

## **EARNINGS UPDATE**

### **Biotechnology**

August 14, 2013

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Rating:	Outperform
Price Target (in \$):	\$27.00
Expected Return:	47.1%
Dividend:	NA
Enterprise Value (MM):	\$596.6

### **Earnings Per Share**

	2012A	2013E	2014E
Q1	\$0.00	\$(22.58)A	
Q2	\$0.00	\$(0.91)A	
Prev:		\$(0.40)	
Q3	\$0.00	\$(0.35)	
Prev:		\$(0.42)	
Q4	\$0.00	\$(0.37)	
Prev:		\$(0.44)	
FY	<u>\$(1.62)</u>	<u>\$(1.75)</u>	<u>\$(1.45)</u>
Prev:		\$(2.00)	\$(1.55)
P/E	NM	NM	NM

#### Stock Statistics as of 08/13/2013 (in \$)

Price:	\$18.36
52W Range:	\$27.00-\$14.00
Shares Out (MM):	25.9
Market Cap (MM):	\$472.3
Net Debt (MM):	\$12.7

### **Fundamentals**

Revenue (MM) ('12A)	33.7
Revenue (MM) ('13E)	5.1
Revenue (MM) ('14E)	7.5
EV/S ('12)	17.7x
EV/S ('13)	117.0x
EV/S ('14)	79.5x



# CHIMERIX INC (NASDAQ:CMRX)

# Reports Q2:13; Releases Top-Line Data from Study 202

This morning, Chimerix reported Q2:13 financials and released top-line data from CMX001's Study 202. Chimerix will begin dosing in CMX001's pivotal SUPPRESS trial this quarter with data on track for 2015. We continue to think Chimerix is undervalued for the potential of CMX001 as a CMV prophylactic alone.

### Q2:13 Financials.

CMRX reported a Q2 net loss of \$12.5MM (\$0.91/sh) and ended Q2 with \$123MM cash. Our new price target (changed from \$26.47 to \$27) reflects our DCF analysis of CMX001's CMV oppy.

### CMX001 Produces Trends in Study 202; Full Data to Be at ICAAC in Sept.

Study 202 tested 2 doses of CMX001 (BIW and QW) vs placebo as preemptive therapy for adenovirus (AdV) infection in adult and pediatric patients following an allogeneic stem cell transplant. The primary endpoint was a composite of progression to symptomatic AdV disease or an increase of at least 10-fold in the levels of AdV in the blood. The BIW CMX001 dose reduced levels of AdV viremia and showed a trend toward improvement in reducing both progression to AdV disease and all-cause mortality, although the trend did not hit statistical significance. The magnitude of the trend was not reported; Chimerix will release full results from the study at ICAAC in Sept. Nonetheless, it is our impression from management's comments that CMX001 reduced AdV viremia as expected, but that the powering assumptions of the trial (eg 50% of viremic patients would progress to AdV disease) were aggressively set, since this was the 1st study of AdV preemption ever conducted. CMRX will discuss data from Study 202 with the FDA during Q4 to design a pediatric registration strategy for CMX001.

# SUPPRESS Phase III on Track to Dose First Patient During Q3.

The trial will enroll 450 CMV seropositive patients following HSCT and will test CMX001 as a prophylactic against CMV reactivation. The primary endpoint is suppression of CMV reactivation through wk 24. A key secondary will be the activity of CMX001 against other dsDNA viruses, as this will help differentiate CMX001 from the CMV-specific prophylactics in Please see addendum of this report for important disclosures. development. Data expected in 2015.



### **Investment Thesis**

Chimerix is a biopharmaceutical company focused on the discovery and development of novel antivirals. Chimerix has a propriety lipid technology that has been shown to improve the potency of antivirals, and has produced two clinical stage candidates. Lead candidate CMX001 is a phospholipid derivative of GILD's cidofovir that can potently kill a wide range of dsDNA viruses. It has successfully completed a Phase II trial for the prophylaxis against CMV reactivation in hematopoietic stem cell transplant (HSCT) patients. A Phase III trial is expected to begin in Q3:13, supporting a U.S. launch by 2016. Our consultants think CMX001 is safe, well tolerated, and potent, and is consequently likely to succeed in its Phase III SUPPRESS trial. Moreover, they think there is a need for a prophylactic to prevent infection with CMV and other dsDNA viral infections in transplant patients, and therefore expect CMX001 to be widely adopted once available. We project that CMX001 will achieve worldwide sales of \$330MM in HSCT alone by 2019, with Chimerix achieving profitability in 2017. CMX001 is also in development for the prevention of viral infection in solid organ transplant patients, and as a bioterrorism measure to prevent smallpox. Behind CMX001 is CMX157, a phospholipid derivative of GILD's tenofovir that partner Merck is developing for the treatment of HIV. We believe that Chimerix is undervalued based just on CMX001's potential as a CMV prophylactic in HSCT patients, with no contribution from other indications or other pipeline programs. We expect Chimerix' stock to outperform over the next 12 months as CMX001 progresses through development.

