

Five Prime Therapeutics

(FPRX-NASDAQ)

Stock Rating: Outperform
Stock Price: \$22.99
Target Price: \$24.00

Monday, March 17, 2014
Biotechnology

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Immuno-Oncology Deal Provides Validation and Support

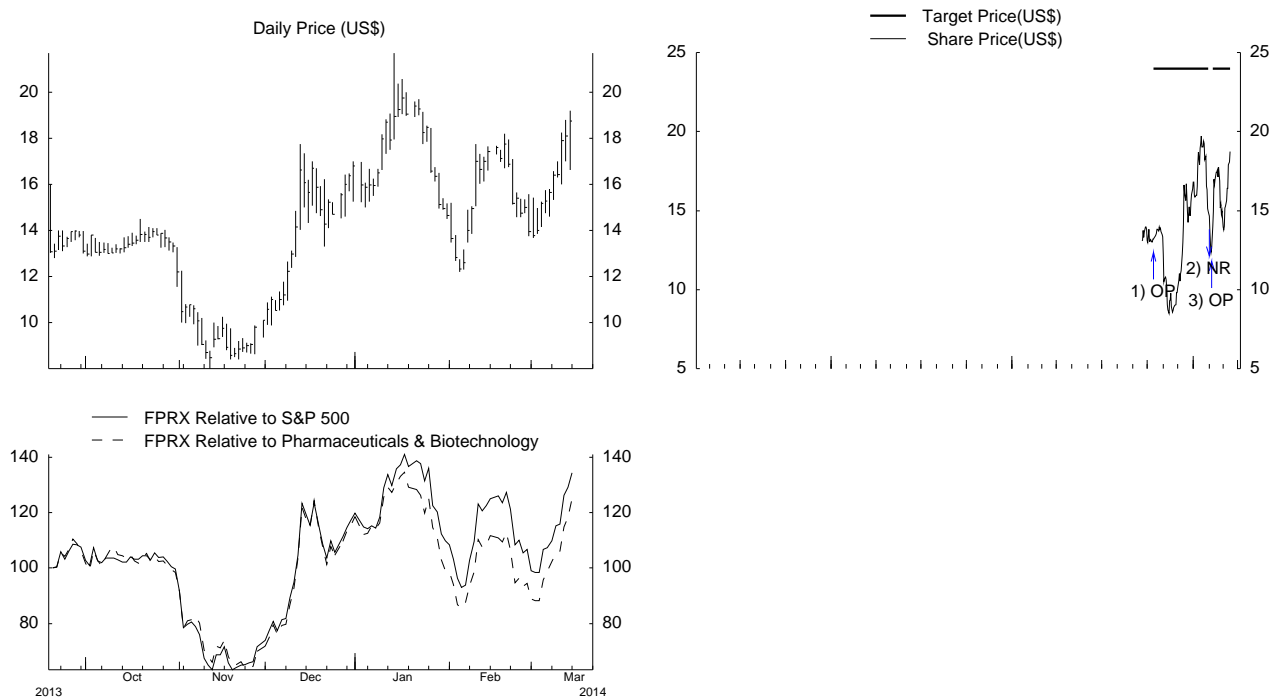
Five Prime Therapeutics (FPRX) and Bristol-Myers Squibb (BMJ, \$54.72, Outperform, by Alex Arfaei) announced earlier today a collaboration agreement for the discovery, development, and commercialization of immuno-oncology therapies directed toward targets identified in two undisclosed immune checkpoint pathways using Five Prime's proprietary target discovery platform. Drug candidates developed against these targets could be studied as single agents or in combination with BMJ's immuno-oncology therapies. Under the agreement, BMJ will obtain exclusive, worldwide rights to develop and commercialize products directed toward targets identified by Five Prime. BMJ will make a \$20 million upfront payment, provide \$9.5 million in research funding over the research term, and acquire 4.9% of Five Prime's outstanding common stock for approximately \$21 mn (at about a 30% premium). Future milestones for development, regulatory and sales total up to \$300 million per collaboration target, and Five Prime will be eligible for tiered mid-single-digit rising to low-double-digit royalty payments on net sales of each product commercialized by BMJ.

