#### **OUTPERFORM**

**Michael Schmidt, Ph.D.** (617) 918-4588

Michael.Schmidt@Leerink.com

Jonathan Chang, Ph.D.

(617) 918-4015

Jonathan.Chang@Leerink.com

Reason for report: **EARNINGS** 



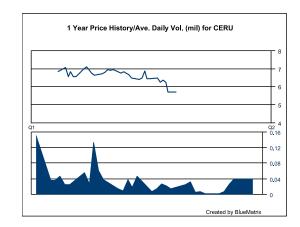
# **CERULEAN PHARMA INC.**

Model Update for 1Q14 Financial Results

• **Bottom Line:** We are updating our model to reflect 1Q14 financial results provided in the 10-Q filing today. We maintain our Outperform rating and \$13 price target.

Key Stats: (NASDAQ:CERU)

S&P 600 Health Care Index: 1,260.59 Price: \$5.75 Price Target: \$13.00 Methodology: DCF analysis with 16% discount rate 52 Week High: \$8.06 52 Week Low: \$5.05 Shares Outstanding (mil): 19.0 Market Capitalization (mil): \$109.3 Book Value/Share: \$0.00 Cash Per Share: \$2.81 Dividend (ann): \$0.00 Dividend Yield: 0.0%



Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	P/E
2013A					0.0					(\$25.10)	NM
2014E - New	0.0A	0.0	0.0	0.0	0.0	(\$3.70)A	(\$0.43)	(\$0.53)	(\$0.64)	(\$2.31)	NM
2014E - Old	0.0A	0.0	0.0	0.0	0.0	(\$6.83)	(\$0.43)	(\$0.53)	(\$0.64)	(\$2.45)	NM
2015E - New					0.0	İ				(\$1.67)	NM
2015E - Old					0.0	j				(\$2.00)	NM

Source: Company Information and Leerink Partners LLC Research

GAAP EPS presented



# **INVESTMENT THESIS**

We rate Cerulean Pharma (CERU) Outperform with a \$13/share price target representing a \$240M valuation. CERU is an oncology-focused company developing anti-cancer drugs based on its proprietary nanoparticle drug delivery platform. CERU's lead product CRLX-101 has an attractive mechanism of action in our view that could overcome several limitations of approved agents. Based on our analysis we believe CRLX-101 is active and CERU's development rationale is strong. Three major catalysts by 2H15 could validate CRLX-101's therapeutic potential. We believe CRLX-101 could address a \$1Bn US opportunity in 2030E and apply a 25% probability of success.

## **VALUATION**

We estimate a \$13 per share price target in 12 months for CERU, reflecting a \$240M market capitalization based on a discounted cash flow analysis. We use a 16% WACC as the discount rate, which we view as appropriate for CERU. We use probability weighted revenue assumptions. We model ~\$1.0Bn peak US CRLX-101 sales in 2030E across three lead indications in 3rd line renal cell cancer, platinum-resistant ovarian cancer, and neoadjuvant rectal cancer.

### RISKS TO VALUATION

CERU faces significant clinical and regulatory risks since its main value driver is currently in multiple early stage investigator-sponsored clinical trials. Like many other developmental stage Biopharma companies, CERU faces manufacturing, competitive, commercial, regulatory and safety risks, as well as risks to its intellectual property. Specifically, CERU faces regulator uncertainty on whether pCR will be accepted by the FDA as an approvable endpoint for a potential future neoadjuvant rectal cancer trial. CERU also faces financial risk and may need to raise dilutive capital near term. We expect the company's current cash balance to be sufficient to fund operations until late 2015.

