William Blair

Chimerix, Inc.

May 13, 2013

First-Quarter Financials a Nonevent; Dosing of SUPPRESS and Data From Phase II AdV Study Next

On Monday, May 13, before the markets opened, Chimerix reported first quarter 2013 financial results (exhibit 1). The company ended the first quarter with $22.9 million in cash; adding the proceeds of $117.9 million from the initial public offering (IPO) completed in April, we estimate the current cash should sustain operations through the data release from Phase III SUPPRESS expected during the first half of 2015. The net loss for the quarter was $34.6 million, with a per-share loss of $22.58, versus our estimates of $7.7 million and $4.96, respectively. The greater-than-expected loss was attributed to $25.5 million in accretion of redeemable convertible preferred stock. We updated our model, as illustrated in exhibit 1.

The key catalysts for Chimerix during 2013 include dosing of the Phase III SUPRESS study in CMV prevention during third quarter, and reporting data from the ongoing Phase II study for AdV preemption during second half. Initiation of the SUPRESS study on time will ensure top-line results to be released in the first half of 2015, and the Phase II AdV study could provide potential upside as Chimerix may be able to file for approval in this setting if a benefit in reduction in mortality or other significant benefits can be demonstrated.

Chimerix recently finalized the SUPRESS design and is ready for dosing during the third quarter. Based on a Phase I food effect study of CMX001, management achieved agreement with the FDA that a single dosing regimen of CMX001 at 100 mg BIW (twice weekly) with a low-fat meal will be evaluated against placebo in SUPPRESS. The concomitant administration with a low-fat meal should decrease the potential for patient discontinuation in the study resulting from gastrointestinal (GI) side effects. Management reiterated its plans to use the safety monitoring and management plan (SMMP) in the SUPPRESS study.

- ***Phase III SUPPRESS study design.*** SUPPRESS plans to enroll and randomize 450 allogeneic hematopoietic stem cell transplantation (HSCT) patients who are cytomegalovirus (CMV) seropositive (R+) 2-to-1 to CMX001 at 100 mg BIW, and placebo. The primary endpoint is 1) CMV disease or 2) initiation of preemptive therapy triggered by a positive test for CMV in the blood. The study is powered at 85%, with one-sided p-value of 0.025 in the superiority design, to detect 50% reduction in treatment failure for CMX001 versus placebo. The design assumes the prevention failure rate for the placebo arm is 30%. It also assumes that 16% of enrolled patients will drop out, become lost to follow-up, or die from non-CMV-related causes. The double-blind, placebo-controlled study will be conducted at 40 sites in the United States and Canada, with significant site overlap with the Phase II CMX001 Study 201.

Chimerix, Inc., a biopharmaceutical company based in Durham, North Carolina, focuses its research-and-development efforts on antiviral therapies.

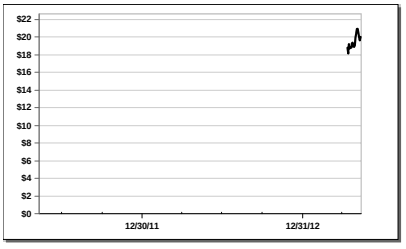
Stock Rating:	**Outperform**
Company Profile:	**Aggressive Growth**
Price Target:	$28.00
Symbol:	CMRX (NASDAQ)
Price:	$20.42 (52-Wk.: $15-$22)
Market Value (mil.):	$489
Fiscal Year End:	December
Long-Term EPS Growth Rate:	NA
Dividend/Yield:	None

	2012A	2013E	2014E
Estimates			
EPS Q1	NA	$-22.58	NA
Q2	NA	$-0.43	NA
Q3	NA	$-0.45	NA
Q4	NA	$-0.49	NA
FY	$-5.71	$-3.57	$-2.03
CY		$-3.57	$-2.03
Valuation			
FY P/E	NM	NM	NM
CY P/E		NM	NM

Trading Data (FactSet)	
Shares Outstanding (mil.)	0
Float (mil.)	11
Average Daily Volume	274,853

Financial Data (FactSet)	
Long-Term Debt/Total Capital (MRQ)	0.8
Book Value Per Share (MRQ)	0.0
Enterprise Value (mil.)	166.0
EBITDA (TTM)	0.0
Enterprise Value/EBITDA (TTM)	0.0x
Return on Equity (TTM)	-7.5

Two-Year Price Performance Chart



Sources: FactSet, William Blair & Company estimates

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Phase II data from CMX001 preemption study in AdV expected during second half; potential filing for this indication contingent on data. Chimerix is also conducting a Phase II preemption study in adenovirus (AdV)-infected HSCT patients, and data is expected during second half 2013. With positive results from the study, Chimerix could also pursue a preemption approval for AdV infections in the HSCT setting. As AdV infection is much less frequent than CMV, a prevention study design, similar to SUPPRESS, is not practical because it would require an excessive number of patients. As a result, Chimerix may be able to file for approval in this setting based on the Phase II data if a benefit in reduction in mortality or other significant benefits can be demonstrated.

