

Five Prime Therapeutics

(FPRX-NASDAQ)

Stock Rating: Outperform**Industry Rating:** Outperform

May 8, 2014

Jim Birchenough, M.D.**415-591-2129**

BMO Capital Markets Corp

jim.birchenough@bmo.com

Chuck Whitesell / Nick Abbott, PhD / Yanan Zhu, PhD

BMO Capital Markets Corp.

212-885-4120 / 206-542-2492 / 415-591-2141

charles.whitesell@bmo.com / nick.abbott@bmo.com /

yanan.zhu@bmo.com

Broadening Pipeline, Lead FGFR Programs on Track

Event

FPRX reported 1Q14 operating results today and provided an update on key initiatives. Net loss per share of (\$0.46) was in line with consensus of (\$0.50). FPRX ended 1Q14 with \$128.9 mn in cash and expects to end 2014 with over \$100 mn in cash. With respect to the pipeline, FPRX noted that GSK's recent deal with NVS will see commercial oncology assets move to NVS, but that oncology development assets such as FGF ligand trap FP1039 will stay with GSK, although in the event that GSK seeks a commercial partner, NVS has right of first refusal. FPRX remains confident that GSK will more than meet the minimum obligations for FP1039 development with dose escalation in 1st and 2nd line NSCLC from the ongoing phase 1 trial expected by YE14. Moving to FPA008, FPRX's anti-CSF1 receptor antibody, the healthy volunteer MAD study is ongoing with data expected by YE14, by which time a study in RA patients is expected to have begun. Finally, FPRX noted that the FGFR2b antibody, FPA144 remains on track to enter the clinic before YE14, first being evaluated in unselected solid tumor patients before transitioning to gastric cancer.

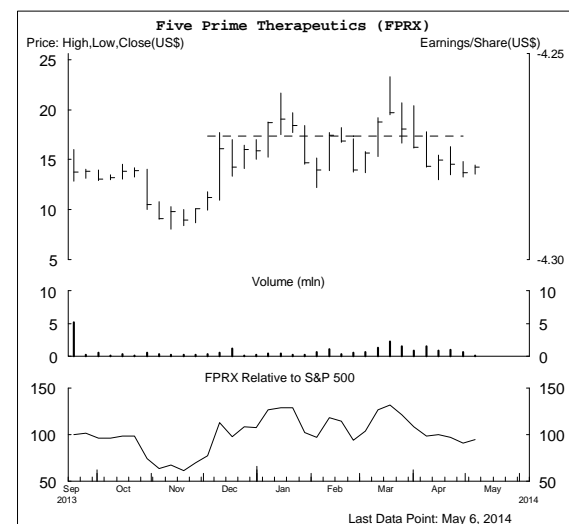
Impact & Analysis

We are maintaining our Outperform rating on shares of Five Prime following review of 1Q14 results. We continue to believe that FP-1039 and FPA144 in targeted cancer patients with FGFR amplification could drive significant value. With FPA008 entering phase 1, we also expect large pharma interest to emerge in 2015 as rheumatoid arthritis data become available. In addition, with further leverage of FPRX's extensive protein library and target discovery platform into immuno-oncology, we expect further upside potential as visibility emerges on novel immune checkpoint pathways with partner BMY.

Valuation & Recommendation

We arrive at our \$28 price target by applying a 20x multiple to 2020 EPS estimate of \$5.65 and discounting at 35%. We rate FPRX shares at Outperform.

Price (8-May) \$13.30 **52-Week High** \$23.33
Target Price \$28.00 **52-Week Low** \$8.02



(FY-Dec.)	2012A	2013A	2014E	2015E
EPS	- \$2.50	- \$5.23	- \$0.70↓	- \$1.23↓
P/E			na	na
Rev. (\$mm)	\$10	\$14	\$33	\$22
EV (\$mm)	na	\$210	\$210	\$210
EBITDA (\$mm)	-\$28	-\$29	-\$13	-\$24
EV/EBITDA	na	na	na	na
Quarterly EPS	Q1	Q2	Q3	Q4
2012A	NA	NA	NA	NA
2013A	-\$0.64	-\$0.64	-\$2.74	-\$0.43
2014E	-\$0.46a	\$0.09	\$0.09	-\$0.43↓
Dividend	\$0.00			0.0%
Book Value	\$3.84			3.5x
Shares O/S (mm)	18.8			\$250
Float O/S (mm)	9.0			\$120
Wkly Vol (000s)	756			\$11.7
Net Debt (\$mm)	-\$94			na
Yield				0.0%
Price/Book				3.5x
Mkt. Cap (mm)				\$250
Float Cap (mm)				\$120
Wkly \$ Vol (mm)				\$11.7
Next Rep. Date				na

