

### Minerva Neurosciences (NERV: US\$6.29)

# Minerva Neurosciences increases 3% in 2015, outperforming 89% of its global peers

Minerva Neurosciences Inc., NASDAQ's 47th largest Healthcare-Products company by market cap, increased 18.0c (or 2.9%) year to date in 2015 to close at US\$6.29. The stock has a 6-month USD relative strength of 89 which means in USD terms it is outperforming 89% of its 45,078 global peers. A price rise combined with a high relative strength is a bullish signal. Compared with the NASDAQ-100 Index which has risen 9.3% YTD, this is a relative price change of -6.3%. In 2015 the market cap has jumped US\$4.3 million.

#### **Introduction with Trends**

We are currently bullish on this stock in the short-term based on technical indicators, but are more bearish in the long-term based on fundamental metrics

### What makes us most bullish on the stock is the following:

- In the last three months the number of rises outnumbered falls 33:27 or 1.2:1.
- Its Moving Average Convergence Divergence indicators are rising, with its 12-day EMA higher than its 26-day EMA.
- The price to 200-day MAP ratio is 1.22, a bullish indicator.
- It has outperformed 79% of the market the past 6 months.

### Fig 1: Stock Summary

**52-Week Range** US\$4.08-US\$10.0

**Sector** Healthcare-Products

Market Cap US\$116 million

Shares Outstanding 18,439,482

**ISIN** US6033801068

**PermID** 1-5035525714

Relative Strength (3 mo) 78

# Fig 2: MCap - A Historical Perspective

	Price	MCap (US\$ M)	
Last	US\$6.29	116	
1 Year ago	US\$6.15	112.4	

### **Bullish Signals**

- Rises to Falls: In the last three months the number of rises outnumbered falls 33:27 or 1.2:1.
- In the NASDAQ market of 2,352 stocks traded today, the stock has a 6-month relative strength of 79 indicating it has outperformed 79% of the market.
- The Moving Average Convergence Divergence (MACD) indicator of 12-day Exponential Moving Average (EMA) of 6.01 minus the 26-day EMA of 5.8 is positive suggesting a bullish signal. Both the 12-day EMA as well as the 26-day EMA are rising, another bullish signal.
- The price to 200-day MAP ratio is 1.22, a bullish indicator. In the past 200 days this ratio has exceeded 1.22 just twice suggesting a resistance level. The stock is trading above both its MAPs and the 50-day MAP of US\$5.49 is higher than the 200-day MAP of US\$5.15, a bullish indicator. The 200-day MAP has increased to US\$5.15. An increase is another bullish indicator.

#### **Undervaluation:**

- The company is cash rich with Cash to Market Capitalisation at 16.0%.
- The Q Ratio, defined by James Tobin as MCap divided by Total Assets, is 1.7. Compared with the rest of the market the stock is undervalued.

#### Other Bullish Signals:

Also, the following criteria set by Benjamin Graham:

• "Current ratio of two or more"; current assets are 5.5 times current liabilities.



# Fig 3: Bullish Indicators and Rank in Market

Description	Value	Rank In Market
Price/MAP50	1.14	In Top 7%
Price/MAP200	1.22	In Top Quartile
% Prem To Vol Wtd Price	6.6	In Top Quartile
Relative Strength (6M)	79	In Top Quartile

### **Bearish Signals**

- The Price/MAP 200 of 1.22 for Minerva Neurosciences is lower than the Price/MAP 200 for the NASDAQ-100 Index of 1.3.
- The stock is overbought according to the Williams % R indicator of -18.3.
- The Stochastic indicator of 86.2 has broken through the overbought line of 80; this indicates the price is close to its 14-day high and is likely to revert to a downtrend.

#### Other Bearish Signals:

The stock has a score of merely 1 out of 9 set by Joseph Piotroski [pass mark >=5]:

Improvement in current ratio from 1.3 to 5.5.

