Minerva Neurosciences, Inc. (NERV)

Solid Development Progress in 3Q14

MARKET OUTPERFORM | Price: $4.28 | Target Price: $16.00

MARKET DATA

Price	$4.28
52-Week Range:	$4.10 - $7.90
Shares Out. (M):	17.8
Market Cap ($M):	$76.2
Average Daily Vol. (000):	14.0
Cash (M):	$24
Cash/Share:	$1.33
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	$0.0A	--
	4Q	$0.0	$0.0	--
	FY	**$0.0**	**$0.0**	**$0.0**
EPS	1Q	--	($0.34)A	--
	2Q	--	($2.55)A	--
	3Q	--	($1.53)A	--
	4Q	--	($0.34)	--
	FY	**($0.78)**	**($4.76)**	**($1.72)**
Previous FY		NC	($3.60)	($0.88)

Source: Company reports and JMP Securities LLC

STOCK PRICE PERFORMANCE

INVESTMENT HIGHLIGHTS

Solid development progress in 3Q14; reiterate our Market Outperform rating and $16 price target on Minerva Neurosciences. Minerva reported 3Q14 earnings below our estimates, but above consensus, with the primary variance being recognition in R&D expenses of a $22MM license fee paid to Janssen for MIN-202. The company ended the quarter with cash of ~$24MM which we project is sufficient to fund operations through YE 2015. In our view, the company is continuing to make solid progress with its two lead clinical development programs, MIN-101 and MIN-202, with several value-inflecting catalysts anticipated in 4Q14 and 2015. Minerva is also continuing to assess the most capital efficient path forward for pipeline assets, MIN-117 (major depressive disorder) and MIN-301 (Parkinson's disease), including the potential for collaboration agreements, and we note that these programs represent upside to our current valuation assumptions. Our $16 price target is derived through a sum-of-the-parts NPV analysis of MIN-101 and MIN-202.

MIN-101 Phase 2b trial in schizophrenia on track to begin in 1H15. Minerva is making progress toward the initiation of an ~234-patient Phase 2b trial for MIN-101 in 1H15. This is expected to be a multi-center, randomized, double-blind, parallel group design study in Europe exploring two doses of a once-daily formulation of MIN-101 vs. placebo in schizophrenic patients with confirmed negative symptoms. Previous Phase 2 results in schizophrenic patients 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. We also believe that MIN-101 has potential to demonstrate a differentiated safety/tolerability profile vs. current atypical antipsychotics based on its novel mechanism of action. Prior to the initiation of the Phase 2b trial, the company is completing a Phase 1 trial of a once-daily formulation of MIN-101, with initial results anticipated by YE 2014.

MIN-202 development making progress with multiple Phase 1 trials. The FDA cleared the company's IND for MIN-202, a selective orexin 2 antagonist being developed in partnership with Janssen Pharma for the treatment of insomnia. A bioavailability study is being initiated by Janssen, representing the first clinical trial initiated for MIN-202 in the U.S. The bioavailability study will be a randomized, open-label, three-way crossover trial in healthy male subjects. The goals of the study are to evaluate the bioavailability, food effect, safety and tolerability of MIN-202 and results are expected in 4Q14. Janssen is also conducting two additional Phase 1 trials with MIN-202, including a Phase 1b study in patients with secondary insomnia and major depressive disorder and a placebo-controlled, multiple-ascending dose study in healthy subjects during 10 days of consecutive dose administration. Results from both of these trials are anticipated in 1Q15.

Jason N. Butler, PhD
jbutler@jmpsecurities.com
(212) 906-3505

3Q14 FINANCIAL SUMMARY

Minerva reported 3Q14 EPS of ($1.53), compared to our estimate of ($0.31). The primary difference between our estimate and the actual result was higher than expected R&D expenses. Total operating expenses were $27.2MM, compared to our estimate of $6.2MM. R&D expenses were $24.7MM, which included $22.0MM in a license fee payment made to Janssen and ~$0.1MM of non-cash stock based compensation, and SG&A expenses were $2.4MM, of which ~$0.8MM was non-cash stock based compensation. Cash and cash equivalents as of September 30, 2014 were $23.6MM.

We have updated our model to include 3Q14 financial results, as summarized in Figure 1.

FIGURE 1. 3Q14 Earnings Summary and Changes to Our Model

NERV	3Q14			2014 est			2015 est		
	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**	**8.3**	**0.0**
R&D	5.1		24.7	27.4		44.4	15.9		24.4
SG&A	1.1		2.4	7.3		10.0	2.2		11.0
Total operating expense	6.2		27.2	34.8		54.4	18.1		35.4
Net income (loss)	**(6.2)**	**(39.1)**	**(27.2)**	**(36.2)**	**(53.1)**	**(55.8)**	**(18.2)**	**(29.9)**	**(35.5)**
Shares outstanding (diluted)	20.2		17.8	13.7		13.1	20.7		20.7
EPS (diluted)	**($0.31)**	**(3.0)**	**($1.53)**	**($3.60)**	**($6.12)**	**($4.76)**	**($0.88)**	**($1.81)**	**($1.72)**