Chance of Success of SUPPRESS Based on Phase II Data: We Estimate 80%
In the Phase II study (Study 201) for CMV prevention in HSCT patients, 10% of CMX001-treated patients experienced prevention failure, versus 37% from placebo, which demonstrates a relative 73% reduction in CMV disease and risk for infection (p=0.002). When the inclusion criteria and protocol of the Phase III SUPPRESS study were applied to the Study 201 patients, the analysis yielded a relative reduction of 52% in prevention failure for the CMX001-treated group versus placebo, in the most conservative scenario.

Further, in the SUPPRESS study, the initiation of prevention therapy is much earlier (within the first two weeks following transplant) than that in Study 201 (on day 24 post-transplantation), which could lead to more favorable outcomes, as earlier initiation of prevention therapy might result in more effective suppression of CMV reactivation. Lastly, the duration of therapy in SUPPRESS is also longer (14 weeks) than that in Study 201 (9-13 weeks), which is also in favor of SUPPRESS.

- ***We compare and contrast similarities and differences between Study 201 and SUPPRESS in exhibit 2.*** We note the SUPPRESS study will enroll similar patients as the CMX001 Study 201; however, several notable differences between the studies exist. The major difference lies in the definition of when to initiate preemptive therapy. In SUPPRESS, initiation of preemptive therapy with another antiviral in the study will occur when a patient has CMV DNA over 1,000 copies per mL or if the patient meets certain specified criteria in the protocol, such as being high risk, and has CMV DNA higher than 150 copies per mL; the threshold on initiating preemptive therapy in Study 201 was 200 copies per mL. In addition, in SUPPRESS, initiation of therapy is expected to occur within two weeks from transplant for 90% of patients, as compared to Study 201 where therapy typically began on day 24. Also, in SUPPRESS, duration of therapy with CMX001 will be uniform at 14 weeks, while in Study 201 duration ranged between 9 and 13 weeks. We believe standardizing the definition of initiation of preemptive therapy, and the time to initiation and duration of CMX001 therapy should translate into a greater likelihood of success of the SUPPRESS study.

Positive SUPPRESS Phase III results should lead to accelerated approval in the United States of CMX001 by 2016; full approval could come with pediatric study. The first indication to pursue for CMX001 is prevention of CMV infection in the HSCT setting, with potential approval and launch in late 2015 or early 2016. Chimerix wishes to use the single pivotal SUPPRESS study to obtain conditional approval in this indication first, then supplement the new drug application with a pediatric HSCT study to obtain full approval. Chimerix is also negotiating with European regulatory authorities to elucidate a clear pathway to approval on the Continent based on the Phase III SUPPRESS study.

We maintain our Outperform rating and $28 price target (exhibit 3). Our Outperform rating is centered on our belief that Chimerix's lead asset, CMX001, which is entering Phase III studies, will be a first-in-class and dominating leader in the prevention of double-stranded DNA (dsDNA) viral infections in the transplant setting and beyond, with multibillion-dollar revenue potential. In our probability-adjusted NPV model, we expect CMX001 to reach the market by early 2016 and become the market leader in the prevention setting. We currently assume CMX001 achieves peak sales of roughly $530 million in the United States and $410 million in Europe; for Europe, we project that Chimerix will license out the commercial rights to CMX001 to a partner and receive 30% royalties on EU sales. We currently assign an 80% probability of success to CMX001 in the HSCT setting. Chimerix's second asset, CMX157, has been licensed to Merck (MRK $46.14) for development of novel HIV combo therapies that could have certain advantages over Gilead's (GILD $54.72; Outperform) industry-leading regimens. We assign $4 per share to the program, which is in Phase I development. We estimate a 35% probability for the CMX157-containing combo to reach the market in 2019, $1.1 billion in peak worldwide sales, and 15% royalties to Chimerix. Adding net cash of approximately $2 per share to our valuation of CMX001 and CMX157, we derive our 12-month price target of $28 per share.

Potential sources of upside to our revenue estimates include longer duration of prevention therapy (we project 14 weeks); application in treating and preventing viral infections other than CMV; utility of CMX001 in the solid-organ transplant (SOT) setting, which represents a similarly sized market as HSCT; and sales in territories outside the United States and Europe.

