



Five Prime Therapeutics

(FPRX-NASDAQ)

Stock Rating: Outperform US\$14.66 Target Price: US\$28.00

July 15, 2014 Biotechnology

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Publication Highlights Validation of CSF1 Targeting in Lupus Nephritis

An international team of researchers has published data that may help identify a second indication for FPA008, Five Prime Therapeutics (FPRX's) monoclonal antibody targeting colony stimulating factor 1 receptor (CSF-1R). The *Journal of the American Society of Nephrology* published, ahead of print, a manuscript describing CSF-1 as a potential biomarker for lupus nephritis (LN). CSF-1 is produced by the kidney at the onset of LN, and the researchers show that CSF-1 levels in serum or urine correlate with CSF-1 levels in the kidney, increased macrophage number and activity, and kidney disease activity. Importantly, rises in CSF-1 predict recurrence of LN prior to evidence of kidney dysfunction and associated serum markers. We have confirmed with FPRX management that LN is one of a limited number of indications that the company is considering as a second indication, after rheumatoid arthritis (RA), for FPA008. Safety and initial efficacy data from the first in man trial of FPA008 in both healthy volunteers and RA patients is expected by year-end 2014.

Our View:

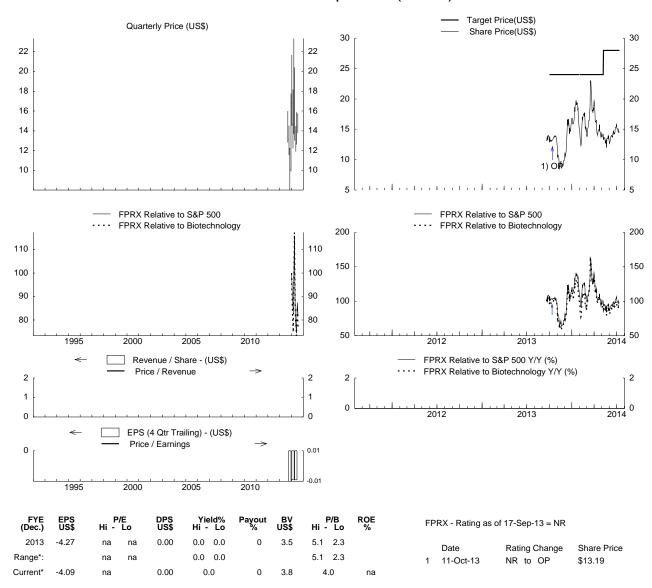
- While the primary focus remains on FGF Ligand Trap FP-1039 in FGF over-expressing tumors, we believe that targeted development of FPA008 in multiple immune disorders should emerge as a value driver for FPRX over the next 12 months.
- Evidence of a potential central role of CSF-1 in development of LN provides validation for FPRX development of FPA008 to inhibit CSF-1.
- With its focus on oncology and immunology drug development and the broadest protein library in the biopharmaceutical industry, we expect continued productivity from FPRX's platform beyond FP-1039 and FPA008.

Please refer to pages 2 to 5 for Important Disclosures, including the Analyst's Certification.





Five Prime Therapeutics (FPRX)



Flash

Last Price (July 11, 2014): \$14.59 Sources: IHS Global Insight, Thomson Reuters, BMO Capital Markets.

^{*} Current EPS is the 4 Quarter Trailing to Q1/2014.
* Valuation metrics are based on high and low for the fiscal year.
* Range indicates the valuation range for the period presented above.





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

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Rating Category	BMO Rating	BMOCM US Universe*	BMOCM US IB Clients**	BMOCM US IB Clients***	BMOCM Universe****	BMOCM IB Clients****	Starmine Universe
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Hold	Market Perform	50.9%	8.4%	31.3%	51.2%	39.9%	39.5%
Sell	Underperform	5.0%	3.4%	1.3%	5.5%	1.5%	5.1%

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