Our View:

- The collaboration agreement with one of the leaders in the immuno-oncology (IO) space provides substantial validation and support for realization of value from FPRX's protein discovery platform.
- With only partial success with checkpoint inhibitors and substantial room for improvement, we believe that optimal combination regimens have yet to be identified and will require substantial investment by large companies like BMJ.
- We are optimistic that FPRX will provide BMJ with the opportunity to develop more effective checkpoint inhibitors and to identify optimal combinations with its own immunotherapy products.
- We continue to see significant upside potential for FPRX shares as the company moves to the forefront of IO product development.

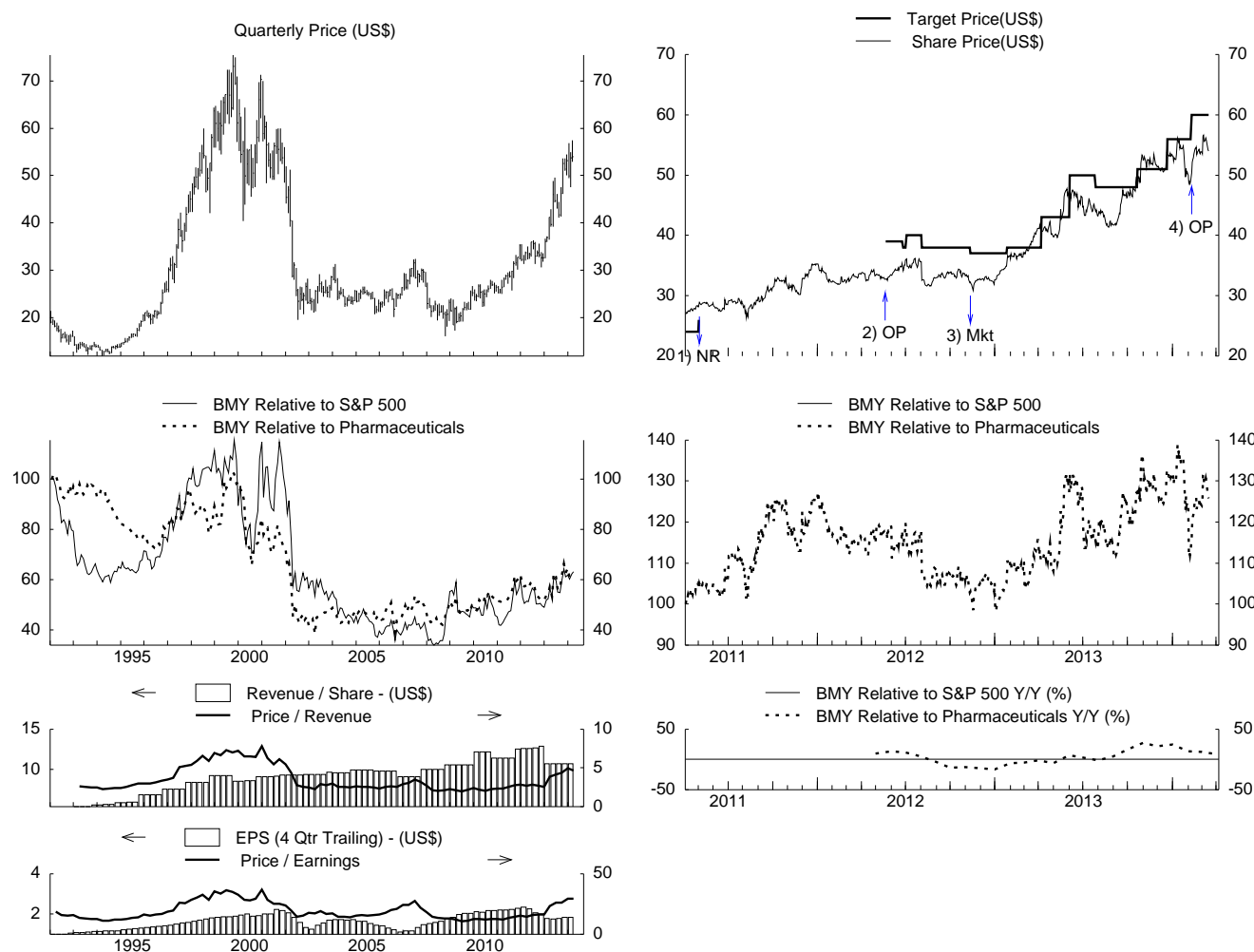
Please refer to pages 2 to 6 for Disclosure Statements, including the Analyst's Certification.