### **Upcoming Chimerix Milestones**

Event	Timing
Initiate Phase III SUPPRESS trial of CMX001 as prophylactic against CMV in adult HSCT	Q3:13
Presentation of Phase II Study 202 of CMX001 for preemption of adenoviral disease in HSCT at ICAAC	Sep 10
Meeting with FDA to define pediatric development plan for CMX001	Q4:13
Data from Study 350 of CMX001 in transplant patients with severe, life threatening dsDNA infections	2013
Negotiation with BARDA over continued funding of CMX001's smallpox program	2014

Source: Cowen and Company



# Chimerix Quarterly P&L (\$MM)

	2012A	Q1:13A	Q2:13A	Q3:13E	Q4:13E	2013E
CMX-001		-				-
CMX-157 Royalty		-				-
Collaboration and Licensing Revenue	17.4	-	-	-	-	-
Contract And Grant Revenue	16.3	1.8	0.8	1.3	1.3	5.1
Total Revenue	33.7	1.8	0.8	1.3	1.3	5.1
COGS		-	-	-	-	-
Gross Margin						
R&D	27.8	6.5	6.3	7.5	8.1	28.4
SG&A	8.7	1.8	2.2	2.5	2.5	9.0
Other						
Operating Expenses	36.5	8.3	8.5	10.0	10.6	37.4
Operating Income / (Loss)	(2.8)	(6.5)	(7.7)	(8.8)	(9.4)	(32.3)
Interest Income, net	(0.8)	(0.4)	(0.4)	(0.2)	(0.2)	(1.2)
Other Income	(0.8)	(2.2)	(4.4)	,	, ,	, ,
Pretax net income	(4.4)	(9.1)	(12.5)	(9.0)	(9.6)	(33.5)
Accretion of redeemable convertible preferred stock	(4.4)	(25.5)	(8.6)	( )	` ,	, ,
Taxes	,	- ′	-	-	-	-
Tax Rate		0%	0%	0%	0%	0%
GAAP Net Income	(8.8)	(34.6)	(21.0)	(9.0)	(9.6)	(33.5)
GAAP EPS	\$ (1.62)	\$ (22.58)	\$ (0.91)	\$ (0.35)	\$ (0.37)	\$ (1.75)
Diluted Shares Outstanding (MM)	5.4	1.5	23.1	25.9	26.0	19.1

Source: Cowen and Company

# Chimerix Annual P&L (\$MM)

	2012A	2013E	2014E	2015E	2016E	2017E	2018E	2019E
CMX-001	-	-	-	-	45.0	135.0	240.0	330.0
CMX-157 Royalty	-	-	-	-	-	-	-	-
Collaboration and Licensing Revenue	17.4	-	5.0	15.5	20.0	20.0	20.0	20.0
Contract And Grant Revenue	16.3	5.1	2.5	-	-	-	-	-
Total Revenue	33.7	5.1	7.5	15.5	65.0	155.0	260.0	350.0
COGS	-	-	0.5	1.6	3.6	10.8	19.2	26.4
Gross Margin		0%	0%	0%	0%	0%	0%	0%
R&D	27.8	28.4	34.3	38.0	45.0	55.0	65.0	75.0
SG&A	8.7	9.0	12.0	13.0	28.0	34.0	40.0	45.0
Other	-	-	-	-	-	-	-	-
Operating Expenses	36.5	37.4	46.8	52.6	76.6	99.8	124.2	146.4
Operating Income / (Loss)	(2.8)	(32.3)	(39.3)	(37.1)	(11.6)	55.2	135.8	203.6
Interest Income, net Other Income	(0.8)	(1.2)	0.5	1.0	1.0	2.0	6.0	6.0
Pretax net income	(4.4)	(33.5)	(38.8)	(36.1)	(10.6)	57.2	141.8	209.6
Accretion of redeemable convertible preferred stock								
Taxes	-	-	-	-	-	-	-	-
Tax Rate	-	0%	0%	0%	0%	0%	0%	0%
GAAP Net Income	(8.8)	(33.5)	(38.8)	(36.1)	(10.6)	57.2	141.8	209.6
GAAP EPS	(1.62)	(1.75)	(1.45)	(1.20)	(0.35)	1.65	3.95	5.65
Diluted Shares Outstanding (MM)	5.4	19.1	26.8	30.0	30.5	34.8	35.9	37.1