CERU P&L (in \$MM)	2012A	2013A	1Q14A	2Q14E	3Q14E	4Q14E	2014E	2015E	2016E
Product revenue	-	-	-	-	-	-	-	-	-
Other revenue	0.6	0.0	0.0	-	-	-	0.0	-	-
Total Revenue	0.6	0.0	0.0	-	-	-	0.0	-	-
cogs	-	-	-	_	-	-	-	-	-
R&D Expense	15.8	9.7	1.5	5.0	7.0	9.0	22.5	35.0	55.0
SG&A Expense	6.4	6.2	1.5	3.0	3.0	3.0	10.5	11.6	12.7
Total Operating Expenses	22.2	15.9	3.0	8.0	10.0	12.0	33.0	46.6	67.7
Operating income (Loss)	(21.6)	(15.9)	(3.0)	(8.0)	(10.0)	(12.0)	(33.0)	(46.6)	(67.7)
Total other income (expense) - net	(0.5)	(1.3)	0.0	(0.1)	(0.1)	(0.1)	(0.4)	(0.3)	-
EBT	(22.1)	(17.1)	(2.9)	(8.1)	(10.1)	(12.1)	(33.3)	(46.8)	(67.7)
Tax	-	-	-	-	-	-	-	-	-
Net income (loss)	(22.1)	(17.1)	(2.9)	(8.1)	(10.1)	(12.1)	(33.3)	(46.8)	(67.7)
Accretion of redeemable convertible preferred stock	(0.1)	-	-	-	-	-	-	-	-
Net loss attributable to common shareholders	(22.2)	(17.1)	(2.9)	(8.1)	(10.1)	(12.1)	(33.3)	(46.8)	(67.7)
	(25.4)	(25.4)	(0.70)	(0.40)	(0.50)	(0.54)	(0.04)	(4.67)	(0.40)
EPS - basic	(36.4)	(25.1)	(3.70)	(0.43)	(0.53)	(0.64)	(2.31)	(1.67)	(2.42)
EPS - diluted	(36.4)	(25.1)	(3.70)	(0.43)	(0.53)	(0.64)	(2.31)	(1.67)	(2.42)
Common shares outstanding - basic	0.6	0.7	0.8	19.0	19.0	19.0	14.5	28.0	28.0
Common shares outstanding - diluted	0.6	0.7	0.8	19.0	19.0	19.0	14.5	28.0	28.0
CERU BS & CFS (in \$MM)	2012A	2013A	1Q14A	2Q14E	3Q14E	4Q14E	2014E	2015E	2016E
Cash & equivalents	16.7	5.5	8.5	53.4	43.4	31.4	31.4	65.5	3.7
Debt	9.1	15.1	23.2	5.0	4.2	3.3	3.3	-	-
500	3.1	13.1	23.2	3.0	7.2	5.5	5.5	Į.	
Change in Cash	1.4	(11.2)	3.0	45.0	(10.1)	(11.9)	26.0	34.0	(61.8)
Cash from operations	(21.0)	(16.6)	(3.7)	(7.4)	(9.2)	(11.1)	(31.4)	(42.6)	(61.8)
Net income (loss)	(22.2)	(17.1)	(2.9)	(8.1)	(10.1)	(12.1)	(33.3)	(46.8)	(67.7)
Share based comp	0.5	0.6	0.1	0.6	0.8	1.0	2.5	3.7	5.4
Non-cash interest expense	0.1	0.6	0.1	-	-	-	0.1	-	-
D&A	0.3	0.2	0.0	0.1	0.1	0.1	0.3	0.5	0.5
Other (Change in WC)	0.2	(0.9)	(1.1)	-	-	-	(1.1)	-	-
Cash from investing	(0.2)	(0.0)	(0.0)	-	-	-	(0.0)	-	-
Capex	(0.2)	(0.0)	(14.0)	-	-	-	(14.0)	-	-
Acquisitions	-	-	-	-	-	-	-	-	-
Other	-	-	14.0	-	-	-	14.0	-	-
Cash from financing	22.5	5.4	6.7	52.4	(0.8)	(0.8)	57.3	76.6	-
Equity issue (buyback)	12.9	0.0	0.0	53.2	-	-	53.2	80.0	-
Debt issue (principal payment)	9.6	5.4	7.7	(0.8)	(0.8)	(0.8)	5.2	(3.4)	-
Other	(0.0)	-	(1.1)	_	_	_	(1.1)	_	_

