Healthcare

June 1, 2018

AzurRx BioPharma, Inc. (AZRX) Rating: Buy

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Experienced Chief Medical Officer Appointed; Reiterate Buy

| Stock Data | | | | 05/31/2018 | | | | |
|------------------|-----------|--------|--------|------------|--|--|--|--|
| Price | | | | \$2.43 | | | | |
| Exchange | | NASDAQ | | | | | | |
| Price Target | | | \$6.00 | | | | | |
| 52-Week High | | | \$5.25 | | | | | |
| 52-Week Low | | | \$2.25 | | | | | |
| Enterprise Valu | ıe (M) | | | \$30.8 | | | | |
| Market Cap (M |) | | | \$41 | | | | |
| Public Market F | Float (M) | | | 5.7 | | | | |
| Shares Outstar | nding (M) | | 16.8 | | | | | |
| 3 Month Avg V | olume | | 34,202 | | | | | |
| Short Interest (| M) | | | 0.02 | | | | |
| Balance Shee | t Metrics | | | | | | | |
| Cash (M) | | | | \$10.0 | | | | |
| Total Debt (M) | | | | \$0.1 | | | | |
| Total Cash/Sha | ire | | | \$0.60 | | | | |
| Book Value/Sh | are | | | \$0.14 | | | | |
| EPS Diluted | | | | | | | | |
| Full Year - Dec | 2017A | 201 | 8E | 2019E | | | | |
| 1Q | (0.29) | (0.2 | 9)A | (0.21) | | | | |
| 2Q | (0.27) | (0.2 | 24) | (0.20) | | | | |
| 3Q | (0.28) | (0.2 | 21) | (0.20) | | | | |
| 14Q | (0.21) | (0.2 | 21) | (0.19) | | | | |



Dr. James Pennington is appointed as CMO. Earlier this week, AzurRx BioPharma announced that the appointment of Dr. James Pennington as the company's Chief Medical Officer (CMO). Before joining AzurRx, Dr. Pennington was Executive Vice President and Chief Medical Officer, and later Senior Clinical Fellow, at Anthera Pharmaceuticals (ANTH; Buy) during the period of 2007-2018. Dr. Pennington has extensive medical experience and was directly involved in the development of Sollpura for the treatment of exocrine pancreatic insufficiency (EPI). In our view, the fact that Dr. Pennington agreed to join AzurRx provides incremental validation to MS1819, the company's candidate being developed for EPI associated with chronic pancreatitis (CP) and cystic fibrosis (CF). AzurRx's management reiterated that an investigational drug application (IND) in the U.S. for MS1819 is slated to be filed in 2H 2018 and a Phase 2 study in CF patients should commence later this year. We believe Dr. Pennington's past experience in clinical development in EPI and regulatory affairs would bring significant contribution to AzurRx's upcoming proof-of-concept trial. In the wake of this update, we reiterate our Buy rating and \$6 price target.

MS1819 showed over 21% improvement in coefficient of fat absorption. AzurRx previously reported positive results from the first nine subjects in the ongoing Phase 2a trial of MS1819 for the treatment of exocrine pancreatic insufficiency (EPI) associated with chronic pancreatitis (CP). Data showed that the highest MS1819 dose cohort continued to show over 21% improvement in coefficient of fat absorption (CFA) in evaluable patients. Higher CFA responses were observed in subjects with lower baseline CFA, with the maximal absolute CFA response being 57%. Bristol stool scale, number of daily evacuations and weight of stool showed favorable trends. Of note, no serious adverse events or notable mild-to-moderate events have been reported. Patients' plasma albumen were unchanged with treatment, and fecal nitrogen assessments and nitrogen output showed favorable trends as well. In our view, these data confirmed the clinical activity and dose response previously observed, and bode well for the top-line data readout in 2H 2018. We note that this Phase 2a trial, conducted in in Australia and New Zealand, is on track to complete enrollment of 12-15 CP patients in the current quarter. Following this study, a Phase 2 trial in cystic fibrosis (CF) patients could be initiated in 2H 2018. MS1819 aims to compensate the pancreatic lipase deficiency in patients with EPI, and has the potential to significantly lower patients' pill burden compared to the standard of care—porcine-derived pancreatic enzymes.