Source: Cowen and Company



# Chimerix DCF Analysis (\$MM)

Financial Year End	12/31/2012
Valuation Date	8/14/2013
Discount Rate	10.0%
Terminal Growth Rate	-20.0%

#### Chimerix: DCF Valuation

\$MM	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CMX-001	0	0	0	45	135	240	330	347	364	382	401	421	442
Growth (%)	8				20%	10%	5%	5%	5%	5%	5%	5%	5%
CMX-157 Royalty	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth (%)													
Collaboration and Licensing Revenue	0	5	16	20	20	20	20	20	20	20	20	20	20
Growth (%)													
Contract And Grant Revenue	5	3	0	0	0	0	0	0	0	0	0	0	0
Growth (%)													
Total Revenues	5	8	16	65	155	260	350	367	384	402	421	441	462
Growth (%)	800				138%	68%	35%	5%	5%	5%	5%	5%	5%
COGS	0	1	2	4	11	19	26	30	31	33	34	36	37
COGS as a % of sales				8%	8%	8%	8%	9%	9%	9%	8%	8%	8%
R&D	28	34	38	45	55	65	75	55	50	44	46	44	46
R&D as a % of Revenues				69%	35%	25%	21%	15%	13%	11%	11%	10%	10%
SG&A	9	12	13	28	34	40	45	51	54	48	51	53	55
SG&A as a % of Revenues	000			43%	22%	15%	13%	14%	14%	12%	12%	12%	12%
Operating Income	-32	-39	-37	-12	55	136	204	230	249	277	290	308	323
Тах	0	0	0	0	0	0	0	69	75	83	87	93	97
Tax rate	0%	0%	0%	0%	0%	0%	0%	30%	30%	30%	30%	30%	30%
NOL/ Tax Assets Utilized													
Tax rate	80												
Taxes Paid	0	0	0	0	0	0	0	69	75	83	87	93	97
Approx Free Cash Flow	(32)	(39)	(37)	(12)	55	136	204	161	174	194	203	216	226
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Years	0.38	1.38	2.38	3.38	4.38	5.38	6.38	7.38	8.38	9.38	10.37	11.38	12.38
Discount Factor	0.96	0.88	0.80	0.72	0.66	0.60	0.54	0.50	0.45	0.41	0.37	0.34	0.31
NPV of Cash flows	(31)	(34)	(30)	(8)	36	81	111	80	78	79	76	73	70

### Terminal Value Calculation

Final year FCF	0
Perpetual Growth Rate	-20.0%
Terminal Value	0
Discount Factor	0
Present Value of Terminal Value	0
Present Value of Cash Flows	581
Enterprise Value	581
Add: Net cash	115
Market Value	696
Fully Diluted Shares Outstanding	25.9
Value per Fully Diluted Share	\$26.88
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Source: Cowen and Company



# Valuation Methodology & Investment 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.

### Company Specific Risks

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.



# Addendum

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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

**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

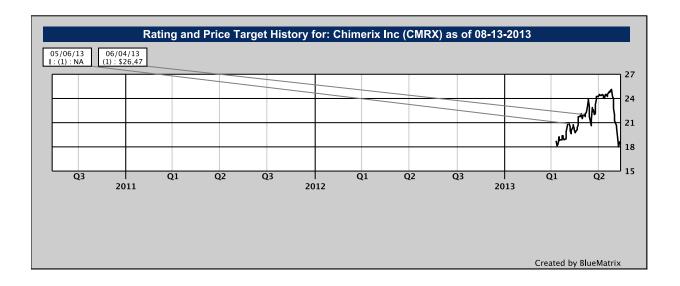
### **COWEN AND COMPANY RATING ALLOCATION**

Distribution of Ratings/Investment Banking Services (IB) as of 06/30/13

Rating	Count	Ratings Distribution	Count	IB Services/Past 12 Months
Buy (a)	380	58.37%	48	12.63%
Hold (b)	247	37.94%	2	0.81%
Sell (c)	24	3.68%	1	4.17%

(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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# **Legend for Price Chart:**

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