

### Biotechnology

**MATN - OTCQX**

April 18, 2017

**Intraday Price 04/18/2017** **\$0.60**  
 Rating: Buy  
 12-Month Target Price: \$2.00  
 52-Week Range: \$0.27 - \$1.02  
 Market Cap (M): 16  
 Shares O/S (M): 26.5  
 Float: 99.6%  
 Avg. Daily Volume (000): 77  
 Dividend: \$0.00  
 Dividend Yield: 0.00%  
 Risk Profile: Speculative  
 Fiscal Year End: December

#### Total Expenses ('000)

	2016A	2017E	2018E
1Q	3,352	3,718	3,831
2Q	3,670	3,880	3,997
3Q	3,262	4,203	4,330
4Q	3,475	4,364	4,497
FY	13,759	16,165	16,655

#### GAAP EPS

	2016A	2017E	2018E
1Q	(0.13)	(0.14)	(0.10)
2Q	(0.14)	(0.11)	(0.10)
3Q	(0.12)	(0.12)	(0.11)
4Q	(0.13)	(0.13)	(0.11)
FY	(0.51)	(0.50)	(0.42)



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## Mateon Therapeutics inc

**Buy**

### Positive First Interim Analysis of the FOCUS Study in Ovarian Cancer

#### Summary

- **Mateon announced the results of the first interim analysis (FOCUS study) of lead combretastatin, CA4P, in platinum resistant ovarian cancer, demonstrating a positive safety profile, as well as early signs of efficacy.**
- **Safety:** In the first 20 patients treated for at least 2 months (CA4P + Avastin + Chemotherapy) the overall safety profile was similar to or better than that observed in previous CA4P studies. The most common adverse events were increase in blood pressure and hypertension (grade 3 or lower), which given the mechanism of action of CA4P (cutting off tumor blood supply) were expected.
- **Efficacy:** While it's still very early, two of nine patients in the CA4P + Avastin + Chemotherapy arm experienced partial responses with reductions in tumor size of 76% and 64%. In the Avastin + Chemotherapy control arm, one patient experienced a partial response with tumor reduction of 46%. Given that it has only been two months and just a few patients, it is difficult to draw any conclusions, though the results are encouraging.
- **Conclusion.** So far so good in the P2/3 (N=436) Focus study. The P2 arm of the study (N=80) continues to enroll and Mateon expects to announce additional interim analyses later this year.

#### Details

**Combretastatins: Cutting off the tumor lifeline.** Solid tumors of any type need a blood supply to survive. Blockbuster drugs like Avastin and other billion dollar anti-angiogenic agents (AAs; Afinitor, Sutent, and Nexavar) "prevent" the tumor from inducing the formation of new blood vessels (angiogenesis) and thus only are effective at the tumor rim. AAs cannot destroy existing blood vessels that feed the tumor core. Combretastatins, including CA4P, bind to "pathogenic" tubulin in the endothelial cells that line the blood vessels supplying tumors (not healthy blood vessels) causing them to swell and block blood flow. As blood can no longer get through and feed the tumor, the tumor dies. Upon injection the blood vessel is cutoff within minutes, followed by the necrosis of the tumor core.

**CA4P synergy with Avastin.** Multiple studies have found that while CA4P kills the tumor core, it does not prevent the outer rim of the tumor from sending out signals to induce angiogenesis—but Avastin does. In a P2 study (N=107) in recurrent ovarian cancer (rOC), a combination of CA4P and Avastin induced a statistically significant increase in progression free survival (PFS), 7.3 months vs. 4.8 months for Avastin alone ( $P < 0.05$ ,  $HR = 0.685$ ), as well as a trend in overall survival improvement (25.2 months vs. 22 months). In patients with platinum resistant disease (prOC, N=27) the difference in PFS widened to 6.7 months vs. 3.4 months ( $P < 0.01$ ,  $HR = 0.57$ ). In platinum sensitive patients only (N=80) the difference was clinically meaningful, though not statistically significant, 7.6 months, vs. 6.1 months. Combined, the greatest effect of CA4P combined with Avastin appears to be prOC, as well as in patients with more advanced (i.e. measurable) diseases. In addition, this is the first published study in rOC to show beneficial effects of an AA combination. The P2/3 study (N=436) in prOC is underway.