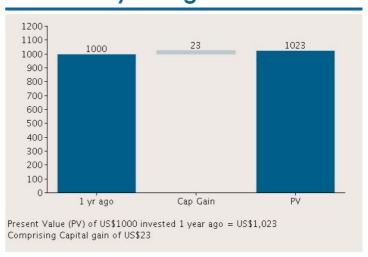
# Fig 4: Bearish Indicators and Rank in Market

Description	Value	Rank In Market
Volatility %	6.3	In Bottom Quartile

#### Note

- It is at a discount of 37.1% to the 12-month high of US\$10.0 on 06 Jan, 2015. It is also at a premium of 54.2% to the 12-month low of US\$4.08 on 11 Nov, 2014.
- The present value of USD1,000 (PV1000) invested one year ago in Minerva Neurosciences is US\$1,023, for a capital gain of US\$23.

# Fig 5: Present Value of USD1000 invested 1 year ago



• 1 year Multiplier in USD = 1.0x

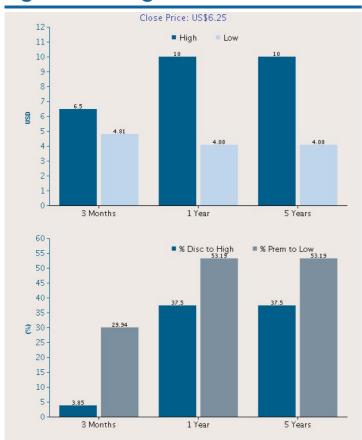


### Price Volume Dynamics

### Volatility

The stock traded between a 52-week low of US\$4.08 and a high of US\$10.0. The average daily volatility of 6.8% places the stock in the 1st quartile in the market meaning it is highly volatile.

### Fig 6: Price High Low Close



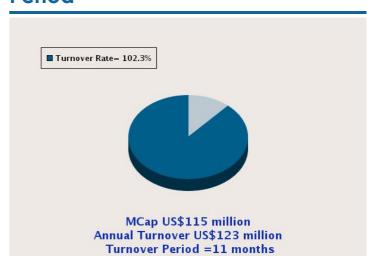
### Fig 7: Shareholder Returns

Trailing quarter: The stock rose 33 times (52.4% of the time), fell 27 times (42.9% of the time) and was unchanged 3 times (4.8% of the time). The aggregate volume was 0.4 times average trading of 7.5 million shares. The value of US\$1,000 invested 3 months ago is US\$1,107 [vs 1,033 for the NASDAQ-100 Index] for a capital gain of US\$107.

Trailing 12 Months: The stock fell 120 times (47.6% of the time), rose 110 times (43.7% of the time), was unchanged 21 times (8.3% of the time) and was untraded 1 time (0.4% of the time). The value of US\$1,000 invested a year ago is US\$1,023 [vs 1,181 for the NASDAQ-100 Index] for a capital gain of US\$23.

PVUS\$1,000	Trailing Qtr	Trailing Yr	Trailing 3 Yrs
NERV	US\$1,107	US\$1,023	
Healthcare- Products sector	1,195	1,842	2,704
NASDAQ-100 Index	1,033	1,181	1,766

# Fig 8: Turnover Rate & Turnover Period



### Fig 9: Trailing 3 months

Turnover	US\$11.9 million
Volume	2,170,507
Volume Index (1 is avg)	0.4



### Price Volume Dynamics (continued)

# Fig 10: Weekly Price Volume Dynamics (Last 12 Weeks)

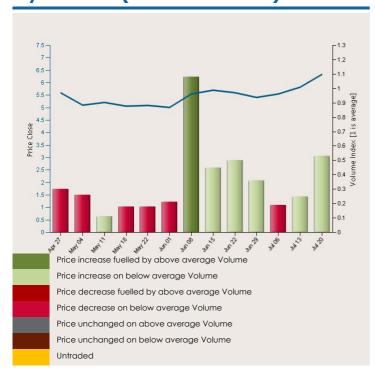


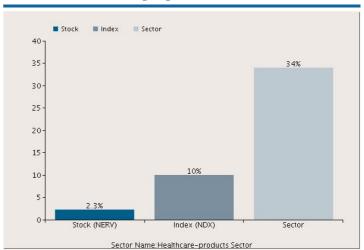
Fig 11: Price/Moving Avg Price [P/MAP200]



