Cerulean Pharma Inc. (CERU)

Reports 3Q14 Results and Highlights Clinical Development

MARKET DATA

Price	$5.93
52-Week Range:	$3.35 - $8.06
Shares Out. (M):	14.3
Market Cap ($M):	$84.8
Average Daily Vol. (000):	37.0
Cash (M):	$64
Cash/Share:	$3.19
Enterprise Value (M):	$166
LT Debt (M):	$2

Source: Thomson Reuters and JMP Securities LLC

FY DEC		2013A	2014E	2015E
Revenue ($M)	1Q	--	$0.0A	$0.0
	2Q	--	$0.0A	$0.0
	3Q	--	$0.0A	$0.0
	4Q	--	$0.0	$0.1
	FY	**$0.0**	**$0.1**	**$0.0**
EPS	1Q	--	($3.71)A	($0.44)
	2Q	--	($0.44)A	($0.28)
	3Q	--	($0.28)A	($0.93)
	4Q	--	($0.93)	($2.91)
	FY	**($2.17)**	**($2.91)**	**($2.57)**
Previous FY		NC	($3.09)	($2.73)

Source: Company reports and JMP Securities LLC

STOCK PRICE PERFORMANCE

MARKET OUTPERFORM | Price: $5.93 | Target Price: $14.00

INVESTMENT HIGHLIGHTS

Cerulean Pharma reports 3Q14, highlighting its strong cash position and advancing development pipeline; we reiterate our Market Outperform rating, with a year-end $14 price target based on a synthesis of DCF, CAGR, and comparable company valuation methodologies. CERU reported 3Q14 net loss of $5.56MM or earnings of ($0.28) per share, better than JMP estimates of $6.89MM or ($0.86) per share primarily due to higher than estimated shares outstanding (20.125MM versus JMP estimates of 8.022MM) and lower operating expenses ($5.37MM versus JMP estimates of $6.6MM). CERU finished the quarter with $57.8MM cash and cash equivalents, providing sufficient runway to continue operations to the end of year 2015. A summary of 3Q14 actual results versus JMP estimates is shown in Figure 2. Incremental changes to our model reflecting 3Q14 results and calculated share count are summarized in Figure 3.

CERU 3Q14 highlights reflect an expanding pipeline with multiple value inflection points. Management recapped an optimistic quarter, with the continued advancement of its lead asset CRLX101 into a randomized Phase II clinical trial in combination with bevacizumab in relapsed renal-cell carcinoma (RCC). This patient population represents an unmet clinical need for which most treatment options have failed, including TKI's and mTOR inhibitors. Additionally, the company plans to advance the clinical development of CRLX101 in relapsed ovarian cancer and initiate a single-arm Phase IB/II clinical trial in non-metastatic colorectal cancer, as well as a Phase I clinical trial in various advanced solid tumors of CRLX301. Clinical results with irinotecan, a related therapy, showed pathological CR rates of 21-27%; however, the drug's serious adverse events include significant GI toxicity. Clinical studies have shown CRLX101 to have a safe and well tolerated safety profile that is potentially superior to irinotecan in the clinic.

The third quarter saw significant changes to senior management. While the departure of CEO Oliver Fetzer, Ph.D., to become CEO of Synthetic Genomics Inc was unexpected, we remain optimistic regarding upcoming clinical development milestones. We also maintain confidence in the appointments of Paul Friedman, M.D., who currently serves on Cerulean's Board of Directors, as Executive Chairman of the Board, Christopher Guiffre, J.D., Cerulean's Chief Business Officer as the position of Chief Operating Officer. William Rastetter, Ph.D., continues to serve as the Lead Independent Director of the Board.

Michael G. King, Jr.
mking@jmpsecurities.com
(212) 906-3520

In our view, Cerulean embodies much of what investors found attractive about Abraxis: a differentiated chemotherapy that maintains or increases its antitumor activity, but has a superior tolerability profile, making it more amenable to combination regimens. On balance, we believe CERU bears a favorable risk/upside potential profile, rooted in the known antitumor activity of camptothecin, as well as the regulatory and commercial paths forward for CRLX101 in its intended indications. Management guided towards multiple value inflection points for 2H14 and into 1H15 including the initiation of a Phase I trial of CRLX301 by the end of the year with results expected in 4Q15, proof of principle data supporting go or no-go decisions in relapsing ovarian and non-metastatic colorectal cancer by 1Q15, and readout of the Phase II trial for CRX101 in relapsed RCC in 4Q15. Provided the data are positive, these events could be expected to bring CERU's market cap in line with comparable platform technologies (e.g., BIND, ECYT, MACK, NKTR, SRNE) that trade at an average market cap of ~$500MM - a significant premium to CERU's present valuation.