Source: SEC Filings and Leerink Partners Estimates

DCF analysis	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Sales					-	162	334	516	832	857	883	909	937	965	994	1,024	1,055
COGS	-	-	-	-	-	16	33	26	42	43	44	45	47	48	50	51	53
R&D	15	35	55	50	45	30	18	12	8	8	4	-	-	-	-	-	-
SG&A	11	12	13	14	15	80	84	129	208	214	221	227	234	241	249	256	264
OpEx	26	47	68	64	60	126	135	167	258	265	269	273	281	290	298	307	317
EBT	(33)	(47)	(68)	(64)	(60)	36	199	349	574	592	614	637	656	676	696	717	739
Tax	-	-	-	-	-	-	-	87	144	148	153	159	164	169	174	179	185
NI	(33)	(47)	(68)	(64)	(60)	36	199	262	431	444	460	477	492	507	522	538	554
Periods	-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PVFCF	(33)	(40)	(50)	(41)	(33)	17	82	93	131	117	104	93	83	74	65	58	52
NPV	770																
Probability of success	25%																
P/V NPV	192																
Estimated net cash post-IPO	48																
Combined (\$M)	241																
Shares outstanding post-IPO (M)	19																
Price Target (\$)	13																
Source: Leerink Partners Estimates																	

# CRLX-101

<u> </u>			
Indication	Trial	Event	Timing
3rd/4th line mRCC	Phase I Avastin combination IST	Trials in progress presentation	ASCO 2014
		Final data (ORR, PFS)	1Q15
	Phase II randomized Avastin combination	Initiate Phase II	2H14
		ORR data	4Q15
Platinum-resistant OC	Phase II single agent IST	Updated single arm data	ASCO 2014
	Phase II Avastin combination IST	Single arm ORR data	4Q14
		Final data (ORR, PFS)	3Q15
	Phase II/III randomized Avasting combination	Initiate Phase II/III	2015
Neoadjuvant rectal cancer	Phase I/II CRT/Xeloda combination IST	ID MTD, launch Phase II single arm expansion	mid-14
		Single arm pCR data	4Q14
	Phase II randomized CRT/Xeloda combination	Initiate Phase II	4Q14
		pCR data	4Q15
		End-of-Phase II FDA meeting	1Q16
	Phase III randomized CRT/Xeloda combination	Initiate Phase III	2016
HER2- gastric cancer	Phase II PD single agent IST	trial ongoing	
2nd line SCLC	Phase II randomized single agent IST vs. topotecan	trial ongoing	

#### CRLX-301

Indication	Trial	Event	Timing
Solid tumors	Phase I	Initiate trial	4Q14
		Phase I data	4Q15

Source: Leerink Partners Estimates and Company Filings

Product Pipeline								
Product		Stage	Indication					
CRLX-101	Nanoparticle formulation of camptothecin	Phase II	Renal Cell Cancer					
			Ovarian Cancer					
		Phase I	Rectal Cancer					
CRLX-301	Nanoparticle formulation of docetaxel	Preclinical	Solid tumors					
Source: SEC	Source: SEC filings							



# **Disclosures Appendix Analyst Certification**

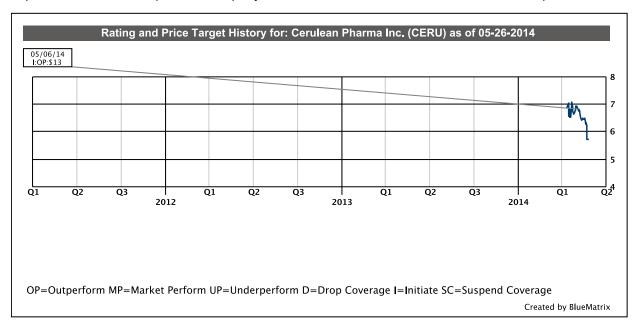
I, Michael Schmidt, Ph.D., certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

# **Valuation**

We estimate a \$13 per share price target in 12 months for CERU, reflecting a \$240M market capitalization based on a discounted cash flow analysis. We use a 16% WACC as the discount rate, which we view as appropriate for CERU. We use probability weighted revenue assumptions. We model ~\$1.0Bn peak US CRLX-101 sales in 2030E across three lead indications in 3rd line renal cell cancer, platinum-resistant ovarian cancer, and neoadjuvant rectal cancer.

# **Risks to Valuation**

CERU faces significant clinical and regulatory risks since its main value driver is currently in multiple early stage investigator-sponsored clinical trials. Like many other developmental stage Biopharma companies, CERU faces manufacturing, competitive, commercial, regulatory and safety risks, as well as risks to its intellectual property. Specifically, CERU faces regulator uncertainty on whether pCR will be accepted by the FDA as an approvable endpoint for a potential future neoadjuvant rectal cancer trial. CERU also faces financial risk and may need to raise dilutive capital near term. We expect the company's current cash balance to be sufficient to fund operations until late 2015.





