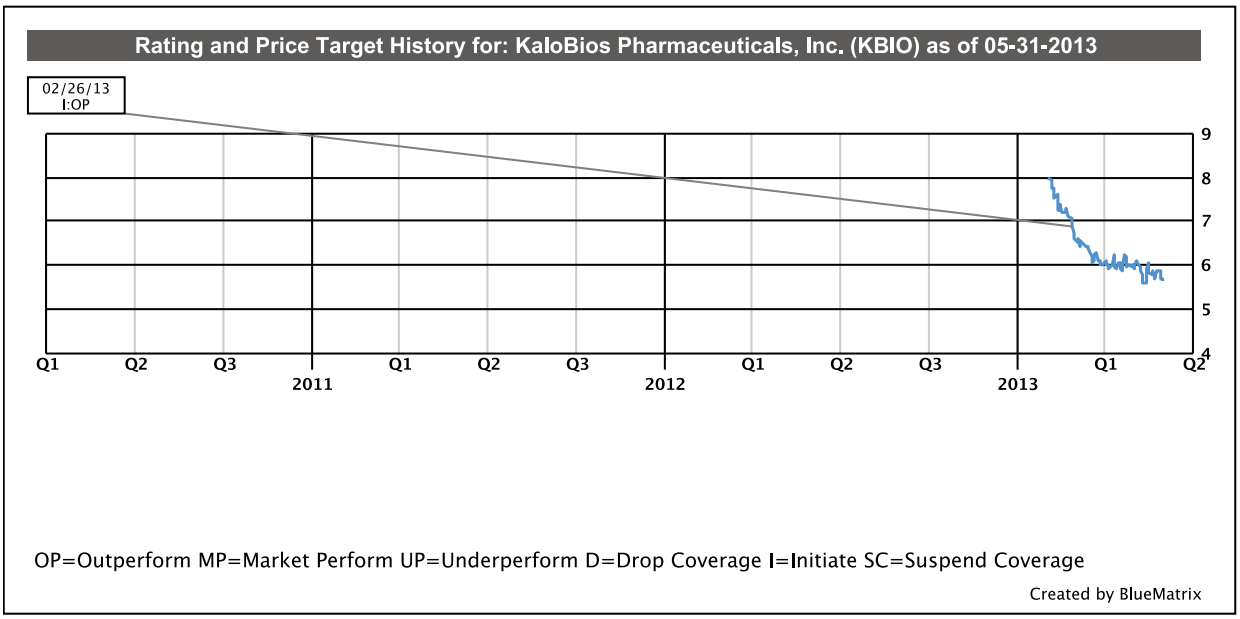
I, Joseph P. Schwartz, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

Valuation

We estimate a risk-adjusted per share value for KBIO of $15 in 12 months. We use a sum-of-the-parts discounted cash flow (DCF) methodology, attributing ~$4 to KB001-A in Pa VAP, ~$4 to KB001-A in Pa CF, ~$5 to KB003 in asthma, and ~$2 to net cash. We use a 12% WACC as our discount rate since the risks involved with drug development and regulatory approval have already been handicapped by probability-weighting our revenues. Over the longer term, we assume a 5% terminal growth rate, which we believe is conservative, given that no generic mAbs have ever been approved and KBIO may expand its mAb pipeline and recognize revenues from therapeutics that are not yet in development. In probability weighting our projected revenue streams from each program, we risk-adjust all sales estimates at 50%, since KB001-A and KB003 have thus far only been examined in Phase I/II trials.

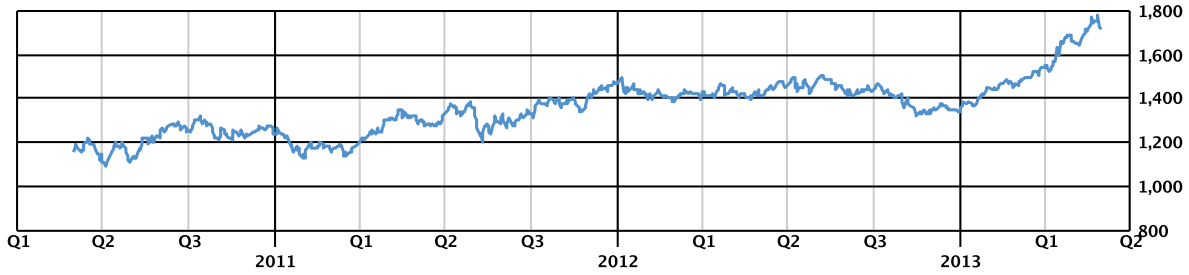
Risks to Valuation

Risks include the potential for disappointing clinical data, regulatory setbacks, and commercial shortfalls. Since KBIO is presently unprofitable and only has products that have completed early-stage clinical trials, any of the possible aforementioned setbacks may impact the stock significantly.