Key risks to our Outperform rating and price target include: 1) failure of CMX001 to meet primary or second endpoints in the SUPPRESS study, 2) a worse-than-expected tolerability profile for CMX001, 3) failure of CMX157 to advance in Merck's HIV pipeline, 4) other clinical and business-development setbacks, and 5) financing risks.

Exhibit 1
Chimerix, Inc.
Income Statement
(dollars in thousands)

	2011A	2012A	2013					2014E	2015E
			Q1A	Q2E	Q3E	Q4E	FY:13E		
Revenues									
CMX001 U.S. revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0
CMX001 EU royalties	-	-	-	-	-	-	-	-	-
CMX157 royalties	-	-	-	-	-	-	-	-	-
Collaboration and licensing revenue	55	17,445	-	-	-	-	-	-	-
Contract and grant revenue	12,046	16,275	1,771	1,729	-	-	3,500	-	-
Total Revenues	**12,101**	**33,720**	**1,771**	**1,729**	**0**	**0**	**3,500**	**0**	**0**
Expenses									
COGS	-	-	-	-	-	-	-	-	-
R&D expense	27,695	27,821	6,498	7,999	8,638	9,502	32,637	39,748	46,092
SG&A expense	9,398	8,682	1,821	2,393	2,513	2,638	9,365	10,765	12,300
Total Operating Expenses	37,093	36,503	8,319	10,392	11,151	12,141	42,002	50,513	58,393
Operating income	(24,992)	(2,783)	(6,548)	(8,663)	(11,151)	(12,141)	(38,502)	(50,513)	(58,393)
Interest expense, net	(212)	(776)	(356)	(187)	(187)	(187)	(917)	(749)	(375)
Fair value adjustments to warrant liability	(385)	(847)	(2,203)	(2,000)	(250)	(240)	(4,693)	(720)	(720)
Other income/(expense)	-	-	-	-	-	-	-	-	-
Pretax income/(loss)	(25,589)	(4,406)	(9,107)	(10,850)	(11,588)	(12,568)	(44,112)	(51,983)	(59,487)
Other comprehensive gain/(loss)	(4)	2	(1)	-	-	-	(1)	-	-
Accretion of redeemable convertible preferred stock	(9,565)	(4,357)	(25,525)	-	-	-	(25,525)	-	-
Provision for income taxes/(income)	-	-	-	-	-	-	-	-	-
Net Income/(Loss)	**($35,154)**	**($8,763)**	**($34,632)**	**($10,850)**	**($11,588)**	**($12,568)**	**($69,637)**	**($51,983)**	**($59,487)**
GAAP EPS	**($23.17)**	**($5.71)**	**($22.58)**	**($0.43)**	**($0.45)**	**($0.49)**	**($3.57)**	**($2.03)**	**($2.32)**
Weighted average shares outstanding, diluted	1,517	1,534	1,534	25,508	25,518	25,528	19,522	25,553	25,593

Sources: Chimerix, Inc. and William Blair & Company, L.L.C. estimates

Exhibit 2
Chimerix, Inc.
Comparsion of Study 201 and SUPPRESS

	Study 201 Phase II	SUPPRESS Phase III
Inclusion criteria	R+ HSCT adult, including high-risk patients (10% cord blood transplant, 25% mismatched donors); also included a few PCR+ patients	R+ HSCT adult, including high-risk patients; but with no PCR+ patients at baseline
Dosage	Dose escalation to 100 mg BIW and 200 mg QW and placebo; found 100 mg BIW as the optimal dose. About 25-50 patients per dose arm.	n=450, 2:1 to 100 mg BIW and placebo. Dosing with low fat meal.
Timing of dose initiation	Average intiation was day 24 after transplant; timing of initiation was varied; initiation of required demontration of engraftment.	50% of patients could start dosing at day 7, and 90% of patients should start dosing within 2 weeks. Earlier dosing might icnrease efficacy of prevention.
Treatment duration	9-13 weeks, then 8 weeks followup	14 weeks, then follow-up until week 24
Primary endpoint/ Definition of prevention failure	1) CMV disease or 2) initiation of preemptive therapy	1) CMV disease or 2) initiation of preemptive therapy
When to initiate preemptive treatment	When CMV DNA exceeded 200 copies/mL; or at physician discretion	Strict protocol to follow: CMV DNA exceeds 1,000 copies/mL in any patient, or over 150 copies/mL in high-risk patients
Efficacy on primary endpoint	10% for 100 mg BIW vs. 37% placebo, p=0.002, relative 73% reduction in prevention failure	Powered 85% to detect 50% reduction in prevention failure
Efficacy: Study 201 data based on SUPPRESS inclusion criteria	22% for 100 mg BIW vs. 46% placebo, relative 52% reduction in prevention failure. This models the "worst-case scenario."	---
Safety	Diarrhea is the major AE; 10% of 100 mg BIW arm, 60% of 200 mg BIW arm dropped out due to GI AE, versus 3% for placebo	Management program to reduce GI dropout

Sources: Chimerix, Inc., ClinicalTrials.gov, and William Blair & Company, L.L.C.

