Marinus Pharmaceuticals, Inc. (MRNS)

Clinical Development is Progressing

MARKET OUTPERFORM | Price: $10.41 | Target Price: $14.00

MARKET DATA

Price	$10.41
52-Week Range:	$4.00 - $16.60
Shares Out. (M):	13.8
Market Cap ($M):	$143.7
Average Daily Vol. (000):	34.0
Cash (M):	$47
Cash/Share:	$3.36
Enterprise Value (M):	$99
LT Debt (M):	$0

Source: Thomson Reuters and JMP Securities LLC

FY DEC		2014A	2015E	2016E
Revenue ($M)	1Q	$0.0	--	--
	2Q	$0.0	--	--
	3Q	$0.0	--	--
	4Q	$0.0	--	--
	FY	**$0.0**	**$0.0**	**$0.0**
EPS	1Q	($7.40)	--	--
	2Q	($7.98)	--	--
	3Q	($0.22)	--	--
	4Q	($0.26)	--	--
	FY	**($2.18)**	**($1.83)**	**($1.57)**
Previous FY		($2.41)	($2.06)	($1.76)

Source: Company reports and JMP Securities LLC

STOCK PRICE PERFORMANCE

INVESTMENT HIGHLIGHTS

Continuing to execute on ganaxolone development; we reiterate our Market Outperform rating and $14 price target on Marinus Pharmaceuticals. Marinus reported 4Q14 earnings slightly ahead of our and consensus estimates primarily due to lower than expected R&D operating expenses. The company ended the year with $50M in cash, which we view as sufficient to fund operations through 2016. Marinus is continuing to make progress with the development of ganaxolone in multiple indications. Timelines for the results from the Phase 2b trial in patients with partial onset epilepsy have shifted by approximately one quarter from 2H15 to 1Q16; however, we view this as only an incremental delay. In 2015, we continue to anticipate initial data from the now ongoing proof-of-concept trial in PCDH19 female pediatric epilepsy, and also potentially from the investigator-led trial in patients with Fragile X Syndrome. Our $14 price target is derived through an NPV analysis of U.S. ganaxolone sales in the adult partial onset seizure indication.

The primary value driver remains the partial onset Phase 2b trial, and we remain confident in the predictive value of positive results from the prior Phase 2 trial. Marinus is continuing to enroll patients in the Phase 2b trial evaluating ganaxolone in patients with partial onset seizures. Based on our discussions with management, bringing clinical sites online has been an incrementally longer process than anticipated; however, we are confident in the currently projected timelines for enrollment, and top line results in 1Q15.

Clinical progress highlights broad potential for ganaxolone. Marinus recently initiated a proof-of-concept trial for ganaxolone in the orphan PCDH19 pediatric epilepsy indication. The trial is designed to enroll up to 10 female pediatric patients between the ages of 2 and 10 years old, with a confirmed PCDH19 genetic mutation. The primary endpoint is change in seizure frequency per 28 days, and initial results are anticipated during 2015. Additionally, enrollment is progressing in the Phase 2 trial in patients with FXS, with results expected in late 2015 or early 2016. The company is also advancing its IV formulation of ganaxolone for use in the hospital setting.

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Company Description

Marinus Pharmaceuticals is a clinical-stage biopharmaceutical company focused on developing and commercializing innovative neuropsychiatric therapeutics. The company's lead drug candidate is ganaxolone, an oral, small molecule synthetic analog of the neurosteroid allopregnanolone. The lead development indication for ganaxolone is an adjunctive therapy for the treatment of partial, (focal) onset seizures in adults with epilepsy. The company has completed a Phase 2 trial in the refractory treatment setting, and is currently conducting a Phase 2b trial. We believe positive Phase 2b results, together with a confirmatory Phase 3 trial, could support regulatory approvals in the U.S. and Europe. Marinus is also developing ganaxolone for additional indications, including an orphan pediatric epilepsy population and Fragile X syndrome.

Investment Risks

Potential risks to our price target include, but are not limited to, clinical, regulatory, commercial and competitive factors.

Clinical risk. We note that results from early trials cannot always be replicated, and the drug may fail to produce positive data in later trials. There may be dosing, efficacy, or safety issues related to product candidates undergoing clinical trials that could preclude continued development. In addition, there may be manufacturing issues, including challenges with the scale-up to commercial quantities. Any of these issues could pose a risk to clinical development success.

Regulatory risk. The company's potential regulatory filing for its NDA may not receive approval from the FDA or ex-U.S. agencies. The FDA may request further studies, in which case the approval pathway will likely take longer, and cost significantly more.