Notes: Quarterly EPS may not sum due to share count. All values in US\$

First Call Mean Estimates: FIVE PRIME THERAPEUTICS INC (US\$) 2014E: -\$0.92; 2015E: -\$1.01

Changes

Annual EPS

2014E -\$0.63 to -\$0.70
 2015E -\$1.15 to -\$1.23

Quarterly EPS

Q4/14E -\$0.40 to -\$0.43

Target

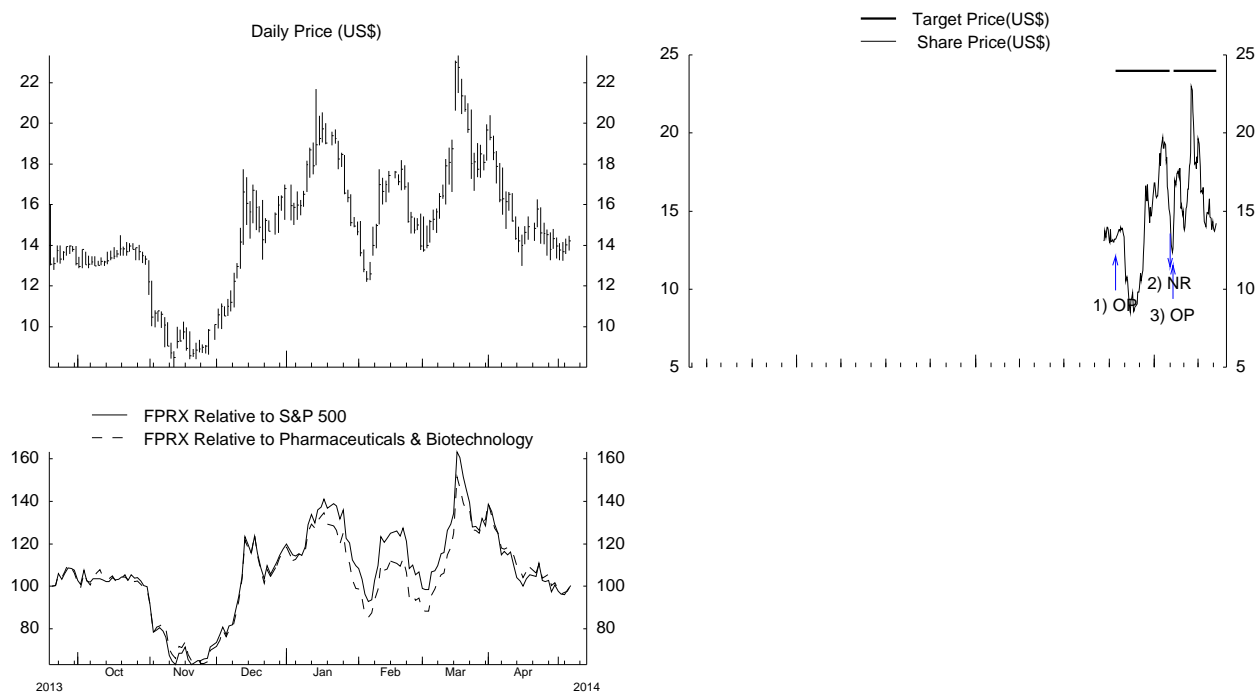
\$24.00 to \$28.00

Exhibit 1: FPRX Income Statement 2014E-2020E

INCOME STATEMENT (\$M)	1Q14A	2Q14E	3Q14E	4Q14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
REVENUES											
Product Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12.2	\$ 45.1	\$ 86.6	\$ 128.1	\$ 169.6
Collaboration Revenue	3.5	3.0	3.0	3.0	12.5	12.0	12.0	12.0	12.0	12.0	14.0
Other Revenue	-	10.0	10.0	-	20.0	10.0	-	-	-	-	-
TOTAL REVENUES	\$ 3.5	\$ 13.0	\$ 13.0	\$ 3.0	\$ 32.5	\$ 22.0	\$ 24.2	\$ 57.1	\$ 98.6	\$ 140.1	\$ 183.6
EXPENSES (GAAP)											
Cost of Goods Sold (COGS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.6	\$ 2.3	\$ 5.2	\$ 9.0	\$ 11.2
R&D Expense	8.9	8.6	8.6	8.6	34.7	34.8	35.2	35.6	37.0	45.0	56.3
SG&A Expense	3.3	2.7	2.7	2.5	11.2	10.8	11.2	11.7	13.0	18.0	20.3
Other	-	-	-	-	-	-	-	-	-	-	-
TOTAL EXPENSES	12.2	11.3	11.3	11.1	45.9	45.6	47.0	49.6	55.2	72.0	62.7
Operating Income	(8.7)	1.7	1.7	(8.1)	(13.4)	(23.6)	(22.8)	7.5	43.3	68.1	120.8
Depreciation and amortization	-	-	-	-	-	-	-	-	-	-	-
EBIT	(8.7)	1.7	1.7	(8.1)	(13.4)	(23.6)	(22.8)	7.5	43.3	68.1	120.8
Interest and other income	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5
Interest and other expense	-	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Other Income (Expense)	-	-	-	-	-	-	-	-	-	-	-
Interest and Other Income (Expense)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5
Pre-Tax Income	(8.6)	1.7	1.7	(8.1)	(13.2)	(23.5)	(22.7)	7.7	43.5	68.4	121.3
Income Taxes	-	-	-	-	-	-	-	-	-	-	-
Net Income (GAAP)	\$ (8.6)	\$ 1.7	\$ 1.7	\$ (8.1)	\$ (13.2)	\$ (23.5)	\$ (22.7)	\$ 7.7	\$ 43.5	\$ 68.4	\$ 121.3
EPS (GAAP) (basic)	\$ (0.46)	\$ 0.09	\$ 0.09	\$ (0.43)	\$ (0.70)	\$ (1.23)	\$ (1.12)	\$ 0.35	\$ 2.03	\$ 3.19	\$ 5.65
EPS (GAAP) (diluted)	\$ (0.46)	\$ 0.09	\$ 0.09	\$ (0.43)	\$ (0.70)	\$ (1.23)	\$ (1.12)	\$ 0.35	\$ 2.03	\$ 3.19	\$ 5.65