Fig 12: Trailing Price Change %

Price Change %	Quarter	Year	3 Years
NERV	10.74	2.28	
Healthcare- Products	19.5	84.19	170.43
NASDAQ-100 index	3.3	16.7	76.59

Fig 13: YTD Comparison Stock Sector Index (%)





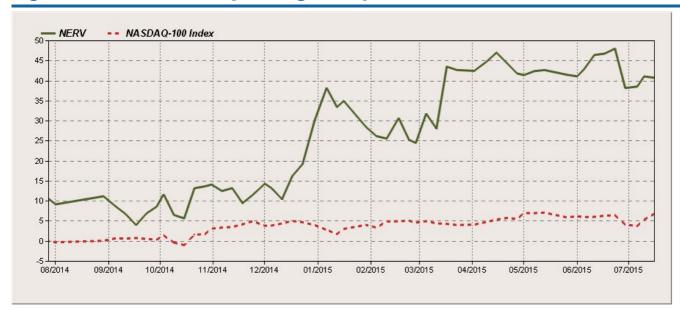
### Fig 14: Month-on-Month Comparison (Trailing Month - ended 21st)

	21 Jul	19 Jun	21 May	21 Apr	20 Mar	20 Feb
Price 21 Jul (USD)	6.25	5.25	5.06	5.63	5.98	5.32
% Price Change	11.6	3.8	-10.1	-5.1	12.4	14.4
Avg Daily Volume	83,218	95,626	99,505	108,055	114,234	113,332
VWP (USD)	5.5	5.37	5.73	5.43	5.85	5.79
Price Range (USD)	5.22 - 6.5	4.81 - 5.9	4.93 - 5.8	4.75 - 6.01	4.65 - 6.43	4.25 - 5.79
Relative Price Change %	8	3.5	-12.2	-4.6	12.1	7.9
Volatility %	24.5	22.7	17.6	26.4	38.3	36.2

Fig 15: Price Volume Trend: Trailing Quarter



Fig 16: Stock v Index (Trailing Year)





### Fig 17: Fibonacci Retracement





### Ranking

### Fig 18: Global Peer Group Analysis (all figures in USD)

Name	Relative Str. (6 mo)	MCap	PV \$1000 (1 yr)	Revenue	Net Profit	Total Assets
Synergetics USA	52	117.1M	1,531.8	64.8M	3.1M	84.7M
Galmed Pharmaceutical	92	116.6M	1,436.4		(17.5M)	170,000
TriVascular Technologies Inc	23	115.5M	375.6	31.8M	(57.4M)	108.5M
Cerulean Pharma	21	115.4M	848.6	593,000	(23.3M)	53.4M
Minerva Neurosciences	89	115.2M	987.4		(56.9M)	68.5M
Titan Medical	46	114.8M	496.6		(11.5M)	31.6M
EOS Imaging	61	110.8M	843.5	18.2M	(6.4M)	50.9M
Shin Hung	88	103.4M	1,347.5	111.8M	6.1M	111.2M
Conatus Pharmaceuticals	50	102.9M	678.6		(22.3M)	38.4M

### Global Peer Group Analysis (continued)

Code	Country	Last Price	P/S	P/Book	Turnover Rate (%)	% Disc to 52-w Hi
SURG	US	US\$4.58	1.6	2.9	72.7	23.0
GLMD	US	US\$10.50			127.7	22.2
TRIV	US	US\$5.69	3.5	3.7	66.6	65.8
CERU	US	US\$4.26	194.6	2.6	113.6	60.8
NERV	US	US\$6.25		3.2	102.3	37.5
TMD	CA	CAD1.47		4.4	22.6	41.9
EOSI	FR	EUR5.54			53.6	8.1
A004080	KR	KRW11,900.0	0.9	1.4	26.3	20.7
CNAT	US	US\$5.22		3.1	786.4	55.5

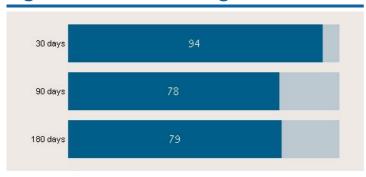


### Ranking (continued)

# Fig 19: Rank in American Region out of 12,328 stocks

Description	Value	Rank	Quartile
MCap (US\$)	115.2M	4907	Second
Total Assets (US\$)	68.5M	5855	Second
Net Profit (US\$)	(56.9M)	10403	Bottom
Price to Book	3.2	4760	Second
PV\$1000 (1Year) US\$	987.4	3878	Second
US\$ Change (1Year) %	-1.3	3621	Second
Rel Strength 6 Mo (US\$)	93	847	Тор