	Distribution of Ratings/Investment Bank	ing Services (IB	,	erv./Past 12 Mos.
Rating	Count	Percent	Count	Percent
BUY [OP]	131	68.23	46	35.11
HOLD [MP]	61	31.77	3	4.92
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.

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

<u>Underperform (Sell):</u> 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.

# **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 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 Editorial 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, Institutional Equities, and Investment Banking. Analysts, however, are not compensated for a specific investment banking services transaction.

MEDACorp is a network of healthcare professionals, attorneys, physicians, key opinion leaders and other specialists accessed by Leerink and it provides information used by its analysts in preparing research.



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

Leerink Partners LLC makes a market in Cerulean Pharma Inc.

Leerink Partners LLC has acted as the manager for a public offering of Cerulean Pharma Inc. in the past 12 months.

©2014 Leerink Partners LLC. All rights reserved. This document may not be reproduced or circulated without our written authority.

Leerink Partners LLC Equity Research							
		. ,					
Director of Equity Research	John L. Sullivan, CFA	(617) 918-4875	john.sullivan@leerink				
Associate Director of Research	Alice C. Avanian, CFA	(617) 918-4544	alice.avanian@leerink				
Healthcare Strategy	John L. Sullivan, CFA	(617) 918-4875	john.sullivan@leerink				
	Alice C. Avanian, CFA	(617) 918-4544	alice.avanian@leerink				
Biotechnology	Howard Liang, Ph.D.	(617) 918-4857	howard.liang@leerink				
	Joseph P. Schwartz	(617) 918-4575	joseph.schwartz@leerink				
	Marko Kozul, M.D.	(415) 905-7221	marko.kozul@leerink				
	Michael Schmidt, Ph.D.	(617) 918-4588	michael.schmidt@leerink				
	Gena Wang, Ph.D., CFA	(212) 277-6073	gena.wang@leerink				
	Jonathan Chang, Ph.D.	(617) 918-4015	jonathan.chang@leerink				
	Paul Matteis	(617) 918-4585	paul.matteis@leerink				
	Richard Goss	(617) 918-4059	richard.goss@leerink				
Life Science Tools	Dan Leonard	(212) 277-6116	dan.leonard@leerink				
and Diagnostics	Justin Bowers, CFA	(212) 277-6066	justin.bowers@leerink				
Pharmaceuticals/Major	Seamus Fernandez	(617) 918-4011	seamus.fernandez@leerink				
	Ario Arabi	(617) 918-4568	ario.arabi@leerink				
	Aneesh Kapur	(617) 918-4576	aneesh.kapur@leerink				
Specialty Pharmaceuticals, Generics	Jason M. Gerberry, JD	(617) 918-4549	jason.gerberry@leerink				
Medical Devices, Cardiology &	Danielle Antalffy	(212) 277-6044	danielle.antalffy@leerink				
Orthopedics	Richard Newitter	(212) 277-6088	richard.newitter@leerink				
	Ravi Misra	(212) 277-6049	ravi.misra@leerink				
Healthcare Services	Ana Gupte, Ph.D.	(212) 277-6040	ana.gupte@leerink				
Healthcare Technology	David Larsen, CFA	(617) 918-4502	david.larsen@leerink				
& Distribution	Christopher Abbott	(617) 918-4010	chris.abbott@leerink				
Sr. Editor/Supervisory Analyst	Mary Ellen Eagan, CFA	(617) 918-4837	maryellen.eagan@leerink				
Supervisory Analysts	Robert Egan		bob.egan@leerink				
	Amy N. Sonne		amy.sonne@leerink				
Editorial	Cristina Diaz-Dickson	(617) 918-4548	cristina.diaz-dickson@leerink				

**New York** 299 Park Avenue, 21<sup>st</sup> floor New York, NY 10171 (888) 778-1653 Boston One Federal Street, 37<sup>th</sup> Floor Boston, MA 02110 (800) 808-7525

San Francisco 201 Spear Street, 16<sup>th</sup> Floor San Francisco, CA 94105 (800) 778-1164