

#### Biotechnology

# Chimerix

# **Equity Research**

February 11, 2014

**Price: \$18.21** (02/11/2014) **Price Target: \$27.00** 

#### **OUTPERFORM (1)**

#### Phil Nadeau. Ph.D.

646.562.1336 phil.nadeau@cowen.com

#### **Key Data**

Symbol NASDAQ: CMRX Market Cap (MM) \$481.1 Company Quick Take

# Highlights From Dinner With Management

# The Cowen Insight

Earlier this week we hosted a dinner with Chimerix management. Chimerix remains confident that brincidofovir's Ph. III SUPPRESS trial will succeed in mid-2015, and CMRX expects other potential opportunities for brincidofovir to begin to crystallize during 2014. We continue to believe that CMRX is undervalued based on brincidofovir's potential in HSCT alone, and remain at Outperform.

# Chimerix Remains Very Confident In The Success of SUPPRESS.

We hosted a dinner with CMRX's CEO Ken Moch, CFO Tim Trost, and a group of investors. Brincidofovir's Phase III SUPPRESS trial as CMV prophylaxis in hematopoietic stem cell transplant (HSCT) remains on track to complete enrollment around the end of 2014, and produce data in mid-2015. Management remains very confident in its success. The primary endpoint of the study is failure to prevent CMV reactivation through week 24. The trial is >87% powered to detect a 50% decrease in CMV reactivation in brincidofovir vs. placebo. In brincidofovir's Phase II '201 trial, 100mg BIW brincidofovir produced a 73% reduction in CMV events. However, there is reason to believe the reduction will be even greater in Phase III. In Phase II, 50 of the 230 subjects with CMV reactivation had it prior to the first day of brincidofovir dosing. In Phase III brincidofovir can be dosed prior to engraftment, as early as day 1, and therefore few patients should have reactivation prior to dosing. In Phase II, none of the 41 patients on 100mg BIW brincidofovir who were CMV negative at baseline developed CMV PCR of >1,000 copies/mL during the dosing period, compared to 15 of the 47 (32%) of patients in the placebo cohort, a 100% reduction (p<0.001). Chimerix noted that the commercial launch of brincidofovir could be as little as 30 months away. Chimerix continues to expect to commercialize brincidofovir itself in the U.S., and hired Chief Commercial Officer Linda Richardson in December. We project www sales of brincidofovir in HSCT of \$45MM in 2016, growing to \$330MM by 2019.

# Opportunities For Brincidofovir In Other Indications Should Begin To Come Into Focus In 2014.

Brincidofovir has shown potent activity against a broad spectrum of dsDNA viruses including those of the herpes, adenovirus, polyoma, papilloma, and pox families. With SUPPRESS up and running, CMRX is spending an increasing amount of time and attention identifying additional opportunities for brincidofovir. Chimerix is in discussions with the FDA and EMA over the design for a Phase III trial in solid organ transplant, and expects to settle on a design during 2014. While the exact structure will depend on the regulatory discussions, CMRX currently expects to conduct the first solid organ transplant viral preventitive study of a design similar to that of the SUPPRESS study, likely in kidney transplant patients. There are approximately 2x as many kidney transplants each year as there are allogeneic stem cell transplants (35K ww vs 18K ww), implying that kidney transplant could be a large incremental market. Chimerix is working to identify other potential indications and populations for brincidofovir development. Chimerix notes that brincidofovir's compassionate **Please see addendum of this report for important disclosures.** 

# Cowen and Company

**Equity Research** 

# Chimerix

February 11, 2014

use program has provided a wealth of information on its use to treat a wide range of viral infections, in a variety of patient populations. Over 230 patients have been treated with brincidofovir under EINDs, including >142 adult and >68 pediatric patients. Brincidofovir has been used to treat life-threatening infections of CMV, AdV, BKV, EBV, JCV, HHV-6, HHV-8, HSV-1, HSV-2, VZV, HPV, moscullum, and vaccinia. Based on the compassionate use/EIND data, Chimerix has confidence in the ability of brincidofovir to manage a wide range of dsDNA infections. Potential new indications and populations will also be partially informed by data to be presented at upcoming medical meetings. In particular, data on immunocompromised pediatric patients and adenovirus viremia in transplant recipients will be presented at the BMT Tandem conference in Dallas later this month. Moreover, secondary endpoints of the SUPPRESS trial should also help demonstrate brincidofovir's broad-spectrum activity. Key endpoints include renal function and hematuria related to BK virus, adenovirus viremia, and healthcare utilization. Our model currently contains no sales outside of HSCT, and therefore opportunities in new indications represent potential upside to our estimates.