FIGURE 1. Upcoming CERU Catalysts

Timing	Candidate	Catalysts
4Q14	CRLX101	Read-out from single Avastin combo in ovarian cancer
4Q14	CRLX101	Read-out from single-arm neoadjuvant rectal cancer IST (UNC)
4Q14	CRLX301	Initiation of Phase I trial in advances solid tumors
1Q15	CRLX101	Potential initiation of randomized Phase II neoadjuvant rectal cancer study (100 pts)
1Q15	CRLX101	Potential initiation of pivotal ovarian Phase II trial in combination with Avastin
4Q15	CRLX301	Phase I read-outs (PK, MTD, and preliminary efficacy)
4Q15	CRLX101	Read-out from randomized RCC Phase II in combo with Avastin

Source: company presentations

FIGURE 2. 3Q14 CERU Results vs. JMP Estimates

Cerulean Pharma(CERU) Abridged Income Statement ($ MM)	3Q14 Results			
	JMP Estimate	Consensus	Actual	Variance (JMP vs. Actual)
Total Revenues	**0.03**		**0.03**	**0.00**
Operating Expenses	**6.60**	**-**	**5.37**	**1.2**
Research and development	3.80		2.93	0.9
General and administrative	2.80		2.44	0.4
Operating income (loss)	**(6.60)**	**(7.72)**	**(5.37)**	**(1.2)**
Other income (expense)	**(0.29)**		**(0.19)**	(0.1)
Pretax income (loss)	**(6.89)**	(7.64)	(5.56)	(1.33)
Net income (loss)	**(6.89)**	(6.15)	(5.56)	(1.33)
EPS Calculations				
Basic EPS	**$ (0.86)**		**$ (0.28)**	**$ (0.58)**
Diluted EPS	**$ (0.86)**	**$ (0.30)**	**$ (0.28)**	**$ (0.58)**
Basic shares outstanding	8.022		20.125	(12.103)
Diluted shares outstanding	8.022		20.125	(12.103)

Source: JMP Securities LLC and Company Reports

FIGURE 3. Changes to Our Model

Cerulean Pharma (CERU)	4Q14E		FY 2014E		FY 2015E		FY 2016E	
($ MM)	Old	New	Old	New	Old	New		New
Collaboration Revenue	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Other								
Total Revenues	**-**	**-**	**0.1**	**0.1**	**-**	**-**	0.0	**-**
COGS	-	-	-	-	-	-	-	-
Gross Profit	-	-	0.08	0.08	-	-	-	-
Operating Expenses	**7.3**	**7.3**	**21.6**	**20.4**	**29.0**	**27.3**	**42.0**	**39.4**
Research and development	4.1	4.1	12.0	11.2	18.1	16.8	29.8	27.6
General and administrative	3.2	3.2	9.5	9.2	11.0	10.6	12.2	11.7
Operating income (loss)	(7.3)	(7.3)	(21.5)	(20.3)	(29.0)	(27.3)	(42.0)	(39.4)
Other income (expense)	(0.3)	(0.2)	(1.3)	(1.1)	-	-	-	-
Interest income	(0.3)	(0.2)	(1.3)	(1.1)	-	-	-	-
Pretax income	(7.6)	(7.5)	(22.8)	(21.4)	(29.0)	(27.3)	(42.0)	(39.4)
Provision for Income Tax	-	-	-	-	-	-	-	-
Net income	(7.6)	(7.5)	(22.8)	(21.4)	(29.0)	(27.3)	(42.0)	(39.4)
Basic EPS	**$ (0.94)**	**$ (0.93)**	**$ (2.84)**	**$ (2.66)**	**$ (2.73)**	**$ (2.57)**	**$ (3.13)**	**$ (2.93)**
Diluted EPS	**$ (0.94)**	**$ (0.93)**	**$ (2.84)**	**$ (2.66)**	**$ (2.73)**	**$ (2.57)**	**$ (3.13)**	**$ (2.93)**
Basic shares outstanding	8.10	8.10	8.05	8.05	10.62	10.62	13.43	13.43
Diluted shares outstanding	8.10	8.10	8.05	8.05	10.62	10.62	13.43	13.43

