Marinus Pharmaceuticals, Inc. (MRNS)

1Q15 Update: Development Programs Advancing in Line with Expectations

MARKET OUTPERFORM | Price: $7.80 | Target Price: $14.00

MARKET DATA

Price	$7.80
52-Week Range:	$4.00 - $16.60
Shares Out. (M):	13.8
Market Cap ($M):	$107.6
Average Daily Vol. (000):	23.0
Cash (M):	$46
Cash/Share:	$3.27
Enterprise Value (M):	$62
LT Debt (M):	$7

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)**	**($2.12)**	**($1.91)**
Previous FY		NC	($1.83)	($1.57)

Source: Company reports and JMP Securities LLC

STOCK PRICE PERFORMANCE

INVESTMENT HIGHLIGHTS

Key development catalysts remain on track with adequate funding through value-inflecting data readouts; reiterate our Market Outperform rating and $14 price target on Marinus Pharmaceuticals. Marinus reported 1Q15 earnings roughly in line with our and consensus estimates with operating expenses ramping to support the development of ganaxolone in multiple indications. The company ended the quarter with ~$46MM cash which it guided is sufficient to fund operations into 2H16. We continue to expect completion of enrollment in the ganaxolone Phase 3 study in patients with refractory focal onset epileptic seizures in 2H16 with top-line results in 1Q16. Additionally in 2015, we anticipate initial results from the open-label, Phase 2 proof-of-concept trial for ganaxolone in PCDH19 female pediatric epilepsy patients in 2H15, as well as results from the proof-of-concept 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.

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1Q15 FINANCIAL SUMMARY

Marinus reported a 1Q15 EPS loss of ($0.50), roughly in line with our and Street consensus estimates of ($0.46). As expected, the company did not report any revenue for the quarter. Operating expenses of $6.9MM were slightly above our estimate of $6.6MM, primarily driven by increasing R&D spending to fund the clinical development of ganaxolone. R&D expenses were $5.5MM, compared to our estimate of $4.9MM, and SG&A expenses were $1.4MM, vs. our $1.7MM. We have made minor adjustments to our model, as summarized in Figure 1.

FIGURE 1. 1Q15 Financial Summary

MRNS	1Q15			2015 est			2016 est		
($MM)	JMP est	Cons	Actual	JMP old	Cons	JMP new	JMP old	Cons	JMP new
Revenue	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Total operating expense	**6.6**		**6.9**	**26.3**		**29.8**	**30.0**		**36.1**
R&D	4.9		5.5	19.6		23.6	21.5		28.3
SG&A	1.7		1.4	6.8		6.2	8.5		7.8
Net income (loss)	**(6.6)**	**(6.5)**	**(7.0)**	**(26.3)**	**(27.8)**	**(29.9)**	**(30.0)**	**(29.1)**	**(36.1)**
Shares outstanding	14.4		14.1	14.4		14.1	19.1		18.9
EPS (diluted)	**($0.46)**	**($0.46)**	**($0.50)**	**($1.83)**	**($1.89)**	**($2.12)**	**($1.57)**	**($1.35)**	**($1.91)**

Source: Company Reports and JMP Securities LLC

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 and Harry Jenq

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:

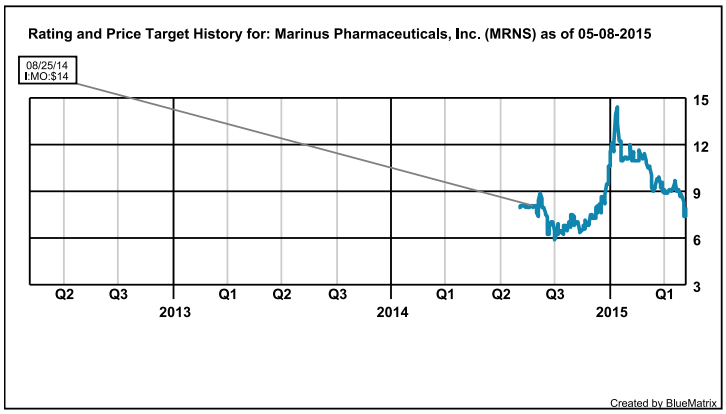
Market Outperform (MO): JMP Securities expects the stock price to outperform relevant market indices over the next 12 months.
Market Perform (MP): JMP Securities expects the stock price to perform in line with relevant market indices over the next 12 months.
Market Underperform (MU): JMP Securities expects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

JMP Securities Research Ratings and Investment Banking Services: (as of May 11, 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	279	*61.86%*	Buy	279	*61.86%*	94	*33.69%*
MARKET PERFORM	Hold	141	*31.26%*	Hold	141	*31.26%*	17	*12.06%*
MARKET UNDERPERFORM	Sell	9	*2.00%*	Sell	9	*2.00%*	0	*0%*
COVERAGE IN TRANSITION		21	*4.66%*		21	*4.66%*	4	*19.05%*
TOTAL:		451	*100%*		451	*100%*	115	*25.50%*

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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