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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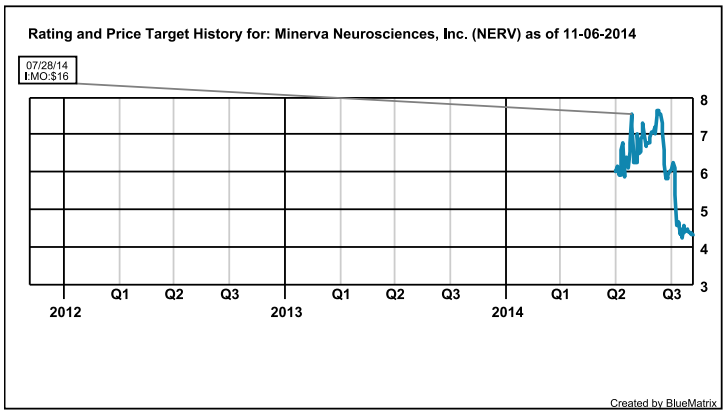
JMP Rating	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	Regulatory Equivalent	# Co's Under Coverage	*% of Total*	# Co's Receiving IB Services in Past 12 Months	*% of Co's With This Rating*
MARKET OUTPERFORM	Buy	286	*61.37%*	Buy	286	*61.37%*	105	*36.71%*
MARKET PERFORM	Hold	140	*30.04%*	Hold	140	*30.04%*	15	*10.71%*
MARKET UNDERPERFORM	Sell	2	*0.43%*	Sell	2	*0.43%*	0	*0%*
COVERAGE IN TRANSITION		36	*7.73%*		36	*7.73%*	0	*0%*
TOTAL:		466	*100%*		466	*100%*	122	*26.18%*

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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Jeffrey H. Spurr
Director of Research
(415) 835-3903

RESEARCH PROFESSIONALS

FINANCIAL SERVICES

Alternative Asset Managers
Devin Ryan (212) 906-3578
Brian McKenna (212) 906-3545

Commercial & Specialty Finance
Christopher York (415) 835-8965
Hannah Kim, CFA (415) 835-8962

Consumer Finance
David M. Scharf (415) 835-8942
Douglas Greiner (212) 906-3525

Financial Processing & Outsourcing
David M. Scharf (415) 835-8942
Douglas Greiner (212) 906-3525

Insurance
Matthew J. Carletti (312) 768-1784
Christine Worley (312) 768-1786

Investment Banks & Brokers
Devin Ryan (212) 906-3578
Brian McKenna (212) 906-3545

Mortgage Operating Companies
REITs: Agency, Hybrid, & Commercial Mortgage
Steven C. DeLaney (404) 848-7773
Trevor Cranston, CFA (415) 869-4431
Charter Robinson (757) 613-8955
Benjamin Zucker (212) 906-3529

HEALTHCARE

Biotechnology
Liisa A. Bayko (312) 768-1785
Masha Chapman (415) 835-8944
Andrew Prigodich, PhD (312) 768-1788
Bhumika Sharma, PhD (312) 768-1795
Jason N. Butler, PhD (212) 906-3505
Caroline Palomeque (212) 906-3509
Michael G. King, Jr. (212) 906-3520
Bryan Czyzewski, PhD (212) 906-3577

Healthcare Services & Facilities
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Arthur Kwok (415) 835-8908

Life Science Tools & Diagnostics
J. T. Haresco, III, PhD (415) 869-4477
Marie T. Casey, PhD (415) 835-3955

Medical Devices
J. T. Haresco, III, PhD (415) 869-4477
Marie T. Casey, PhD (415) 835-3955

Medical Devices & Supplies
David Turkaly (212) 906-3563
John Gillings (212) 906-3564

Specialty Pharmaceuticals
Oren G. Livnat, CFA (212) 906-3566
Nazibur Rahman (212) 906-3519

REAL ESTATE

Housing & Land Development
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Bharathwajan Iyengar (415) 835-3902

Lodging & Leisure
Robert A. LaFleur (212) 906-3510
Whitney Stevenson (212) 906-3538

Property Services
Mitch Germain (212) 906-3546
Peter Lunenburg (212) 906-3537

REITs: Healthcare, Residential, & Specialty
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Arthur Kwok (415) 835-8908

REITs: Office, Industrial, & Diversified
Mitch Germain (212) 906-3546
Peter Lunenburg (212) 906-3537

Residential Services
Peter L. Martin, CFA (415) 835-8904
Aaron Hecht (415) 835-3963
Bharathwajan Iyengar (415) 835-3902

TECHNOLOGY

Communications Infrastructure & Internet Security
Erik Suppiger (415) 835-3918
John Lucia (415) 835-3920

Internet & Digital Media
Ronald V. Josey III (212) 906-3528
Andrew Boone, CFA (415) 835-3957
Ignatius Njoku (415) 835-8960
Michael Wu (415) 835-8996

Software
Patrick Walravens (415) 835-8943
Peter Lowry (415) 869-4418
Mathew Spencer (415) 835-8930
Greg McDowell (415) 835-3934
Rishi Jaluria (415) 835-3961

Wireless & Cloud Computing Technologies
Alex Gauna (415) 835-8998

ADDITIONAL CONTACTS

Thomas R. Wright
Director of Equities
(212) 906-3599

Dan Wychulis
Director of Institutional Sales
(617) 235-8530

600 Montgomery Street, Suite 1100
San Francisco, CA 94111
www.jmpsecurities.com