Market risk. Market estimates of patients, or patients eligible for ganaxolone treatment, may be overestimated. Furthermore, new drugs entering the market could provide greater competition for the product candidate. This would impact the ability to reach revenue and profitability projections. In addition, the company must retain its intellectual property rights. Other companies may file patent applications or may receive patents that claim the same methods or formulations. Generic competition would affect operations and potential business prospects.

Financial risk. Marinus has incurred losses each year since inception due to research and development expenses for the ganaxolone pre-clinical and clinical programs. These expenses and losses are expected to continue to incur in the near future. It has not generated revenue to date from sales, and if there are any issues preventing the successful commercialization of products, the company may not reach profitability. We believe the company's cash runway will last ~24 months, into mid-2016. We anticipate that Marinus will likely need to raise additional funds to continue future operations. Raising additional funds may cause dilution to Marinus shares or require that it give up rights to product candidates. Any of the aforementioned scenarios may jeopardize the business. Additionally, as usual, the share price is subject to market volatility risk.

JMP FACTS AND DISCLOSURES

Analyst Certification:

The research analyst(s) who prepared this report does/do hereby certify that the views presented in this report are in accordance with my/our personal views on the securities and issuers discussed in this report. As mandated by SEC Regulation AC no part of my/our compensation was, is or will be directly or indirectly related to the specific views or recommendations expressed herein. This certification is made under the obligations set forth in SEC Regulation AC. Any other person or entity may not use it for any other purpose. This certification is made based on my/our analysis on the date of this report's publication. I/We assume no obligation to update this certification to reflect any facts,circumstances or events that may subsequently come to my/our attention. Signed Jason N. Butler

JMP Securities Disclosures:

JMP Securities currently makes a market in the security of Marinus Pharmaceuticals, Inc.

JMP Securities was manager or co-manager of a public offering of securities for Marinus Pharmaceuticals, Inc. (MRNS) in the past 12 months, and received compensation for doing so.

JMP Securities expects to receive OR intends to seek compensation for investment banking services from Marinus Pharmaceuticals, Inc. in the next 3 months.

JMP Securities Investment Opinion Definitions:

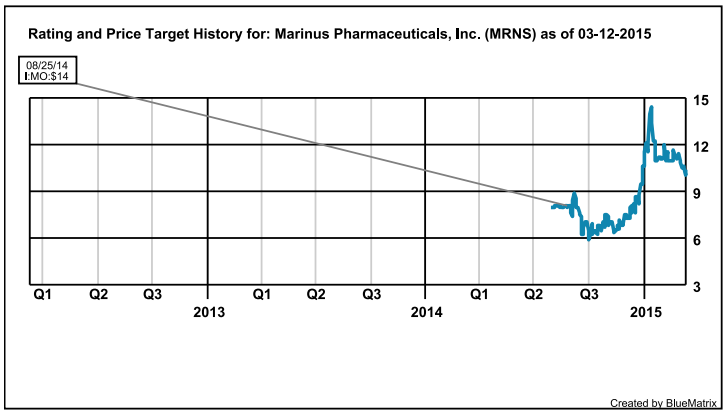
Market Outperform (MO): JMP Securities expects the stock price to outperform relevant market indices over the next 12 months.
Market Perform (MP): JMP Securities expects the stock price to perform in line with relevant market indices over the next 12 months.
Market Underperform (MU): JMP Securities expects the stock price to underperform relevant market indices over the next 12 months.

JMP Securities Research Ratings and Investment Banking Services: (as of March 13, 2015)

JMP Rating	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	# Co's Receiving IB Services in Past 12 Months	*% of Co's With This Rating*
MARKET OUTPERFORM	Buy	285	*63.47%*	Buy	285	*63.47%*	88	*30.88%*
MARKET PERFORM	Hold	154	*34.30%*	Hold	154	*34.30%*	23	*14.94%*
MARKET UNDERPERFORM	Sell	8	*1.78%*	Sell	8	*1.78%*	0	*0%*
COVERAGE IN TRANSITION		1	*0.22%*		1	*0.22%*	0	*0%*
TOTAL:		449	*100%*		449	*100%*	111	*24.72%*

Stock Price Chart of Rating and Target Price Changes:

Note: First annotation denotes initiation of coverage or 3 years, whichever is shorter. If no target price is listed, then the target price is N/A. In accordance with NASD Rule 2711, the chart(s) below reflect(s) price range and any changes to the rating or price target as of the end of the most recent calendar quarter. The action reflected in this note is not annotated in the stock price chart. Source: JMP Securities.



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