### Fig 20: Relative Strength



### **Sector Sorting**

For Company searches, or for sorting by stocks and variables, an interactive version of today's Table is available here



### Financial Results (Annual)

### 31 December, 2014

### Fig 21: Income Statement

Currency in USD	2014-12-31	2013-12-31	Change %
Expenses			
Research and development	42,908,566	708,489	Up 5,956.3
General and administrative	11,961,865	2,466,490	Up 385.0
Total expenses	54,870,431	3,174,979	Up 1,628.2
Loss from operations	-54,870,431	-3,174,979	Deterioration 1,628.2
Foreign exchange gains -losses	18,727	-28,977	Recovery
Interest -expense income	2,049,735	58,049	Up 3,431.0
Net loss	-56,901,439	-3,262,005	Deterioration 1,644.4
Net loss per share, basic and diluted	-447.0c	-78.0c	Deterioration 473.1
Weighted average shares outstanding, basic and diluted	12,724,395	4,186,104	Up 204.0

### Fig 22: Balance Sheet

Currency in USD	2014-12-31	2013-12-31	Change %
Assets			
Current assets			
Cash and cash equivalents	18,545,702	1,818,317	Up 919.9
Restricted cash	35,014		
Prepaid expenses	756,979	852	Up 88,747.3
Total current assets	19,337,695	1,819,169	Up 963.0
Equipment, net	43,446	3,232	Up 1,244.2
In-process research and development	34,200,000	19,000,000	Up 80.0
Goodwill	14,869,399	7,918,387	Up 87.8
Deferred public offering costs		433,998	
Total assets	68,450,540	29,174,786	Up 134.6
Liabilities and Stockholders' Equity			
Current liabilities			
Accounts payable	641,813	522,981	Up 22.7
Accrued expenses and other current liabilities	1,645,258	815,239	Up 101.8
Accrued collaborative expenses	1,222,420		
Convertible promissory notes		58,270	
Derivative liability		10,093	
Total current liabilities	3,509,491	1,406,583	Up 149.5
Deferred taxes	13,433,760	7,588,600	Up 77.0

Up 134.6



#### Financial Results (Annual) (continued) 31 December, 2014 Other noncurrent liabilities 7,694 Total liabilities 16,950,945 8,995,183 Up 88.4 Commitments and contingencies Stockholders' equity Preferred stock; .0001 par value; 100,000,000 shares authorized; none issued or outstanding as of December 31, 2014 and 2013, respectively Common stock; .0001 par value; 125,000,000 shares authorized; 1,844 611 Up 201.8 18,439,482 and 6,112,738 shares issued and outstanding as of December 31, 2014 and 2013, respectively Up 232.1 Additional paid-in capital 126,228,981 38,008,783 Accumulated deficit -74,731,230 -17,829,791 Deterioration 319.1 Total stockholders' equity 51,499,595 20,179,603 Up 155.2

68,450,540

29,174,786

### Fig 23: Cash Flow

Total liabilities and stockholders' equity

Currency in USD	2014-12-31	2013-12-31	Change %
Cash flows from operating activities:			
Net loss	-56,901,439	-3,262,005	Deterioration 1,644.4
Adjustments to reconcile net loss to net cash used in operatactivities:	ing		
Depreciation and amortization	33,869		
Amortization of debt discount recorded as interest expense	1,952,309	36,231	Up 5,288.5
Stock-based compensation expense	17,966,611	655,723	Up 2,640.0
Unrealized foreign exchange loss		22,039	
Change in fair value of derivative	-10,093	117	Deterioration
Changes in operating assets and liabilities			
Prepaid expenses	-713,200	8,143	Deterioration
Accounts payable	368,698	522,981	Down 29.5
Accrued expenses and other liabilities	112,285	-143,472	Recovery
Accrued collaborative expenses	1,222,420		
Other noncurrent liabilities	7,694		
Net cash used in operating activities	-35,960,846	-2,160,243	Deterioration 1,564.7
Cash flows from investing activities:			
Cash acquired in business combination	1,167,869		
Restricted cash	-35,014		
Purchases of equipment	-45,609	-3,232	Deterioration 1,311.2
Net cash provided by investing activities	1,087,246	-3,232	Recovery



