

Fate Therapeutics (FATE)

Q4:13 Earnings, Pediatric Studies of ProHema in Blood Cancer and Rare Metabolic Diseases on Track, Reiterate OUTPERFORM

- FATE reported Q4:13 EPS of (\$0.29), missing our (\$0.28) estimate by a penny. The company ended the quarter with \$54.0M in cash.
- The clinical studies of ProHema in pediatric patients undergoing hematopoietic stem cell transplantation (HSCT) for hematological malignancies and lysosomal storage disorders (LSD) are on track to begin next half. The pediatric formulation of ProHema is reduced in volume, but is otherwise identical.
- Recall that last week the company initiated the PUMA trial incorporating the improved formulation of ProHema. The primary endpoint of the PUMA study is cumulative incidence of neutrophil engraftment as compared to control median time to engraftment.
- FATE plans to amend the existing IND for ProHema in Q2:14 to support expansion into the pediatric hematolymphoid malignancy patient population, with a study expected to begin enrollment in Q3:14. If results from this study and PUMA are positive, a single Phase III trial enrolling both adult and pediatric patients could be sufficient for approval in both age groups considering the curative potential of HSCT.
- The IND for the LSD setting is expected to be filed mid-2014, with an open-label study expected to follow in H2:14 in patients with Hurler syndrome, Krabbe disease and certain other leukodystrophies. In animal models, ProHema increased the engraftment of donor HSCs in the brain, differentiating it from enzyme replacement therapy (ERT) which is typically impeded by the blood-brain barrier. External studies have also demonstrated that HSCT can produce high rates of engraftment and survival in LSD patients.
- We expect the next major catalyst for FATE to be the interim update from the PUMA trial in H2:14, which should provide a preliminary sign of efficacy and safety for the improved ProHema formulation.

Reiterate OUTPERFORM and \$14 price target. We arrive at our \$14 PT by applying a 6x multiple to 2019 revenues discounted by 35% annually.

| FYE Dec | 2013A | 2014E | | | 2015E | | |
|---------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| REV | ACTUAL | CURR. | PREV. | CONS. | CURR. | PREV. | CONS. |
| Q1 Mar | -- | 0.0E | | \$0.0E | 0.0E | | \$0.0E |
| Q2 Jun | 0.8A | 0.0E | | 0.0E | 0.0E | | 0.0E |
| Q3 Sep | 0.2A | 0.0E | | 0.0E | 0.0E | | 0.0E |
| Q4 Dec | 0.0A | 0.0E | | 0.0E | 0.0E | | 0.0E |
| Year* | 1.0A | 0.0E | | \$0.0E | 0.0E | | \$16.7E |
| Change | -- | -100% | | | -- | | |
| EPS | ACTUAL | CURR. | PREV. | CONS. | CURR. | PREV. | CONS. |
| Q1 Mar | -- | (\$0.27)E | (\$0.29)E | (\$0.37)E | (\$0.29)E | (\$0.32)E | N/AE |
| Q2 Jun | (\$7.41)A | (\$0.30)E | (\$0.32)E | (\$0.38)E | (\$0.30)E | (\$0.33)E | N/AE |
| Q3 Sep | (\$4.81)A | (\$0.32)E | (\$0.34)E | (\$0.38)E | (\$0.31)E | (\$0.33)E | N/AE |
| Q4 Dec | (\$0.29)A | (\$0.29)E | (\$0.32)E | (\$0.38)E | (\$0.30)E | (\$0.32)E | N/AE |
| Year* | (\$12.50)A | (\$1.18)E | (\$1.27)E | (\$1.37)E | (\$1.19)E | (\$1.30)E | (\$0.89)E |
| P/E | -- | -- | | | -- | | |
| Change | -- | 91% | | | -1% | | |

Consensus estimates are from Thomson First Call.

* Numbers may not add up due to rounding.