LEERINK SWANN

Rating and Price Target History for: GlaxoSmithKline plc (GSK LN) as of 05-31-2013

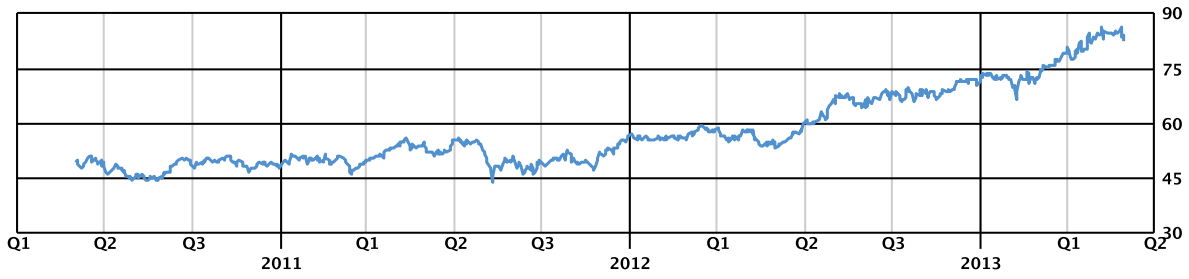


Leerink Swann initiated coverage of GSK LN with a Market Perform rating on Nov. 24, 2009.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

Created by BlueMatrix

Rating and Price Target History for: Sanofi (SAN FP) as of 05-31-2013



Leerink Swann initiated coverage of SAN FP with an Outperform rating on February 26, 2010.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

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Distribution of Ratings/Investment Banking Services (IB) as of 03/31/13				
			IB Serv./Past 12 Mos.	
Rating	Count	Percent	Count	Percent
BUY [OP]	107	61.14	32	29.91
HOLD [MP]	68	38.86	0	0.00
SELL [UP]	0	0.00	0	0.00

Explanation of Ratings

Outperform (Buy): We expect this stock to outperform its benchmark over the next 12 months.

Market Perform (Hold/Neutral): We expect this stock to perform in line with its benchmark over the next 12 months.

Underperform (Sell): We expect this stock to underperform its benchmark over the next 12 months.The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600® Health Care Index for issuers with a market capitalization of less than $2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over $2 billion.

From October 1, 2006 through January 8, 2009, the relevant benchmarks for the above definitions were the Russell 2000® Health Care Index for issuers with a market capitalization of less than $2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over $2 billion.

Definitions of Leerink Swann Ratings prior to October 1, 2006 are shown below:

Outperform (Buy): We expect this stock to outperform its benchmark by more than 10 percentage points over the next 12 months.

Market Perform (Hold/Neutral): We expect this stock to perform within a range of plus or minus 10 percentage points of its benchmark over the next 12 months.

Underperform (Sell): We expect this stock to underperform its benchmark by more than 10 percentage points over the next 12 months.

For the purposes of these definitions, the relevant benchmark were the Russell 2000® Health Care Index for issuers with a market capitalization of less than $2 billion and the S&P 500® Index for issuers with a market capitalization over $2 billion.

Important Disclosures

This information (including, but not limited to, prices, quotes and statistics) has been obtained from sources that we believe reliable, but we do not represent that it is accurate or complete and it should not be relied upon as such. All information is subject to change without notice. This is provided for information purposes only and should not be regarded as an offer to sell or as a solicitation of an offer to buy any product to which this information relates. The Firm, its officers, directors, employees, proprietary accounts and affiliates may have a position, long or short, in the securities referred to in this report, and/or other related securities, and from time to time may increase or decrease the position or express a view that is contrary to that contained in this report. The Firm's salespeople, traders and other professionals may provide oral or written market commentary or trading strategies that are contrary to opinions expressed in this report. The Firm's asset management group and proprietary accounts may make investment decisions that are inconsistent with the opinions expressed in this report. The past performance of securities does not guarantee or predict future performance. Transaction strategies described herein may not be suitable for all investors. Additional information is available upon request by contacting the Publishing Department at One Federal Street, 37th Floor, Boston, MA 02110.

Like all Firm employees, analysts receive compensation that is impacted by, among other factors, overall firm profitability, which includes revenues from, among other business units, the Private Client Division, Institutional Equities, and Investment Banking. Analysts, however, are not compensated for a specific investment banking services transaction.

Leerink Swann Consulting LLC, an affiliate of Leerink Swann LLC, is a provider of evidence-based strategy and consulting to the healthcare industry.

In the past 12 months, the Firm has received compensation for providing investment banking services to KaloBios Pharmaceuticals, Inc.

Leerink Swann LLC makes a market in KaloBios Pharmaceuticals, Inc.

Leerink Swann LLC is willing to sell to, or buy from, clients the common stock of GlaxoSmithKline plc and Sanofi on a principal basis.

In the past 12 months, an affiliate of the Firm, Leerink Swann Consulting LLC, has received compensation for providing non-securities services to: GlaxoSmithKline plc.

Leerink Swann LLC has acted as the manager for a public offering of KaloBios Pharmaceuticals, Inc. in the past 12 months.

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