Five Prime Therapeutics (FPRX)



Last Daily Data Point: March 14, 2014

Bristol-Myers Squibb Company (BMY)



FYE (Dec.)	EPS US\$	P/E Hi - Lo	DPS US\$	Yield% Hi - Lo	Payout %	BV US\$	P/B Hi - Lo	ROE %
1992	1.02	21.0 14.0	0.49	3.5 2.3	48	2.9	7.4 4.9	38
1993	1.10	15.7 11.0	0.70	5.7 4.0	63	2.9	5.9 4.2	40
1994	1.15	12.6 10.3	0.70	5.9 4.9	61	2.8	5.2 4.2	40
1995	1.28	16.2 10.6	0.71	5.3 3.4	56	2.9	7.2 4.7	45
1996	1.40	19.8 13.3	0.72	3.9 2.6	52	3.3	8.4 5.7	45
1997	1.57	29.8 16.1	0.74	2.9 1.6	47	3.6	12.9 7.0	45
1998	1.79	36.0 23.5	0.82	1.9 1.3	46	3.8	>15 11.0	48
1999	1.87	40.4 29.2	0.93	1.7 1.2	50	4.4	>15 12.5	46
2000	1.92	37.1 21.0	1.05	2.6 1.5	55	4.7	>15 8.6	42
2001	2.17	32.9 22.3	1.12	2.3 1.6	52	5.6	12.8 8.7	42
2002	1.33	42.1 14.7	1.12	5.7 2.0	84	4.6	12.1 4.2	26
2003	1.68	17.4 12.5	1.12	5.3 3.8	67	5.0	5.8 4.2	35
2004	1.70	18.4 13.1	1.12	5.0 3.6	66	5.2	6.0 4.2	33
2005	1.43	18.6 14.5	1.12	5.4 4.2	78	5.7	4.6 3.6	26
2006	1.09	24.2 18.4	1.12	5.6 4.2	>100	5.1	5.2 3.9	20
2007	1.46	22.2 16.8	1.24	5.0 3.8	85	5.4	6.0 4.6	28
2008	1.77	16.7 9.0	1.24	7.8 4.2	70	6.2	4.8 2.6	31
2009	2.03	13.1 8.5	1.28	7.4 4.8	63	8.7	3.1 2.0	27
2010	2.16	13.0 10.3	1.32	5.9 4.7	61	9.3	3.0 2.4	24
2011	2.28	15.5 11.0	1.36	5.4 3.8	60	9.5	3.7 2.6	24
2012	1.99	18.3 15.4	1.40	4.6 3.9	70	8.4	4.3 3.7	22
2013	1.82	29.9 17.5	1.44	4.5 2.6	79	8.4	6.5 3.8	22
Range*		42.1 8.5		7.8 1.2			>15 2.0	
Current*	1.82	29.5	1.44	2.7	79	8.7	6.2	21
Growth(%):								
5 Year:	0.6		3.0			7.2		
10 Year:	0.8		2.5			5.6		
20 Year:	2.5		3.7			5.7		

* Current EPS is the 4 Quarter Trailing to Q4/2013.

* Valuation metrics are based on high and low for the fiscal year.

* Range indicates the valuation range for the period presented above.

BMY - Rating as of 5-Apr-11 = Mkt

Date	Rating Change	Share Price
1 3-May-11	Mkt to NR	\$28.83
2 18-May-12	NR to OP	\$32.72
3 9-Nov-12	OP to Mkt	\$32.23
4 7-Feb-14	Mkt to OP	\$50.33

Last Price (March 14, 2014): \$54.00

Sources: IHS Global Insight, Thomson Reuters, BMO Capital Markets.

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.

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Methodology and Risks to Our Price Target

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.

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Methodology and Risks to Our Price Target

Methodology: DCF: Free Cash Flow To Equity.

Risks: Uncertainty of Phase 3 Pipeline.

Distribution of Ratings (December 31, 2013)

Rating Category	BMO Rating	BMOCM US Universe*	BMOCM US IB Clients**	BMOCM US IB Clients***	BMOCM Universe****	BMOCM IB Clients*****	Starmine Universe
Buy	Outperform	38.0%	20.4%	49.0%	38.8%	50.4%	52.5%
Hold	Market Perform	56.1%	13.8%	49.0%	54.0%	46.5%	41.8%
Sell	Underperform	5.8%	5.6%	2.0%	7.2%	3.1%	5.7%

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

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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;
 (S) = Speculative investment;
 NR = No rating at this time; and
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http://researchglobal.bmocapitalmarkets.com/documents/2013/prior_rating_system.pdf

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