Valuation and risks. Our price target is derived from a discounted cash flow-based asset value of \$115M for MS1819, using a 15% discount rate and 2% terminal growth rate, with 40% probability of success. Investment risks include: (1) failure of MS1819 in clinical trials; (2) failure of MS1819 to secure regulatory approval; (3) failure of MS1819 to achieve commercial success due to reimbursement, penetration rate, and/or competition; and (4) dilution risk.

AzurRx BioPharma, Inc.

June 1, 2018

Table 1: AzurRx BioPharma, Inc. (AZRX)—Historical Income Statements, Financial Projections

FY end December 31 \$ in thousands, except per share data

| | 2017A | | | | 2018E | | | | | | | |
|---|----------|---------|---------|---------|---------|----------|---------|---------|---------|---------|----------|----------|
| | 2016A | 1QA | 2QA | 3QA | 4QA | 2017A | 1QA | 2QE | 3QE | 4QE | E 2018E | 2019E |
| Revenue | | | | | | | | | | | | |
| Product revenue | - | | | | | - | | | | | - | - |
| Other revenue | - | | | | | - | | | | | - | - |
| Total revenue | - | - | - | - | - | - | - | - | - | - | - | - |
| Expenses | | | | | | | | | | | | |
| Cost of goods sold | - | | | | | - | | | - | - | - | - |
| Research and development | 2,496 | 534 | 743 | 967 | 151 | 2,395 | 1,678 | 1,500 | 1,500 | 1,500 | 6,178 | 6,800 |
| General and administrative | 4,129 | 2,174 | 1,381 | 2,009 | 2,121 | 7,686 | 1,916 | 2,000 | 2,000 | 2,000 | 7,916 | 8,000 |
| Fair value adjustment, contingent consideration | (300) | 100 | 260 | (250) | 30 | 140 | (10) | | | | (10) | - |
| Total expenses | 6,325 | 2,808 | 2,384 | 2,726 | 2,302 | 10,221 | 3,584 | 3,500 | 3,500 | 3,500 | 14,084 | 14,800 |
| Gain (loss) from operations | (6,325) | (2,808) | (2,384) | (2,726) | (2,302) | (10,221) | (3,584) | (3,500) | (3,500) | (3,500) | (14,084) | (14,800) |
| Other income/expense | | | | | | | | | | | | |
| Interest expense | (5,937) | (1) | (287) | (408) | (179) | (875) | (49) | | | | (49) | - |
| Fair value adjustment, warrants | (2,329) | - | | | | - | | | | | - | - |
| Other income | - | | | | | | | | | | | |
| Total investment income and other | (8,267) | (1) | (287) | (408) | (179) | (875) | (49) | - | - | - | (49) | - |
| Income (loss) before provision for income taxes | (14,592) | (2,809) | (2,672) | (3,134) | (2,481) | (11,096) | (3,633) | (3,500) | (3,500) | (3,500) | (14,133) | (14,800) |
| Provision for income taxes | - | | | | | - | | | | | - | - |
| Net income (loss) | (14,592) | (2,809) | (2,672) | (3,134) | (2,481) | (11,096) | (3,633) | (3,500) | (3,500) | (3,500) | (14,133) | (14,800) |
| Net income (loss) per share (basic) | (2.24) | (0.29) | (0.27) | (0.28) | (0.21) | (1.04) | (0.29) | (0.24) | (0.21) | (0.21) | (0.93) | (0.79) |
| Net income (loss) per share (diluted) | (2.24) | (0.29) | (0.27) | (0.28) | (0.21) | (1.04) | (0.29) | (0.24) | (0.21) | (0.21) | (0.93) | (0.79) |
| Weighted average number of shares outstanding (basic) | 6,505 | 9,631 | 10,065 | 11,243 | 11,732 | 10,629 | 12,447 | 14,687 | 16,777 | 16,787 | 15,175 | 18,750 |
| Weighted average number of shares outstanding (diluted) | 6,505 | 9,631 | 10,065 | 11,243 | 11,732 | 10,629 | 12,447 | 14,687 | 16,777 | 16,787 | 15,175 | 18,750 |

Source: Company reports and H.C. Wainwright & Co. estimates.