Total of Reconciliation Items	-	-	-	-	-	-	-	-	-	-	-
Net Income (Non-GAAP)	\$ (8.6)	\$ 1.7	\$ 1.7	\$ (8.1)	\$ (13.2)	\$ (23.5)	\$ (22.7)	\$ 7.7	\$ 43.5	\$ 68.4	\$ 121.3
Impact of Adjustments to EPS	-	-	-	-	-	-	-	-	-	-	-
EPS (Non-GAAP) (basic)	\$ (0.46)	\$ 0.09	\$ 0.09	\$ (0.43)	\$ (0.70)	\$ (1.23)	\$ (1.12)	\$ 0.35	\$ 2.03	\$ 3.19	\$ 5.65
EPS (Non-GAAP) (diluted)	\$ (0.46)	\$ 0.09	\$ 0.09	\$ (0.43)	\$ (0.70)	\$ (1.23)	\$ (1.12)	\$ 0.35	\$ 2.03	\$ 3.19	\$ 5.65
Weighted average shares outstanding (basic)	18.8	18.8	18.8	18.8	18.8	19.0	20.6	21.6	21.5	21.5	21.5
Weighted average shares outstanding (diluted)	18.8	18.8	18.8	18.8	18.8	19.0	20.6	21.6	21.5	21.5	21.5

Source: Company reports and BMO Capital Markets

Five Prime Therapeutics (FPRX)



Last Daily Data Point: May 6, 2014

IMPORTANT DISCLOSURES**Analyst's Certification**

I, Jim Birchenough, M.D., hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities or issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Analysts who prepared this report are compensated based upon (among other factors) the overall profitability of BMO Capital Markets and their affiliates, which includes the overall profitability of investment banking services. Compensation for research is based on effectiveness in generating new ideas and in communication of ideas to clients, performance of recommendations, accuracy of earnings estimates, and service to clients.

Analysts employed by BMO Nesbitt Burns Inc. and/or BMO Capital Markets Ltd. are not registered as research analysts with FINRA. These analysts may not be associated persons of BMO Capital Markets Corp. and therefore may not be subject to the NASD Rule 2711 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Company Specific Disclosure

Disclosure 1: BMO Capital Markets has undertaken an underwriting liability with respect to this issuer within the past 12 months.

Disclosure 2: BMO Capital Markets has provided investment banking services with respect to this issuer within the past 12 months.

Disclosure 3: BMO Capital Markets has managed or co-managed a public offering of securities with respect to this issuer within the past 12 months.