Source: JMP Securities LLC and Company Reports

FIGURE 4. Income Statement

Cerulean Pharma (CERU)	2012A	2013A	1Q14A	2Q14A	3Q14E	4Q14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Income Statement ($MM)	2012A	2013A	1Q14A	2Q14A	3Q14E	4Q14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Product Sales and Royalties:															
CRLX101															
US Sales								-	-	-	49.8	164.9	278.0	421.5	558.9
ROW Royalties								-	-	-	-	7.7	27.8	50.3	76.1
CRLX301															
US Sales								-	-	-	-	105.6	221.2	341.1	501.2
ROW Royalties								-	-	-	-	-	15.8	32.3	49.8
Total Product Sales and Royalties	0.0	0.0	0.00	-	-	-	-	-	-	-	49.8	278.2	542.7	845.2	1,186.0
Collaboration Revenue	0.6	0.0					-	-	-	-	-	-	-	-	-
Total Revenue	0.6	0.0	0.05	0.0	-	-	0.1	-	-	-	49.8	278.2	542.7	845.2	1,186.0
Cost of Goods Sold											6.0	18.1	27.8	42.1	55.9
Gross Profit	0.6	0.0	0.05	0.0	0.0	0.0	0.1	0.0	0.0	0.0	43.9	260.0	514.9	803.0	1,130.1
Operating Expenses:															
Research and Development	15.8	9.7	1.50	2.6	3.8	4.1	12.043	18.1	29.8	59.6	74.5	85.7	96.8	108.5	119.3
General and administrative	6.4	6.2	1.51	2.0	2.8	3.2	9.539	11.0	12.2	44.7	60.3	78.4	98.0	117.6	131.8
Total operating expenses	22.2	15.9	3.01	4.7	6.6	7.3	21.582	29.0	42.0	104.3	134.8	164.1	194.9	226.1	251.1
Operating income (loss)	(21.6)	(15.9)	(3.0)	(4.6)	(6.6)	(7.3)	(21.502)	(29.0)	(42.0)	(104.3)	(91.0)	95.9	320.0	576.9	879.0
Other income (expense):															
Interest income	0.0	0.0	0.00	0.0	0.0	0.0	0.0								
Interest expense	(0.6)	(1.5)	(0.46)	(0.3)	(0.3)	(0.3)	(1.3)								
Loss on extinguishment of debt				(2.5)											
Decrease in value of preferred stock warrant liability	0.0	0.2	0.50		0.0	0.0	0.5								
Total other income, net	(0.5)	(1.3)	0.04	(2.8)	(0.3)	(0.3)	(1.3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pretax net income (loss)	(22.1)	(17.143)	(2.92)	(7.4)	(6.9)	(7.6)	(24.834)	(29.0)	(42.0)	(104.3)	(91.0)	95.9	320.0	576.9	879.0
Income tax benefit (provision)							0.0	0.0	0.0	0.0	0.0	(14.4)	(64.0)	(144.2)	(263.7)
Tax Rate							*0%*	*0%*	*0%*	*0%*	*0%*	*15%*	*20%*	*25%*	*30%*
Comprehensive income (loss)	(22.1)	(17.1)	(2.92)	(7.4)	(6.9)	(7.6)	(24.834)	(29.0)	(42.0)	(104.3)	(91.0)	81.5	256.0	432.7	615.3
Accretion of redeemable convertible preferred stock	(0.1)	0.0	0.00												
Net income (loss) attributable to common stockholders	(22.2)	(17.143)	(2.92)	(7.4)	(6.9)	(7.6)	(24.8)	(29.0)	(42.0)	(104.3)	(91.0)	81.5	256.0	432.7	615.3
Basic EPS to common shareholders	$ (36.39)	$ (2.17)	(3.71)	$ (0.44)	$ (0.86)	$ (0.94)	$ (3.09)	$ (2.73)	$ (3.13)	$ (6.47)	$ (4.36)	$ 3.46	$ 10.52	$ 17.25	$ 23.82
Diluted EPS to common shareholders	$ (36.39)	$ (2.17)	(3.71)	$ (0.44)	$ (0.86)	$ (0.94)	$ (3.09)	$ (2.73)	$ (3.13)	$ (6.47)	$ (4.36)	$ 2.70	$ 8.27	$ 13.64	$ 18.92
Basic shares outstanding	0.6	7.9	0.79	16.9	8.0	8.1	8.0	10.6	13.4	16.1	20.9	23.6	24.3	25.1	25.8
Diluted shares outstanding	0.6	7.9	0.79	16.9	8.0	8.1	8.0	10.6	13.4	16.1	20.9	30.2	31.0	31.7	32.5

