Minerva Neurosciences, Inc. (NERV)

Clinical Programs on Track Following Completion of IPO

MARKET OUTPERFORM | Price: $7.00 | Target Price: $16.00

MARKET DATA

Price	$7.00
52-Week Range:	$5.57 - $7.90
Shares Out. (M):	18.3
Market Cap ($M):	$128.1
Average Daily Vol. (000):	88.0
Cash (M):	$28
Cash/Share:	$1.53
LT Debt (M):	$0

Source: Thomson Reuters and JMP Securities LLC

FY DEC		2013A	2014E	2015E
Revenue ($M)	1Q	$0.0	$0.0A	--
	2Q	$0.0	$0.0A	--
	3Q	$0.0	$0.0	--
	4Q	$0.0	$0.0	--
	FY	**$0.0**	**$0.0**	**$0.0**
EPS	1Q	--	($0.34)A	--
	2Q	--	($2.55)A	--
	3Q	--	($0.31)	--
	4Q	--	($0.41)	--
	FY	**($0.78)**	**($3.60)**	**($0.88)**
	Previous FY	NC	($1.35)	($0.95)

Source: Company reports and JMP Securities LLC

STOCK PRICE PERFORMANCE

INVESTMENT HIGHLIGHTS

Looking to continued development progress in 2H14; reiterate our Market Outperform rating and $16 price target on Minerva Neurosciences. Minerva reported 2Q14 earnings below our estimates due to higher than expected non-cash R&D expenses. Following the completion of the company's IPO in July, it has approximately $27.6MM in cash, which we believe is sufficient to fund operations through YE2015. While the earnings call provided only incremental updates, we continue to anticipate key value-inflecting clinical catalysts for lead development candidates MIN-101 (schizophrenia) and MIN-202 (insomnia) over the coming 12-18 months and point to our initiation of coverage report dated July 28, 2014 for additional details. We believe these candidates have demonstrated encouraging proof-of-concept and have the potential to differentiate from standard-of-care therapies in blockbuster commercial markets. Our $16 price target is derived through a sum-of-the-parts NPV analysis of MIN-101 and MIN-202.

Lead development candidate is MIN-101 in schizophrenia. Minerva has previously reported positive results from a Phase 2 trial for MIN-101 in patients with schizophrenia and is making progress toward the initiation of a 255 patient Phase 2b trial in 1H15. Previous Phase 2 results demonstrated that the drug candidate resulted in statistically significant improvement in Negative Symptoms, as well as trends toward improvements in Positive Symptoms and Cognitive Symptoms. Prior to the initiation of the Phase 2b trial, the company is completing a 20-patient Phase 1 trial of a once-daily formulation of MIN-101, with results anticipated by YE2014.

Looking to Phase 1b results for MIN-202 by YE2014. MIN-202 is a selective orexin 2 antagonist being developed in partnership with Janssen Pharma for the treatment of insomnia. Results from a Phase 1b trial evaluating MIN-202 for the treatment of secondary insomnia in patients with Major Depressive Disorder (MDD) are expected by YE2014. Additionally, results from a multiple ascending dose trial of MIN-202 in healthy volunteers are also expected by YE2014.

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2Q14 FINANCIAL SUMMARY

Minerva reported 2Q14 EPS of ($2.55) compared to our estimate of ($0.34). The primary difference between our estimate and the actual result was higher than expected R&D expenses. Total operating expenses were $17.7MM compared to our estimate of $2.6MM. R&D expenses were $14.6MM, which included ~$13MM of non-cash stock based compensation, and SG&A expenses were $3.1MM, of which ~$2MM was non-cash stock based compensation.

We have updated our model to include 2Q14 financial results, as summarized in Figure 1.

FIGURE 1. 2Q14 Earnings Summary and Changes to Our Model

NERV	2Q14			2014 est			2015 est		
	JMP est	Cons	Actual	JMP old	Cons	JMP new	JMP old	Cons	JMP new
Revenue	**0.0**	**n/a**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**25.0**	**0.0**
R&D	0.6		14.6	14.4		27.4	15.8		15.9
SG&A	2.0		3.1	3.6		7.3	2.2		2.2
Total operating expense	2.6		17.7	18.0		34.8	18.0		18.1
Net income (loss)	**(2.3)**	**n/a**	**(19.4)**	**(17.6)**	**(22.1)**	**(36.2)**	**(18.0)**	**(24.0)**	**(18.2)**
Shares outstanding (diluted)	6.9		7.6	12.7		13.7	18.8		20.7
EPS (diluted)	**($0.34)**	**n/a**	**($2.55)**	**($1.35)**	**($1.68)**	**($3.60)**	**($0.95)**	**($1.31)**	**($0.88)**