Disclosure 4: BMO Capital Markets or an affiliate has received compensation for investment banking services from this issuer within the past 12 months.

Disclosure 6: This issuer is a client (or was a client) of BMO NB, BMO Capital Markets Corp., BMO CM Ltd. or an affiliate within the past 12 months: Investment Banking Services.

Disclosure 9: BMO Capital Markets makes a market in this security.

Methodology and Risks to Price Target/Valuation

Methodology: We arrive at our price target by applying a 20x multiple to 2020 EPS estimate of \$5.65 and discounting at 35%.

Risks: There are a number of risks associated with investment in biotechnology companies. These risks include, but are not limited to, risk of clinical trial delay or failure, adverse regulatory decisions including product non-approval, unanticipated adverse effects of drugs which may result in removal from market, risk of manufacturing difficulties, capital market risk which may impair the ability to fund product discovery, research, regulatory filing, manufacture and/or commercialization, risk in attaining and retaining appropriate development or commercial partners, lower-than-expected product adoption, difficulties in gaining appropriate reimbursement for products from payors, unforeseen generic and branded competition, risk to patents being invalidated, and failure to meet earnings and revenue expectations.

Distribution of Ratings (March 31, 2014)

Rating Category	BMO Rating	BMOCM US Universe*	BMOCM US IB Clients**	BMOCM US IB Clients***	BMOCM Universe****	BMOCM IB Clients*****	Starmine Universe
Buy	Outperform	42.0%	21.5%	60.7%	40.8%	53.6%	53.6%
Hold	Market Perform	52.8%	10.8%	38.2%	52.8%	43.8%	40.8%
Sell	Underperform	5.2%	3.2%	1.1%	6.3%	2.7%	5.6%

* Reflects rating distribution of all companies covered by BMO Capital Markets Corp. equity research analysts.

** Reflects rating distribution of all companies from which BMO Capital Markets Corp. has received compensation for Investment Banking services as percentage within ratings category.

*** Reflects rating distribution of all companies from which BMO Capital Markets Corp. has received compensation for Investment Banking services as percentage of Investment Banking clients.

**** Reflects rating distribution of all companies covered by BMO Capital Markets equity research analysts.

***** Reflects rating distribution of all companies from which BMO Capital Markets has received compensation for Investment Banking services as percentage of Investment Banking clients.

Rating and Sector Key (as of April 5, 2013):

We use the following ratings system definitions:

OP = Outperform - Forecast to outperform the analyst's coverage universe on a total return basis

Mkt = Market Perform - Forecast to perform roughly in line with the analyst's coverage universe on a total return basis

Und = Underperform - Forecast to underperform the analyst's coverage universe on a total return basis on a total return basis

(S) = speculative investment;

NR = No rating at this time;

R = Restricted – Dissemination of research is currently restricted.

BMO Capital Markets' seven Top 15 lists guide investors to our best ideas according to different objectives (CDN Large Cap, CDN Small Cap, US Large Cap, US Small cap, Income, CDN Quant, and US Quant have replaced the Top Pick rating).

Prior BMO Capital Markets Ratings System (January 4, 2010–April 4, 2013):

http://researchglobal.bmocapitalmarkets.com/documents/2013/prior_rating_system.pdf

Other Important Disclosures

For Other Important Disclosures on the stocks discussed in this report, please go to

http://researchglobal.bmocapitalmarkets.com/Public/Company_Disclosure_Public.aspx or write to Editorial Department, BMO Capital Markets, 3 Times Square, New York, NY 10036 or Editorial Department, BMO Capital Markets, 1 First Canadian Place, Toronto, Ontario, M5X 1H3.

Dissemination of Research

BMO Capital Markets Equity Research is available via our website

<https://research-ca.bmocapitalmarkets.com/Public/Secure/Login.aspx?ReturnUrl=/Member/Home/ResearchHome.aspx>. Institutional clients may also receive our research via Thomson Reuters, Bloomberg, FactSet, and Capital IQ. Research reports and other commentary are required to be simultaneously disseminated internally and externally to our clients.