AzurRx BioPharma, Inc.

June 1, 2018

Table 2: AzurRx BioPharma, Inc. (AZRX)—Historical Balance Sheets, Financial Projections

FY end December 31 \$ in thousands, except per share data

| | 2017A | | | 2018E | | | | | | | | |
|---|-----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|-----------|-----------|
| | 12/31/16A | 3/31A | 6/30A | 9/30A | 12/31A | 12/31/17A | 3/31A | 6/30E | 9/30E | 12/31E | 12/31/18E | 12/31/19E |
| Assets | | | | | | | | | | | | |
| Current assets: | | | | | | | | | | | | |
| Cash | 1,774 | 532 | 3,829 | 2,946 | 573 | 573 | 574 | 7,016 | 3,734 | 452 | 452 | 8,594 |
| Marketable securities | - | | | | | - | | - | - | - | - | - |
| Other receivables | 961 | 1,011 | 979 | 174 | 1,104 | 1,104 | 1,015 | 1,015 | 1,015 | 1,015 | 1,015 | 1,015 |
| Prepaid expenses | 229 | 207 | 223 | 65 | 275 | 275 | 216 | 216 | 216 | 216 | 216 | 216 |
| Inventories | - | | - | - | - | - | - | - | - | - | - | - |
| Total current assets | 2,964 | 1,750 | 5,031 | 3,185 | 1,953 | 1,953 | 1,806 | 8,248 | 4,966 | 1,684 | 1,684 | 9,826 |
| Property, equipment, and leasehold improvements, net | 152 | 141 | 150 | 148 | 134 | 134 | 149 | 149 | 149 | 149 | 149 | 149 |
| In process research & development, net | 302 | 299 | 310 | 310 | 308 | 308 | 307 | 307 | 307 | 307 | 307 | 307 |
| License agreements, net | 1,534 | 1,402 | 1,326 | 1,190 | 1,038 | 1,038 | 884 | 716 | 548 | 380 | 380 | (292) |
| Goodwill | 1,768 | 1,797 | 1,917 | 1,973 | 2,016 | 2,016 | 2,071 | 2,071 | 2,071 | 2,071 | 2,071 | 2,071 |
| Deposits | 35 | 35 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Total Assets | 6,754 | 5,424 | 8,764 | 6,836 | 5,480 | 5,480 | 5,248 | 11,522 | 8,072 | 4,622 | 4,622 | 12,092 |
| Liabilities and shareholder equity | | | | | | | | | | | | |
| Current liabilities | | | | | | | | | | | | |
| Accounts payable and accrued expenses | 1,471 | 1,697 | 1,023 | 1,533 | 1,187 | 1,187 | 1,797 | 1,797 | 1,797 | 1,797 | 1,797 | 1,797 |
| Accounts payable and accrued expenses - related party | 707 | 871 | 858 | 854 | 868 | 868 | 699 | 699 | 699 | 699 | 699 | 699 |
| Notes payable | 155 | 78 | 26 | | 159 | 159 | 80 | 80 | 80 | 80 | 80 | 80 |
| Convertible promissory notes | - | - | | | | - | | - | - | - | - | - |
| Convertible debt | - | - | 645 | 336 | 257 | 257 | 235 | 235 | 235 | 235 | 235 | 235 |
| Warrant liability | - | - | | | | - | | - | - | - | - | - |
| Interest payable | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Total current liabilities | 2,341 | 2,653 | 2,560 | 2,731 | 2,479 | 2,479 | 2,819 | 2,819 | 2,819 | 2,819 | 2,819 | 2,819 |
| Contingent consideration | 1,200 | 1,300 | 1,560 | 1,310 | 1,340 | 1,340 | 1,330 | 1,330 | 1,330 | 1,330 | 1,330 | 1,330 |
| Total Liabilities | 3,541 | 3,953 | 4,120 | 4,041 | 3,819 | 3,819 | 4,149 | 4,149 | 4,149 | 4,149 | 4,149 | 4,149 |
| Shareholder's equity | | | | | | | | | | | | |
| Convertible preferred stock | - | | | | | - | | | | | - | - |
| Common stock | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Additional paid-in capital | 27,561 | 28,567 | 34,182 | 35,319 | 37,670 | 37,670 | 39,563 | 49,287 | 49,287 | 49,287 | 49,287 | 70,907 |
| Subscriptions receivable | | | | | (1,071) | (1,071) | | - | - | - | - | - |
| Accumulated deficit | (22,887) | (25,696) | (28,368) | (31,502) | (33,983) | (33,983) | (37,616) | (41,066) | (44,516) | (47,966) | (47,966) | (62,116) |
| Accumulated other comprehensive loss | (1,462) | (1,400) | (1,170) | (1,023) | (956) | (956) | (850) | (850) | (850) | (850) | (850) | (850) |
| Total shareholder's equity | 3,213 | 1,471 | 4,645 | 2,795 | 1,661 | 1,661 | 1,098 | 7,372 | 3,922 | 472 | 472 | 7,942 |
| Total liability and shareholder's equity | 6,754 | 5,424 | 8,764 | 6,836 | 5,480 | 5,480 | 5,248 | 11,522 | 8.072 | 4,622 | 4,622 | 12,092 |