Source: JMP Securities LLC, Company reports

Company Description

Minerva Neurosciences is a clinical-stage biopharmaceutical company, headquartered in Cambridge, MA, focused on the development and commercialization of novel drug candidates to treat patients suffering from CNS diseases. The company has four novel clinical stage candidates with validated mechanisms of action, each having the potential to differentiate in important unmet medical needs. Its lead product candidates are MIN-101, for the treatment of schizophrenia, and MIN-202, which Minerva is co-developing with Jansen Pharma for the treatment of patients suffering from primary and secondary insomnia. In addition, the portfolio includes MIN-117, for the treatment of patients suffering from major depressive disorder, or MDD, and MIN-301, for the treatment of patients suffering from Parkinson's disease. Based on its current capital, the company intends to focus resources on the development of MIN-101 and MIN-202; however, development of pipeline candidates could be accelerated should additional funds, including from non-dilutive sources or partnerships, become available.

Investment Risks

Clinical risk. Minerva may not be successful in the full development and launch of its product candidates. There may be enrollment, dosing, efficacy, or safety issues that would preclude development. It is possible that drug candidates may fail to reach endpoints or statistical significance in respective clinical trials. Any of the aforementioned issues would cause a delay, or potential discontinuation of development. If product candidates make it through clinical trials, the company may encounter manufacturing issues including challenges with the scale-up to commercial quantities. All of the above circumstances should be taken into consideration when assessing clinical risk.

Regulatory risk. The company’s drug candidates may not receive approval from the FDA or from ex-U.S. agencies. The FDA may request additional pre-clinical or clinical trials to provide validation for approval that would likely delay approval timelines and increase expenses. If approval is granted, the regulatory agency may impose restrictions on the label, or may require a REMS program for a drug candidate; this could limit commercial uptake and delay commercial progress.

Market risk. The market opportunity for products may not accurately reflect current estimates and there may be challenges with market adoption. This would impact the ability to reach revenue and profitability projections. The company must obtain and protect its intellectual property rights in order to effectively compete in the marketplace. Minerva could get involved in patent lawsuits that would likely be time-consuming and expensive.

Financial risk. Minerva has no commercial products generating revenue, thus, it has not been, and is not yet, profitable. It has incurred losses each year since inception due to research and development expenses. These expenses are expected to increase in the near future as product candidates advance through the pipeline. The company will likely need to raise additional capital to fund these trials and continue operations. If there are any issues with acquiring needed financing, commercializing its product candidates, or achieving sales revenue, the company may not reach profitability.

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

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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.
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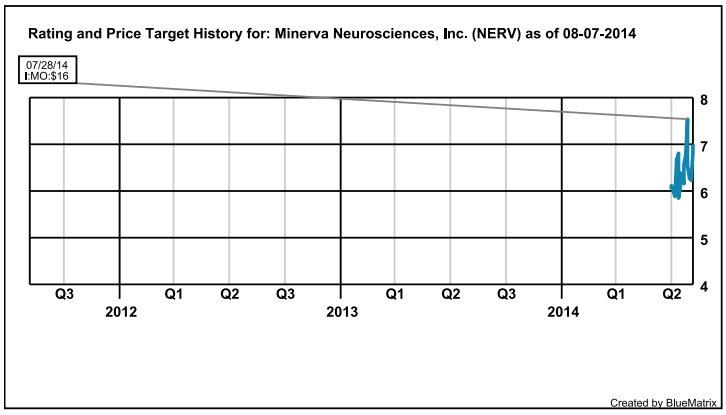
JMP Rating	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	# Co's Receiving IB Services in Past 12 Months	*% of Co's With This Rating*
MARKET OUTPERFORM	Buy	267	*60.14%*	Buy	267	*60.14%*	97	*36.33%*
MARKET PERFORM	Hold	137	*30.86%*	Hold	137	*30.86%*	18	*13.14%*
MARKET UNDERPERFORM	Sell	4	*0.90%*	Sell	4	*0.90%*	0	*0%*
COVERAGE IN TRANSITION		36	*8.11%*		36	*8.11%*	0	*0%*
TOTAL:		444	*100%*		444	*100%*	115	*25.90%*

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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