General Disclaimer

BMO Capital Markets” is a trade name used by the BMO Investment Banking Group, which includes the wholesale arm of Bank of Montreal and its subsidiaries BMO Nesbitt Burns Inc., BMO Capital Markets Ltd. in the U.K. and BMO Capital Markets Corp. in the U.S. BMO Nesbitt Burns Inc., BMO Capital Markets Ltd. and BMO Capital Markets Corp are affiliates. Bank of Montreal or its subsidiaries (“BMO Financial Group”) has lending arrangements with, or provide other remunerated services to, many issuers covered by BMO Capital Markets. The opinions, estimates and projections contained in this report are those of BMO Capital Markets as of the date of this report and are subject to change without notice. BMO Capital Markets endeavours to ensure that the contents have been compiled or derived from sources that we believe are reliable and contain information and opinions that are accurate and complete. However, BMO Capital Markets makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. Information may be available to BMO Capital Markets or its affiliates that is not reflected in this report. The information in this report is not intended to be used as the primary basis of investment decisions, and because of individual client objectives, should not be construed as advice designed to meet the particular investment needs of any investor. This material is for information purposes only and is not an offer to sell or the solicitation of an offer to buy any security. BMO Capital Markets or its affiliates will buy from or sell to customers the securities of issuers mentioned in this report on a principal basis. BMO Capital Markets or its affiliates, officers, directors or employees have a long or short position in many of the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon. The reader should assume that BMO Capital Markets or its affiliates may have a conflict of interest and should not rely solely on this report in evaluating whether or not to buy or sell securities of issuers discussed herein.

Additional Matters

To Canadian Residents: BMO Nesbitt Burns Inc. furnishes this report to Canadian residents and accepts responsibility for the contents herein subject to the terms set out above. Any Canadian person wishing to effect transactions in any of the securities included in this report should do so through BMO Nesbitt Burns Inc.

The following applies if this research was prepared in whole or in part by Andrew Breichmanas, Iain Reid, Tony Robson, David Round, Edward Sterck or Brendan Warn: This research is not prepared subject to Canadian disclosure requirements. This research is prepared by BMO Capital Markets Limited and subject to the regulations of the Financial Conduct Authority (FCA) in the United Kingdom. FCA regulations require that a firm providing research disclose its ownership interest in the issuer that is the subject of the research if it and its affiliates own 5% or more of the equity of the issuer. Canadian regulations require that a firm providing research disclose its ownership interest in the issuer that is the subject of the research if it and its affiliates own 1% or more of the equity of the issuer that is the subject of the research. Therefore BMO Capital Markets Limited will only disclose its and its affiliates ownership interest in the subject issuer if such ownership exceeds 5% of the equity of the issuer.

To U.S. Residents: BMO Capital Markets Corp. furnishes this report to U.S. residents and accepts responsibility for the contents herein, except to the extent that it refers to securities of Bank of Montreal. Any U.S. person wishing to effect transactions in any security discussed herein should do so through BMO Capital Markets Corp.

To U.K. Residents: In the UK this document is published by BMO Capital Markets Limited which is authorised and regulated by the Financial Conduct Authority. The contents hereof are intended solely for the use of, and may only be issued or passed on to, (I) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the “Order”) or (II) high net worth entities falling within Article 49(2)(a) to (d) of the Order (all such persons together referred to as “relevant persons”). The contents hereof are not intended for the use of and may not be issued or passed on to, retail clients.

Unauthorized reproduction, distribution, transmission or publication without the prior written consent of BMO Capital Markets is strictly prohibited.

[Click here](#) for data vendor disclosures when referenced within a BMO Capital Markets research document.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

BMO Financial Group (NYSE, TSX: BMO) is an integrated financial services provider offering a range of retail banking, wealth management, and investment and corporate banking products. BMO serves Canadian retail clients through BMO Bank of Montreal and BMO Nesbitt Burns. In the United States, personal and commercial banking clients are served by BMO Harris Bank N.A. (Member FDIC). Investment and corporate banking services are provided in Canada and the US through BMO Capital Markets.

BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A. (Member FDIC), BMO Ireland Plc, and Bank of Montreal (China) Co. Ltd. and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member SIPC) and BMO Capital Markets GKST Inc. (Member SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Canadian Investor Protection Fund) in Canada, Europe and Asia, BMO Capital Markets Limited in Europe and Australia, and BMO Advisors Private Limited in India.

Nesbitt Burns[®] is a registered trademark of BMO Nesbitt Burns Corporation Limited, used under license. "BMO Capital Markets" is a trademark of Bank of Montreal, used under license. "BMO (M-Bar roundel symbol)" is a registered trademark of Bank of Montreal, used under license.

® Registered trademark of Bank of Montreal in the United States, Canada and elsewhere.
TM Trademark Bank of Montreal

©COPYRIGHT 2014 BMO CAPITAL MARKETS CORP

A member of BMO  Financial Group