2

# 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**

Much of Chimerix valuation rests on the potential of its developmental-stage candidates, most specifically CMX001 and CMX157. Projecting future sales for any product is difficult, and this is particularly the case for candidates that are still in clinical development. Chimerix' stock could be impacted by changes in the regulatory, commercial, or competitive environment for any. Moreover, a number of antiviral candidates have failed during clinical trials, and both CMV and HIV are an extremely competitive spaces. There can be no assurance that any of Chimerix candidates, even if successfully developed, will generate meaningful revenue. Therefore Chimerix product portfolio must be considered high risk.

www.cowen.com



# Stocks Mentioned In Important Disclosures

Ticker	Company Name
CMRX	Chimerix

#### **Analyst Certification**

Each author of this research report hereby certifies that (i) the views expressed in the research report accurately reflect his or her personal views about any and all of the subject securities or issuers, and (ii) no part of his or her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed in this report.

#### **Important Disclosures**

Cowen and Company, LLC and or its affiliates make a market in the stock of Chimerix securities.

Chimerix has been client(s) of Cowen and Company, LLC in the past 12 months.

Chimerix is or was in the past 12 months a client of Cowen and Company, LLC; during the past 12 months, Cowen and Company, LLC provided IB services.

Cowen and Company, LLC and/or its affiliates received in the past 12 months compensation for investment banking services from Chimerix.

Cowen and Company, LLC and/or its affiliates managed or co-managed a public offering of Chimerix within the past twelve months.

Cowen and Company, LLC compensates research analysts for activities and services intended to benefit the firm's investor clients. Individual compensation determinations for research analysts, including the author(s) of this report, are based on a variety of factors, including the overall profitability of the firm and the total revenue derived from all sources, including revenues from investment banking. Cowen and Company, LLC does not compensate research analysts based on specific investment banking transactions.

#### **Disclaimer**

This research is for our clients only. Our research is disseminated primarily electronically and, in some cases, in printed form. Research distributed electronically is available simultaneously to all Cowen and Company, LLC clients. All published research can be obtained on the Firm's client website, https://cowenlibrary.bluematrix.com/client/library.jsp.

Further information on any of the above securities may be obtained from our offices. This report is published solely for information purposes, and is not to be construed as an offer to sell or the solicitation of an offer to buy any security in any state where such an offer or solicitation would be illegal. Other than disclosures relating to Cowen and Company, LLC, the information herein is based on sources we believe to be reliable but is not guaranteed by us and does not purport to be a complete statement or summary of the available data. Any opinions expressed herein are statements of our judgment on this date and are subject to change without notice.

For important disclosures regarding the companies that are the subject of this research report, please contact Compliance Department, Cowen and Company, LLC, 599 Lexington Avenue, 20th Floor, New York, NY 10022. In addition, the same important disclosures, with the exception of the valuation methods and risks, are available on the Firm's disclosure website at https://cowen.bluematrix.com/sellside/Disclosures.action.

Price Targets: Cowen and Company, LLC assigns price targets on all covered companies unless noted otherwise. The price target for an issuer's stock represents the value that the analyst reasonably expects the stock to reach over a performance period of twelve months. The price targets in this report should be considered in the context of all prior published Cowen and Company, LLC research reports (including the disclosures in any such report or on the Firm's disclosure website), which may or may not include price targets, as well as developments relating to the issuer, its industry and the financial markets. For price target valuation methodology and risks associated with the achievement of any given price target, please see the analyst's research report publishing such targets.