Exhibit 3
Chimerix, Inc.
Sum-of-the-Parts Fair Value
(dollars in thousands)

Drug Candidate	Peak Sales	Stage of Development	Estimated Launch Date	Probability of Commercialization	Percentage of Sales to Company	Probability-Adjusted NPV	Value Per Share	Percentage of Fair Value
CMX001— United States	$526,017	Phase III start mid-2013	H1:2016	80%	100%	$445,114	$17.42	62.3%
CMX001— European Union	$413,065	Phase III start mid-2013	H1:2017	80%	30%	$114,102	$4.47	16.0%
CMX157— HIV	$1,074,060	Phase I	H1:2019	35%	15%	$112,361	$4.40	15.7%
Subtotal						**$671,576**	**$26.29**	**94.0%**
Net Cash at Mid-2014 **Net Present Value of Additional Gain (Loss)***						$54,123 ($11,364)	$2.12 ($0.44)	7.6% (1.6%)
Sum-of-the-Parts Fair Value						**$714,335**	**$27.96**	**100.0%**

*Includes costs not directly related to programs above
Sources: Company reports and William Blair & Company, L.L.C. estimates

Exhibit 4
Chimerix, Inc.
Clinical Development Timeline and Milestones

Drug	CMX001			CMX157
Indication	**Prevention of CMV Infection in HSCT**	**Preemption of AdV Infection in Adult and Pediatric HSCT**	**Smallpox Under Animal Efficacy Rule**	**HIV**
Class	**Lipid-conjugated cidofovir (Vistide)**			**Lipid-conjugated tenofovir (Viread)**
Partner				***Merck***
Q3:12				Licensed worldwide rights to Merck (July)
Q4:12				
Q1:13		Type C meeting with the FDA		
Q2:13	Finalized Phase III SUPPRESS adult study design in April; dosing mid-year (Study 301, n=450)		BARDA contract renewal	
Q3:13				
Q4:13	Initiate Phase III pediatric study (Study 311)	Phase II pediatric study data release (Study 202)		
Q1:14		Potential NDA submission		
Q2:14				
Q3:14	Completion of enrollment of SUPPRESS			
Q4:14		Potential approval and launch		
H1:15	Data release from SUPPRESS			Merck starts Phase II study; Chimerix collects milestone
H2:15	Submit NDA and MAA			
H1:16	Approval and launch; data from pediatric study			
H2:16				

Coral highlight: events likely to affect the stock price
Sources: Company reports and William Blair & Company, L.L.C. estimates

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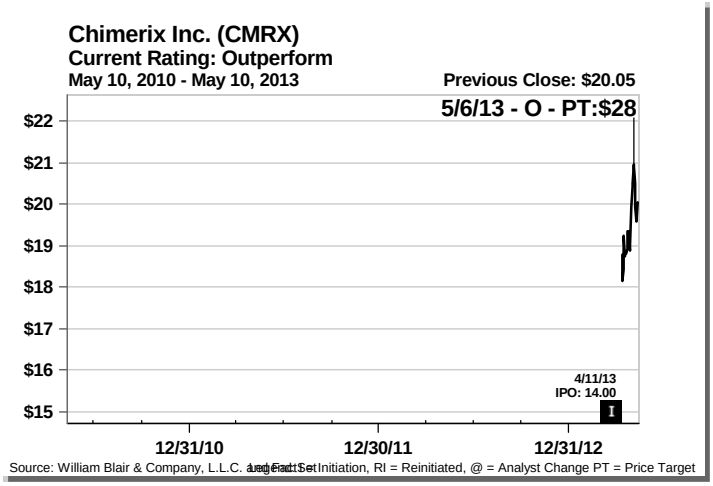
Additional information is available upon request.



Current Rating Distribution (as of 04/30/13)

Coverage Universe	Percent	Inv. Banking Relationships*	Percent
Outperform (Buy)	63	Outperform (Buy)	9
Market Perform (Hold)	33	Market Perform (Hold)	1
Underperform (Sell)	1	Underperform (Sell)	0

*Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

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Fundamental risk is approximately in line with the broader William Blair universe; Aggressive Growth (A) – Fundamental risk is higher relative to the broader William Blair universe.

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