Source: JMP Securities LLC and Company Reports

Company Description

Cerulean Pharma Inc. (CERU) is a Cambridge, MA-based, clinical-stage nanopharmaceutical company that is developing dynamic, tumor-targeted medicines with the aim of maximizing the uptake of drug by tumor cells while preserving healthy tissue across various solid tumor malignancies. The company's lead pipeline candidate, CRLX101, is a nanopharmaceutical formulation of camptothecin - a highly active anti-cancer agent, and highly toxic when delivered as a free compound. CRLX101 is entering randomized Phase II testing for the treatment of 3rd/4th line renal cell carcinoma in combination with Avastin. CRLX101 is also being developed for the treatment of recurrent ovarian carcinoma and rectal cancer in the neoadjuvant setting.

Investment Risks

Clinical. Drug development is an inherently risky business. Like all clinical trials, CRLX101 clinical development carries some risk of failure. CRLX101 may fail to maintain acceptable tolerability or to demonstrate meaningful enough efficacy to warrant further development through large Phase III trials or regulatory approval.

Regulatory and commercial. The ability of Cerulean or its potential partners to market its drugs depends upon those drugs obtaining approval from the FDA and foreign regulatory agencies. Failure to achieve approval or delays in the timelines to approval could negatively impact the company's share price.

Competitive. Oncology drug development is an increasingly competitive field and Cerulean faces considerable competition from companies with development-stage drug candidates, utilizing similar delivery formulation technology, as well as from companies with marketed products seeking to expand the number of indications approved for use. Some of these companies may possess greater R&D and commercial resources than Cerulean or its potential partners.

Financial. Following the IPO, we estimate that Cerulean will complete 1Q14 with approximately $56MM in cash and cash equivalents–adequate resources to support current trials, the launch of a randomized Phase II trial of CRLX101 plus Avastin in 3rd/4th-line RCC, and company operations into 2H15. In the event current dose-finding studies in ovarian and neoadjuvant rectal cancer yield positive data and Cerulean elects to further development in these indications (a likely scenario, in our view), we anticipate that Cerulean will seek additional equity financing in the form of a secondary offering during 2015, thereby exposing existing shareholders to some degree of dilution risk.

JMP FACTS AND DISCLOSURES

Analyst Certification:

The research analyst(s) who prepared this report does/do hereby certify that the views presented in this report are in accordance with my/our personal views on the securities and issuers discussed in this report. As mandated by SEC Regulation AC no part of my/our compensation was, is or will be directly or indirectly related to the specific views or recommendations expressed herein. This certification is made under the obligations set forth in SEC Regulation AC. Any other person or entity may not use it for any other purpose. This certification is made based on my/our analysis on the date of this report's publication. I/We assume no obligation to update this certification to reflect any facts,circumstances or events that may subsequently come to my/our attention. Signed Michael G. King

JMP Securities Disclosures:

JMP Securities currently makes a market in the securities of Cerulean Pharma Inc. and BIND Therapeutics, Inc.

JMP Securities was manager or co-manager of a public offering of securities for Cerulean Pharma Inc. (CERU) in the past 12 months, and received compensation for doing so.

JMP Securities expects to receive OR intends to seek compensation for investment banking services from Cerulean Pharma Inc. and BIND Therapeutics, Inc. in the next 3 months.