Notice to UK Investors: This publication is produced by Cowen and Company, LLC which is regulated in the United States by FINRA. It is to be communicated only to persons of a kind described in Articles 19 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005. It must not be further transmitted to any other person without our consent.

#### Copyright, User Agreement and other general information related to this report

© 2014 Cowen and Company, LLC. Member NYSE, FINRA and SIPC. All rights reserved. This research report is prepared for the exclusive use of Cowen clients and may not be reproduced, displayed, modified, distributed, transmitted or disclosed, in whole or in part, or in any form or manner, to others outside your organization without the express prior written consent of Cowen. Cowen research reports are distributed simultaneously to all clients eligible to receive such research reports. Any unauthorized use or disclosure is prohibited. Receipt and/or review of this research constitutes your agreement not to reproduce, display, modify, distribute, transmit, or disclose to others outside your organization the contents, opinions, conclusion, or information contained in this report (including any investment recommendations, estimates or price targets). All Cowen trademarks displayed in this report are owned by Cowen and may not be used without its prior written consent.

Cowen and Company, LLC. New York (646) 562-1000 Boston (617) 946-3700 San Francisco (415) 646-7200 Chicago (312) 577-2240 Cleveland (440) 331-3531 Atlanta (866) 544-7009 London (affiliate) 44-207-071-7500

#### **COWEN AND COMPANY RATING DEFINITIONS**

Cowen and Company Rating System effective May 25, 2013

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

Market Perform (2): The stock is expected to have a total return that falls between the parameters of an Outperform and Underperform over the next 12 months

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

# Cowen and Company

**Equity Research** 

#### Chimerix

February 11, 2014

Sell – The fundamentals/valuations of the subject company are deteriorating and the investment return is expected to be 5 to 15 percentage points lower than the general market return

**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 12/31/13

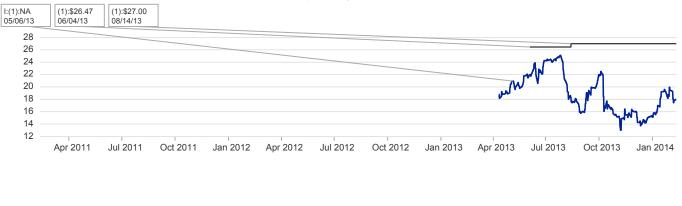
Rating	Count	Ratings Distribution	Count	IB Services/Past 12 Months
Buy (a)	415	59.20%	68	16.39%
Hold (b)	270	38.52%	4	1.48%
Sell (c)	16	2.28%	1	6.25%

(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.

Note: "Buy", "Hold" and "Sell" are not terms that Cowen and Company, LLC uses in its ratings system and should not be construed as investment options. Rather, these ratings terms are used illustratively to comply with FINRA and NYSE regulations.

# Chimerix Rating History as of 02/10/2014

powered by: BlueMatrix



# Legend for Price Chart:

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

Target Price

Closing Price

www.cowen.com



# Points Of Contact

# **Reaching Cowen**

#### **Main U.S. Locations**

#### **New York**

599 Lexington Avenue New York, NY 10022 646.562.1000 800.221.5616

#### Atlanta

3399 Peachtree Road NE Suite 417 Atlanta, GA 30326 866.544.7009

# **Boston**

Two International Place Boston, MA 02110 617.946.3700 800.343.7068

#### Cleveland

20006 Detroit Road Suite 100 Rocky River, OH 44116 440.331.3531

#### San Francisco

555 California Street, 5th Floor San Francisco, CA 94104 415.646.7200 800.858.9316

# Chicago

181 West Madison Street Suite 1925 Chicago, IL 60602 312.577.2240

# **International Locations**

#### **Cowen International Limited**

#### London

1 Snowden Street - 11th Floor London EC2A 2DQ United Kingdom 44.20.7071.7500

# Cowen and Company (Asia) Limited

# **Hong Kong**

Suite 1401 Henley Building No. 5 Queens Road Central Central, Hong Kong 852 3752 2333