March 18, 2014

Price
\$11.12

Rating
OUTPERFORM

12-Month Price Target
\$14

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Company Information

| | |
|----------------------|------------------|
| Shares Outst (M) | 20.4 |
| Market Cap (M) | \$227.1 |
| 52-Wk Range | \$4.30 - \$12.81 |
| Book Value/sh | \$N/A |
| Cash/sh | \$2.65 |
| Enterprise Value (M) | \$173.1 |
| LT Debt/Cap % | 0% |
| Cash Burn (M) | \$26.0 |

Company Description

Fate Therapeutics, Inc., is based in San Diego, California, and is focused on modulating the activity of adult stem cells used in stem cell transplants for the



Source: Thomson Reuters

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Risks to the achievement of our price target include failure to gain approval for ProHema, failure to achieve sales estimates for ProHema and failure to achieve earnings estimates.

Investment Thesis

Fate Therapeutics is a cell therapy company developing two product platforms that modulate the activity of adult stem cells for the treatment of rare diseases. One platform focuses on the *ex vivo* optimization of hematopoietic stem cells (HSC), and the other focuses on the *in vivo* activation of satellite stem cells (SSC). ProHema, the lead product from the HSC platform, is derived from modified umbilical cord blood (UCB) and is in the Phase II PUMA trial in adult patients with hematological malignancies. ProHema is also set to enter the clinic for pediatric hematological malignancies and lysosomal storage disorders (LSD) in H2:14. Fate's SSC platform is initially focused on analogs of Wnt7a proteins, which are in preclinical testing for muscular dystrophies and neuromuscular disorders.

3/17/2014

Ticker: (FATE:Nasdaq)

Fate Therapeutics, Inc

Wedbush PacGrow Life Sciences

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| | 2012A | 2013A | Q1 | Q2 | Q3 | Q4 | 2014E | 2015E | 2016E | 2017E | 2018E | 2019E |
|--------------------------------------|-----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|
| Revenues: | | | | | | | | | | | | |
| US Product Sales | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$43,180 | \$181,224 |
| ex-US Product Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27,896 | 198,672 |
| Grant Revenue | 2,670 | 971 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Revenues | 2,670 | 971 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71,076 | 379,896 |
| Cost and Expenses: | | | | | | | | | | | | |
| Cost of Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,108 | 37,990 |
| R&D | 11,999 | 12,007 | 3,789 | 4,357 | 4,575 | 4,804 | 17,524 | 20,195 | 23,532 | 26,570 | 28,761 | 31,131 |
| SG&A | 4,228 | 6,639 | 1,908 | 1,947 | 1,986 | 2,025 | 7,866 | 8,450 | 8,815 | 9,403 | 40,395 | 96,857 |
| Total Operating Expenses | 16,227 | 18,646 | 5,697 | 6,304 | 6,560 | 6,829 | 25,390 | 28,645 | 32,346 | 35,973 | 76,263 | 165,978 |
| Operating Income (Loss) | (13,557) | (17,675) | (5,697) | (6,304) | (6,560) | (6,829) | (25,390) | (28,645) | (32,346) | (35,973) | (5,187) | 213,918 |
| Net Interest Income (Expense) | (486) | (562) | 446 | 365 | 309 | 258 | 1,379 | 1,584 | 1,828 | 769 | 730 | 2,743 |
| Other non-operating Income (Expense) | (196) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Income Before Income Taxes | (14,239) | (18,237) | (5,251) | (5,938) | (6,251) | (6,571) | (24,011) | (27,061) | (30,519) | (35,205) | (4,457) | 216,661 |
| Provision for Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,155 | 11,483 |
| Net Income (Loss) | (14,239) | (18,237) | (5,251) | (5,938) | (6,251) | (6,571) | (24,011) | (27,061) | (30,519) | (35,205) | (5,612) | 205,178 |
| Non-GAAP EPS | (13.21) | (1.05) | (0.26) | (0.29) | (0.30) | (0.29) | (1.07) | (1.13) | (1.27) | (1.39) | (0.25) | 7.99 |
| GAAP EPS | (13.06) | (12.50) | (0.27) | (0.30) | (0.32) | (0.29) | (1.18) | (1.19) | (1.28) | (1.46) | (0.24) | 8.02 |
| Total Shares Outstanding | 1,090 | 20,425 | 20,450 | 20,475 | 20,500 | 23,000 | 23,000 | 24,540 | 24,560 | 25,825 | 25,598 | 25,598 |
| Cash Burn | (13,274) | (17,834) | (5,697) | (7,195) | (6,462) | (6,671) | (26,024) | (28,378) | (32,042) | (35,675) | (9,023) | 198,442 |
| Cash Balance | 9,087 | 54,036 | 44,302 | 37,473 | 31,320 | 57,811 | 57,811 | 66,269 | 36,054 | 36,399 | 26,595 | 215,544 |

Analyst Biography

David Nierengarten, Ph.D.

