

#### Specialty Pharmaceuticals

Price:	\$11.65
Fair Value Estimate:	\$20.00
52-Week Range:	\$5.49 - \$16.60
Market Cap (MM):	\$166
Shr.O/S-Diluted (mm):	14.2
Average Daily Volume:	81,075
Yield:	0.0%
Cash/Share:	\$(1.40)
FCF Yield:	NA
Debt/Cap:	15%

FYE: Dec	2014A	2015E
EPS:	\$(1.76)A	\$(1.89)E
Prior EPS:		NC
Consensus	NM	-1.96
P/E Ratio:	NA	NA

#### Quarterly EPS:

Q1	\$(4.79)A	\$(0.50)A
Q2	\$(7.98)A	\$(0.47)E
Q3	\$(0.22)A	\$(0.47)E
Q4	\$(0.33)A	\$(0.46)E

July 6, 2015

# Marinus Pharmaceuticals, Inc

(MRNS) - BUY

# Highlighting MRNS POC Trial in PCDH19 Following Supportive Study

#### Flash Takeaways

MRNS announced this morning the publication of a study in Human Molecular Genetics investigating the role of neurosteroids in the specific pathophysiology of PCDH19 female epilepsy. Data from the study showed that a deficiency of a particular neurosteroid, allopregnanolone, may contribute to PCDH19 and that supplementation with Ganaxolone, MRNS's lead product candidate and a synthetic analogue of allopregnanolone may be beneficial to these patients. MRNS is currently enrolling a Phase 2 POC trial with initial results expected by year end.

#### **Analysts Notes**

- Review of PCDH19: PCDH19 female pediatric epilepsy is a rare disease affecting between 15,000 and 30,000 females in the US the cause of which is a specific gene mutation. PCDH19 manifests as cluster seizures before the age of 5 with patients experiences multiple seizure types throughout childhood. These patients also commonly have developmental delays, intellectual disability and behavioral problems into adolescence and adulthood. There are currently no approved treatments for PCDH19.
- <u>Steroid and Neurosteroid Metabolism are Factors in PCDH19:</u> Dr. Gecz, a
   Professor of Human Genetics at the Department of Pediatrics at the University of
   Adelaide identified two genes that code for neurosteroid metabolizing enzymes
   and showed that a depression of these genes lead to an allopregnanolone
   deficiency in PCDH19 patients. This in turn, leads to a decrease in GABA, an
   inhibitory neurotransmitter and an increase in neuron excitability.
- Why Ganaxolone Could Be Beneficial: Ganaxolone is a small molecule synthetic
  analogue of allopregnanolone that modulates GABA through the activation of
  GABA-A receptors. It does this on both the synaptic and extrasynaptic receptors
  which, in theory provides a more constant control of the GABA inhibitory signal,
  which calms those overexcited neurons. The additional of Ganaxolone should
  help reduce neural excitability in PCDH19 patients that have a deficiency in this
  neurosteroid.
- Proof of Concept (POC) Phase 2 Trial: MRNS is currently enrolling a small POC trial of ~10 patients between 2 and 10 years old that have confirmed PCDH19 mutation. Baseline seizure will be established and patients will be treated with Ganaxolone for 26 weeks. Primary endpoint is change in seizure frequency per 28 days relative to baseline. Initial results are expected by year end 2015.



#### IMPORTANT DISCLOSURES

# **Research Analyst Certification**

I, Chiara Russo, the Primarily Responsible Analyst for this research report, hereby certify that all of the views expressed in this research report accurately reflect my personal views about any and all of the subject securities or issuers. No part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views I expressed in this research report.

# Janney Montgomery Scott LLC ("Janney") Equity Research Disclosure Legend

Marinus Pharmaceuticals, Inc currently is, or during the past 12 months was, a Janney Montgomery Scott LLC client. Janney Montgomery Scott LLC, provided investment banking related services.

Janney Montgomery Scott LLC managed or co-managed a public offering of securities for Marinus Pharmaceuticals, Inc in the past 12 months.

Janney Montgomery Scott LLC received compensation for investment banking services from Marinus Pharmaceuticals, Inc in the past 12 months

Janney Montgomery Scott LLC intends to seek or expects to receive compensation for investment banking services from Marinus Pharmaceuticals, Inc in the next three months.

The research analyst is compensated based on, in part, Janney Montgomery Scott's profitability, which includes its investment banking revenues.

# <u>Definition of Ratings</u>

BUY: Janney expects that the subject company will appreciate in value. Additionally, we expect that the subject company will outperform comparable companies within its sector.

NEUTRAL: Janney believes that the subject company is fairly valued and will perform in line with comparable companies within its sector. Investors may add to current positions on short-term weakness and sell on strength as the valuations or fundamentals become more or less attractive.

SELL: Janney expects that the subject company will likely decline in value and will underperform comparable companies within its sector.

## **Price Charts**



# Janney Montgomery Scott Ratings Distribution as of 3/31/15

#### IB Serv./Past 12 Mos.

Rating	Count	Percent	Count	Percent
BUY [B]	140	50.36	21	15.00
NEUTRAL [N]	137	49.28	14	10.22
SELL [S]	1	0.36	0	0.00

\*Percentages of each rating category where Janney has performed Investment Banking services over the past 12 months.

## Other Disclosures

Janney Montgomery Scott LLC, is a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission and a member of the New York Stock Exchange, the Financial Industry Regulatory Authority and the Securities Investor Protection Corp.

This report is for your information only and is not an offer to sell or a solicitation of an offer to buy the securities or instruments named or described in this report. Interested parties are advised to contact the entity with which they deal or the entity that provided this report to them, should they desire further information. The information in this report has been obtained or derived from sources believed by Janney Montgomery Scott LLC, to be reliable. Janney Montgomery Scott LLC, however, does not represent that this information is accurate or complete. Any opinions or estimates contained in this report represent the judgment of Janney Montgomery Scott LLC at this time and are subject to change without notice.

Investment opinions are based on each stock's 6-12 month return potential. Our ratings are not based on formal price targets, however, our analysts will discuss fair value and/or target price ranges in research reports. Decisions to buy or sell a stock should be based on the investor's investment objectives and risk tolerance and should not rely solely on the rating. Investors should read carefully the entire research report, which provides a more complete discussion of the analyst's views. Supporting information related to the recommendation, if any, made in the research report is available upon request.