

Biotechnology

Kite Pharma

Equity Research

January 5, 2015

Price: \$69.75 (01/5/2015) **Price Target: NA**

OUTPERFORM (1)

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Key Data

Symbol NASDAQ: KITE Market Cap (MM) \$2,918.1

Company Update

Kite Gains Targets, Validation In Deal With Amgen

The Cowen Insight

Kite and Amgen announced a partnership to develop a novel set of CAR T-cells directed at targets supplied by Amgen. Kite will receive \$60MM in upfront payments, milestones, and royalties and the right to develop half of the drug candidates. We believe the deal broadens Kite's pipeline while providing validation for its platform and leading IP position. Kite remains a top pick.

The News: Earlier today Kite announced a collaboration with Amgen that combines Kite's CAR T-cell platform with Amgen's proprietary cancer antigen and antibody sequences. Under the collaboration, Kite will receive \$60MM upfront and funding to cover all pre-clinical development. The companies will work together to develop CAR T-cells specific for multiple targets from a prespecified list. Management did not disclose the identity or number of targets on this list. However, it did disclose that all targets and antibody reagents are coming from Amgen, and that targets have already been divided 50:50 as either "Kite products" or "Amgen products". Kite is contributing its CAR T-cell manufacturing expertise and intellectual property exclusively to these targets. Following the filing of an IND, Kite will be responsible for developing its designated products. Successful development by Kite will trigger milestone payments to Amgen of up to \$525MM along with tiered single-digit royalties for each product. Similarly, products designated as Amgen's will be developed at Amgen's expense. Successful development by Amgen will trigger milestone payments to Kite of up to \$525MM along with tiered royalties beginning in the high single-digits and reaching double-digits for each product. A joint steering committee will facilitate the selection of CAR constructs (e.g. 2nd generation vs. 3rd generation), election of substitute targets in the event of target failures, and coordination of clinical development programs across the partnership.

Our Take: Development of CAR T-cells is limited by the ability to (1) identify tumor specific antigens and (2) isolate antibodies specific to these antigens. Kite's ongoing collaboration with the National Cancer Institute has provided access to several targets including CD19 and others that remain outside the Amgen collaboration. Today's deal allows Kite access to a number of additional targets identified by Amgen's decades of research in oncology, as well as antibody constructs that can facilitate rapid creation of CARs. With Kite deploying its leading CAR T-cell manufacturing process and IP, the collaboration should create far more value than the sum of its parts. Importantly, we think Kite's ability to capture >50% of economics of the transaction recognizes the value Kite brings in terms of its significant IP position (and the Eshhar patent in particular) that others in the CAR space will likely also need to access.

What Is Next For KITE? Kite has submitted its corporate IND for KTE-C19's development in multicenter NHL trials, and expects to initiate a potentially pivotal Phase I/II trial in r/r DLBCL during Q1:15. Additional, potentially pivotal trials in MCL (H1:15), CLL (H2:15), and ALL (H2:15) are also planned. Data from these trials could support an initial approval of KTE-C19 as soon as 2016. Phase I/II data from Kite's first

Please see addendum of this report for important disclosures.

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TCR product, targeting NY-ESO in solid tumors including synovial cell carcinoma, is expected to be presented at ASCO 2015.

Our Thesis on KITE Shares: Kite is a leader in the development of engineered T cells. Pivotal trials for Kite's first CD19 CAR will begin imminently. In addition, partnerships with Amgen and the National Cancer Institute should fuel a broad expansion of Kite's pipeline. Successful developments across any and all programs will further validate the engineered T cell approach and fuel significant share price appreciation.

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Valuation Methodology And Risks

Valuation Methodology

Biotechnology:

In calculating our 12-month target price, we employ one or more valuation methodologies, which include a discounted earnings analysis, discounted cash flow analysis, net present value analysis and/or a comparable company analysis. These analyses may or may not require the use of objective measures such as price-to-earnings or price-to-sales multiples as well as subjective measures such as discount rates.

We make investment recommendations on early stage (pre-commercial) biotechnology companies based upon an assessment of their technology, the probability of pipeline success, and the potential market opportunity in the event of success. However, because these companies lack traditional financial metrics, we do not believe there are any good methodologies for assigning a specific target price to such stocks.

Investment Risks

Biotechnology:

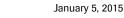
There are multiple risks that are inherent with an investment in the biotechnology sector. Beyond systemic risk, there is also clinical, regulatory, and commercial risk. Additionally, biotechnology companies require significant amounts of capital in order to develop their clinical programs. The capital-raising environment is always changing and there is risk that necessary capital to complete development may not be readily available.

Risks To The Price Target

Kite Pharma is unprofitable, has no approved products, and will likely need to raise additional capital from the public markets prior to turning profitable. There is limited clinical trial experience on lead candidate KTE-C19, and eACT's more broadly. Moreover, KTE-C19 faces a number of clinical, regulatory, and commercial hurdles prior to becoming successful, and projecting any future sales for KTE-C19 is inherently difficult.

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Stocks Mentioned In Important Disclosures

Ticker	Company Name
KITE	Kite Pharma

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Outperform (1): The stock is expected to achieve a total positive return of at least 15% over the next 12 months

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Underperform (3): Stock is expected to achieve a total negative return of at least 10% over the next 12 months

Assumption: The expected total return calculation includes anticipated dividend yield

Cowen and Company Rating System until May 25, 2013

Outperform (1): Stock expected to outperform the S&P 500

Neutral (2): Stock expected to perform in line with the S&P 500

Underperform (3): Stock expected to underperform the S&P 500

Assumptions: Time horizon is 12 months; S&P 500 is flat over forecast period

Cowen Securities, formerly known as Dahlman Rose & Company, Rating System until May 25, 2013

Buy - The fundamentals/valuations of the subject company are improving and the investment return is expected to be 5 to 15 percentage points higher than the general market return

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Hold – The fundamentals/valuations of the subject company are neither improving nor deteriorating and the investment return is expected to be in line with the general market return

Cowen And Company Rating Definitions

Distribution of Ratings/Investment Banking Services (IB) as of 12/31/14

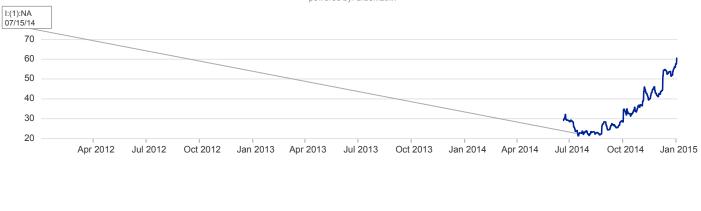
Rating	Count	Ratings Distribution	Count	IB Services/Past 12 Months
Buy (a)	461	60.50%	109	23.64%
Hold (b)	288	37.80%	14	4.86%
Sell (c)	13	1.71%	0	0.00%

(a) Corresponds to "Outperform" rated stocks as defined in Cowen and Company, LLC's rating definitions. (b) Corresponds to "Market Perform" as defined in Cowen and Company, LLC's ratings definitions. (c) Corresponds to "Underperform" as defined in Cowen and Company, LLC's ratings definitions.

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Kite Pharma Rating History as of 01/02/2015

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Legend for Price Chart:

I = Initiation | 1 = Outperform | 2 = Market Perform | 3 = Underperform | UR = Price Target Under Review | T = Terminated Coverage | \$xx = Price Target | NA = Not Available | S=Suspended

Target Price

Closing Price

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