JMP Securities Investment Opinion Definitions:

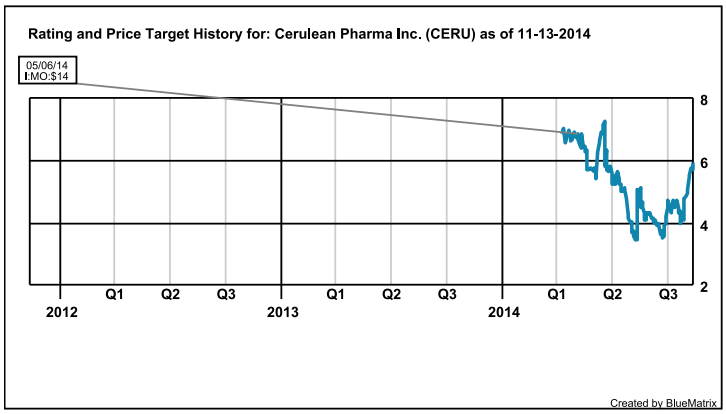
Market Outperform (MO): JMP Securities expects the stock price to outperform relevant market indices over the next 12 months.
Market Perform (MP): JMP Securities expects the stock price to perform in line with relevant market indices over the next 12 months.
Market Underperform (MU): JMP Securities expects the stock price to underperform relevant market indices over the next 12 months.

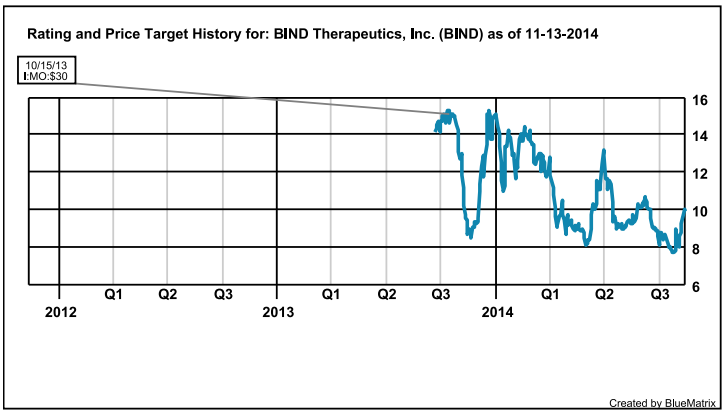
JMP Securities Research Ratings and Investment Banking Services: (as of November 14, 2014)

JMP Rating	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	# Co's Receiving IB Services in Past 12 Months	*% of Co's With This Rating*
MARKET OUTPERFORM	Buy	286	*61.11%*	Buy	286	*61.11%*	103	*36.01%*
MARKET PERFORM	Hold	141	*30.13%*	Hold	141	*30.13%*	15	*10.64%*
MARKET UNDERPERFORM	Sell	2	*0.43%*	Sell	2	*0.43%*	0	*0%*
COVERAGE IN TRANSITION		36	*7.69%*		36	*7.69%*	0	*0%*
TOTAL:		468	*100%*		468	*100%*	120	*25.64%*

Stock Price Chart of Rating and Target Price Changes:

Note: First annotation denotes initiation of coverage or 3 years, whichever is shorter. If no target price is listed, then the target price is N/A. In accordance with NASD Rule 2711, the chart(s) below reflect(s) price range and any changes to the rating or price target as of the end of the most recent calendar quarter. The action reflected in this note is not annotated in the stock price chart. Source: JMP Securities.





JMP Disclaimer:

JMP Securities LLC (the “Firm”) compensates research analysts, like other Firm employees, based on the Firm’s profitability, which includes revenues from the Firm’s institutional sales, trading, and investment banking departments as well as on the quality of the services and activities performed that are intended to benefit the Firm’s institutional clients. These data have been prepared by JMP Securities LLC for informational purposes only and are based on information available to the public from sources that we believe to be reliable, but we do not guarantee their accuracy or completeness. Any opinions and projections expressed herein reflect our judgment at this date and are subject to change without notice. These data are neither intended nor should be considered as an offer to sell or a solicitation or a basis for any contract for the purchase of any security or other financial product. JMP Securities LLC, its affiliates, JMP Group LLC, Harvest Capital Strategies LLC, and their respective partners, directors, officers, and associates may have a long or short position in, may act as a market maker for, or may purchase or sell a position in the securities mentioned herein. JMP Securities LLC or its affiliates may be performing, have performed, or seek to perform investment banking, advisory, or other services and may have acted as manager or co-manager for a public offering of securities for any company mentioned herein. The reader should assume that JMP Securities LLC will solicit business from the company covered in this report. Members of our Sales and Trading Department provide oral and/or written market opinions and trading strategies to our clients that reflect their personal opinions about stocks that are the subject of the firm's research reports. Our research analysts discuss trading strategies with clients that sometimes reflect short-term expectations for the price of the securities that are the subject of research reports. These trading strategies are distinct from the analysts' fundamental rating for the stock, which is based upon the analysts' view compared to other stocks under coverage for the relevant time period. JMP Securities LLC is a member of FINRA, NASDAQ, and SIPC.

