

Fate Therapeutics

(FATE-NASDAQ)

Stock Rating: Outperform
Stock Price: US\$6.75
Target Price: US\$15.00

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Biotechnology

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Visibility on PROHEMA for Metabolic Disorders and iPSC for Immune Oncology/Other

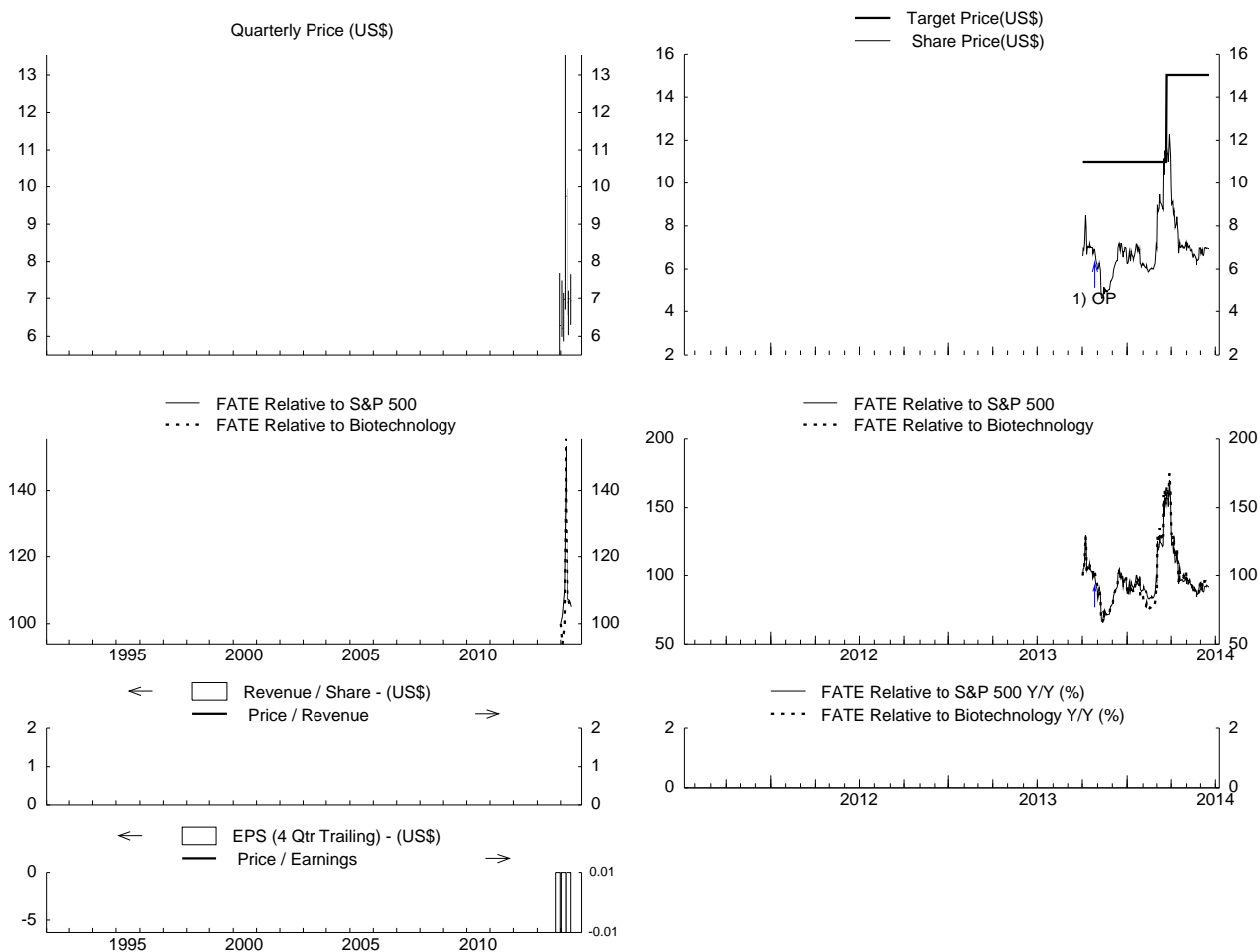
The BMO Capital Markets biotech team met with Fate Therapeutics (FATE) management following their participation at the recent International Cord Blood Symposium. The focus of our call was on pre-clinical data supporting the use of ProHema in pediatric metabolic disorders and separately the potential applications for the ability to generate induced-pluripotent stem cells (iPSC) from small numbers of cells. FATE noted that lethally irradiated mice receiving ProHema showed an increased number of cells trafficking to the brain by day-8 post-transplant versus mice receiving an unmodified human cord blood transplant. Importantly, the increase in cell number led to an increase in enzyme production that may have implications for the forthcoming pediatric metabolic disease program where the ability to accelerate CNS benefit from a transplant beyond the expected three to four months could have significant clinical utility. In terms of the iPSC program, FATE has developed the ability to produce iPSC from a small numbers of cells, potentially sourced from the 1mL segment typically attached to each unit of banked cord blood. Use of small aliquots of cord blood has the potential advantage of having already been screened and with 600,000 units banked, their use for iPSC generation is inherently more efficient than starting with fibroblasts from healthy volunteers.

Our View:

- Enhanced trafficking of FATE optimized stem cells in PROHEMA could gain clinical validation in pediatric metabolic disorders with a pediatric IND currently under review by FDA and phase 1 initiation expected by YE14.
- With the first clinical trial of an iPSC-derived product ongoing in Japan, FATE's technology could have evidence of clinical utility in the short term, with focus here on AMD and iPS derived retinal epithelial cells.
- The ability to re-program iPSC into any cell type in the hematopoietic lineage has tremendous applicability in oncology as a source of activated NK cells, dendritic or CAR-T cells for example.
- Further the technology could be used on other cell sources such as patient derived T cells, where iPSC could be developed from the effector T cell of choice and then clonally expanded and banked for use as tumor infiltrating lymphocyte (TIL) therapy.

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

Fate Therapeutics (FATE)



FYE (Dec.)	EPS US\$	P/E Hi - Lo	DPS US\$	Yield% Hi - Lo	Payout %	BV US\$	P/B Hi - Lo	ROE %
2013	-3.38	na na	0.00	0.0 0.0	0	2.5	3.7 1.7	
Range*		na na		0.0 0.0			3.7 1.7	
Current*	-6.24	na	0.00	0.0	0	-49.7	-0.1	13

FATE - Rating as of 30-Sep-13 = NR

Date	Rating Change	Share Price
1 25-Oct-13	NR to OP	\$6.87

* 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.

Last Price (June 17, 2014): \$6.94
 Sources: IHS Global Insight, Thomson Reuters, BMO Capital Markets.

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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.

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(S) = speculative investment;

NR = No rating at this time;

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