**Valuation.** We assume CA4P launches in the U.S. in 2021 and 2022 in Europe for ovarian cancer, followed by additional indications in 2023. A 30% discount rate is applied to the free cash flow, discounted EPS, and sum-of-the-parts models which are equally weighted to derive a \$2 price target.

## DISCLOSURES

## Mateon Therapeutics inc Rating History as of 04/17/2017

powered by: BlueMatrix



## Maxim Group LLC Ratings Distribution

As of: 04/17/17

		% of Coverage Universe with Rating	% of Rating for which Firm Provided Banking Services in the Last 12 months
<b>Buy</b>	Fundamental metrics and/or identifiable catalysts exist such that we expect the stock to outperform its relevant index over the next 12 months.	<b>75%</b>	<b>31%</b>
<b>Hold</b>	Fundamental metrics are currently at, or approaching, industry averages. Therefore, we expect this stock to neither significantly outperform nor underperform its relevant index over the next 12 months.	<b>22%</b>	<b>18%</b>
<b>Sell</b>	Fundamental metrics and/or identifiable catalysts exist such that we expect the stock to underperform its relevant index over the next 12 months.	<b>3%</b>	<b>20%</b>

*\*See valuation section for company specific relevant indices*

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I, Jason McCarthy, Ph.D., attest that the views expressed in this research report accurately reflect my personal views about the subject security and issuer. Furthermore, no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation or views expressed in this research report.

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The research analyst(s) primarily responsible for the preparation of this research report have received compensation based upon various factors, including the firm's total revenues, a portion of which is generated by investment banking activities.

## Maxim Group makes a market in Mateon Therapeutics inc

**Maxim Group expects to receive or intends to seek compensation for investment banking services from Mateon Therapeutics inc in the next 3 months.**

**MATN:** For Mateon Therapeutics we use the BTK (Biotechnology Index) as the relevant index.

**Valuation Methods**

**MATN:** Valuation. We assume CA4P launches in the U.S. in 2021 and 2022 in Europe for Ovarian Cancer, followed by additional indications in 2023. A 30% discount is applied to the FCF, Discounted EPS and SOP models which are equally weighted to derive a price target.

**Price Target and Investment Risks**

**MATN:** Aside from general market and other economic risks, risks particular to our price target and rating for Mateon Therapeutics include: 1) No assurances of regulatory approval(s) and or timing of such; 2) No assurances of the company's ability to penetrate the market - note that the company does not currently generate revenues; 3) The company may need to raise additional capital to finance operations.

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**RISK RATINGS**

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Risk ratings take into account both fundamental criteria and price volatility.

**Speculative – Fundamental Criteria:** This is a risk rating assigned to early-stage companies with minimal to no revenues, lack of earnings, balance sheet concerns, and/or a short operating history. Accordingly, fundamental risk is expected to be significantly above the industry. Price Volatility: Because of the inherent fundamental criteria of the companies falling within this risk category, the price volatility is expected to be significant with the possibility that the investment could eventually be worthless. Speculative stocks may not be suitable for a significant class of individual investors.

**High – Fundamental Criteria:** This is a risk rating assigned to companies having below-average revenue and earnings visibility, negative cash flow, and low market cap or public float. Accordingly, fundamental risk is expected to be above the industry. Price Volatility: The price volatility of companies falling within this category is expected to be above the industry. High-risk stocks may not be suitable for a significant class of individual investors.

**Medium – Fundamental Criteria:** This is a risk rating assigned to companies that may have average revenue and earnings visibility, positive cash flow, and is fairly liquid. Accordingly, both price volatility and fundamental risk are expected to approximate the industry average.

**Low – Fundamental Criteria:** This is a risk rating assigned to companies that may have above-average revenue and earnings visibility, positive cash flow, and is fairly liquid. Accordingly, both price volatility and fundamental risk are expected to be below the industry.

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**ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST**

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