Source: Company reports and H.C. Wainwright & Co. estimates.

AzurRx BioPharma, Inc. June 1, 2018

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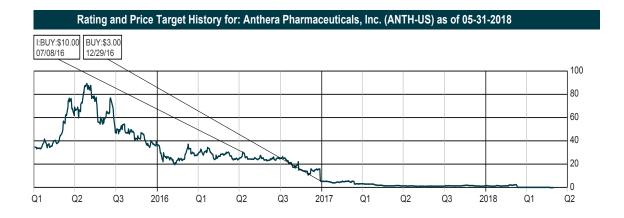
RETURN ASSESSMENT

Market Outperform (Buy): The common stock of the company is expected to outperform a passive index comprised of all the common stock of companies within the same sector.

Market Perform (Neutral): The common stock of the company is expected to mimic the performance of a passive index comprised of all the common stock of companies within the same sector.

Market Underperform (Sell): The common stock of the company is expected to underperform a passive index comprised of all the common stock of companies within the same sector.





| Related Companies Mentioned in this Report as of May/31/2018 | | | | | | | | |
|--|--------|------------------------|--------------------------|--------|---------------|--|--|--|
| Company | Ticker | H.C. Wainwright Rating | 12 Month Price Target | Price | Market Cap | | | |
| Anthera Pharmaceuticals, Inc. | ANTH | Buy | \$3.00 | \$0.24 | \$6 | | | |

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AzurRx BioPharma, Inc. June 1, 2018

| Distribution of Ratings Table as of May 31, 2018 | | | | | | | | | |
|--|-------|---------|-------|---------|--|--|--|--|--|
| IB Service/Past 12 Mo | | | | | | | | | |
| Ratings | Count | Percent | Count | Percent | | | | | |
| Buy | 270 | 93.43% | 101 | 37.41% | | | | | |
| Neutral | 14 | 4.84% | 3 | 21.43% | | | | | |
| Sell | 0 | 0.00% | 0 | 0.00% | | | | | |
| Under Review | 5 | 1.73% | 1 | 20.00% | | | | | |
| Total | 289 | 100% | 105 | 36.33% | | | | | |

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The Firm does not make a market in AzurRx BioPharma, Inc. and Anthera Pharmaceuticals, Inc. as of the date of this research report.

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