Jeffrey H. Spurr
Director of Research
(415) 835-3903

RESEARCH PROFESSIONALS

FINANCIAL SERVICES

Alternative Asset Managers
Devin Ryan (212) 906-3578
Brian McKenna (212) 906-3545

Commercial & Specialty Finance
Christopher York (415) 835-8965
Hannah Kim, CFA (415) 835-8962

Consumer Finance
David M. Scharf (415) 835-8942
Douglas Greiner (212) 906-3525

Financial Processing & Outsourcing
David M. Scharf (415) 835-8942
Douglas Greiner (212) 906-3525

Insurance
Matthew J. Carletti (312) 768-1784
Christine Worley (312) 768-1786

Investment Banks & Brokers
Devin Ryan (212) 906-3578
Brian McKenna (212) 906-3545

Mortgage Operating Companies
REITs: Agency, Hybrid, & Commercial Mortgage
Steven C. DeLaney (404) 848-7773
Trevor Cranston, CFA (415) 869-4431
Charter Robinson (757) 613-8955
Benjamin Zucker (212) 906-3529

HEALTHCARE

Biotechnology
Liisa A. Bayko (312) 768-1785
Masha Chapman (415) 835-8944
Andrew Prigodich, PhD (312) 768-1788
Bhumika Sharma, PhD (312) 768-1795
Jason N. Butler, PhD (212) 906-3505
Caroline Palomeque (212) 906-3509
Michael G. King, Jr. (212) 906-3520
Bryan Czyzewski, PhD (212) 906-3577

Healthcare Services & Facilities
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Arthur Kwok (415) 835-8908

Life Science Tools & Diagnostics
J. T. Haresco, III, PhD (415) 869-4477
Marie T. Casey, PhD (415) 835-3955

Medical Devices
J. T. Haresco, III, PhD (415) 869-4477
Marie T. Casey, PhD (415) 835-3955

Medical Devices & Supplies
David Turkaly (212) 906-3563
John Gillings (212) 906-3564

Specialty Pharmaceuticals
Oren G. Livnat, CFA (212) 906-3566
Nazibur Rahman (212) 906-3519

REAL ESTATE

Housing & Land Development
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Bharathwajan Iyengar (415) 835-3902

Lodging & Leisure
Robert A. LaFleur (212) 906-3510
Whitney Stevenson (212) 906-3538

Property Services
Mitch Germain (212) 906-3546
Peter Lunenburg (212) 906-3537

REITs: Healthcare, Residential, & Specialty
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Arthur Kwok (415) 835-8908

REITs: Office, Industrial, & Diversified
Mitch Germain (212) 906-3546
Peter Lunenburg (212) 906-3537

Residential Services
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Bharathwajan Iyengar (415) 835-3902

TECHNOLOGY

Communications Infrastructure & Internet Security
Erik Suppiger (415) 835-3918
John Lucia (415) 835-3920

Internet & Digital Media
Ronald V. Josey III (212) 906-3528
Andrew Boone, CFA (415) 835-3957
Ignatius Njoku (415) 835-8960
Michael Wu (415) 835-8996

Software
Patrick Walravens (415) 835-8943
Peter Lowry (415) 869-4418
Mathew Spencer (415) 835-8930
Greg McDowell (415) 835-3934
Rishi Jaluria (415) 835-3961

Wireless & Cloud Computing Technologies
Alex Gauna (415) 835-8998

ADDITIONAL CONTACTS

Thomas R. Wright
Director of Equities
(212) 906-3599

Dan Wychulis
Director of Institutional Sales
(617) 235-8530

600 Montgomery Street, Suite 1100
San Francisco, CA 94111
www.jmpsecurities.com