David is an Analyst covering stocks in the Biotechnology/Biopharmaceuticals/BioDefense sector. His prior sell-side research experience at Robert W. Baird & Co. covered biotechnology companies of all market capitalizations, with a focus on oncology and rare diseases.

David received his B.S. (Biochemistry) from the University of Wisconsin-Madison and Ph.D. (Molecular and Cell Biology) from the University of California-Berkeley.

David's Edge: David's early stage venture capital investing experience gives him a balanced perspective on developmental-stage biotechnology companies and their ultimate risk/reward potential. His experience on the other side of that equation in a clinical-stage, venture backed biotechnology company provides him with insights into corporate operations. The combination of experiences creates a focus on value creation in this event-driven space.

Analyst Certification

I, David M. Nierengarten, Ph.D., Gregory R. Wade, Ph.D., Christopher N. Marai, Ph.D., Dilip Joseph, certify that the views expressed in this report accurately reflect my personal opinion and that I have not and will not, directly or indirectly, receive compensation or other payments in connection with my specific recommendations or views contained in this report.

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Underperform: Expect the total return of the stock to underperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

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| Rating Distribution (as of December 31, 2013) | Investment Banking Relationships (as of December 31, 2013) |
|--|---|
| Outperform: 54% | Outperform: 18% |
| Neutral: 43% | Neutral: 2% |
| Underperform: 3% | Underperform: 0% |

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| Company | Disclosure |
|-------------------|------------|
| Fate Therapeutics | 1,3,4,5 |

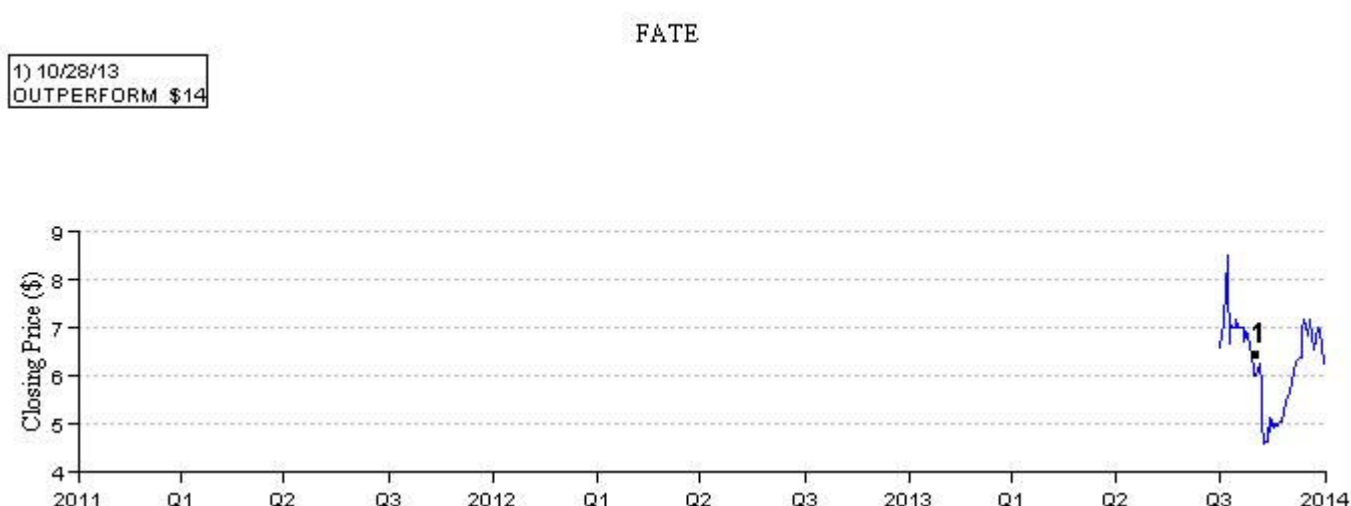
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