### Financial Results (Annual) (continued)

### 31 December, 2014

Cash flows from financing activities:			
Cash acquired in business merger		631,478	
Proceeds from issuance of convertible promissory notes		1,300,000	
Proceeds from working capital loans	1,882,817		
Repayments of working capital loans	-1,882,817		
Proceeds from sales of common stock in initial public offering	31,334,702		
Proceeds from sales of common stock in private placements	23,706,118	1,850,000	Up 1,181.4
Fees paid in connection with private placements	-280,000		
Public offering costs paid	-3,159,835		
Net cash provided by financing activities	51,600,985	3,781,478	Up 1,264.6
Net increase in cash and cash equivalents	16,727,385	1,618,003	Up 933.8
Cash and cash equivalents			
Beginning of period	1,818,317	200,314	Up 807.7
End of period	18,545,702	1,818,317	Up 919.9

### Fig 24: Performance Ratios

	2014-12-31	2013-12-31	Change %
Return on Equity (%)	-110.49	-16.16	
Return on Assets (%)	-83.13	-11.18	
Total Liabilities to Operating Cash Flow	-0.47	-4.16	Reduced 88.7
Total Liabilities/Total Assets	0.25	0.31	Down 19.7
Current Ratio	5.51	1.29	

### Fig 25: Per Share figures

	2014-12-31	2013-12-31	Change %
Cash	US\$1.46	43.44c	Up 235.5
Working Capital	US\$1.24	9.86c	
Shareholders' Funds	US\$4.05	US\$4.82	Down 16.0
Total Liabilities	US\$1.33	US\$2.15	Down 38.0
Total Assets	US\$5.38	US\$6.97	Down 22.8
Net Tangible Assets	US\$2.88	US\$2.93	Down 1.7
EPS Final	-447.0c	-78.0c	



### Company Overview and Regulatory Announcements

#### **Activities**

Minerva Neurosciences Inc. operates as a clinical-stage biopharmaceutical company. The Company develops new therapies to treat central nervous system (CNS) and neuropsychiatric diseases and disorders. Minerva Neurosciences serves communities in the United States.

Further details can be found at

http://www.minervaneurosciences.com.

Business Sector	Healthcare Services
Industry Group	Healthcare Equipment & Supplies
Economic Sector	Healthcare

### **Issued Capital**

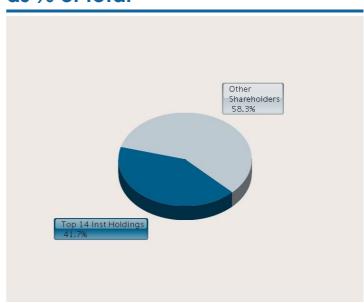
Based on 18,439,482 issued equity shares the market capitalisation is US\$116 million.

The top fourteen shareholders hold 41.7% of the issued capital leaving a float of 58.3%.

# Fig 26: List of Top 10 Institutional Holdings

Name of Shareholder	No. of Shares	% Held	Value USD
FMR LLC	2,765,922	15	17.4 M
Federated Investors Inc,PA	2,506,611	13.59	15.8 M
Cormorant Asset Management LLC	1,145,043	6.21	7.2 M
Perceptive Advisors LLC	810,537	4.4	5.1 M
Armistice Capital LLC	202,634	1.1	1.3 M
Dafna Capital Management LLC	101,317	0.55	637,284
Spark Investment Management LLC	57,079	0.31	359,027
Vanguard Group Inc	53,195	0.29	334,597
Goldman Sachs Group Inc	29,702	0.16	186,826
KCG Holdings Inc.	17,881	0.1	112,471
Total	7,689,921	41.7	

## Fig 27: Top 14 Institutional Holdings as % of total



#### **Financials**

### Annual Report for the year ended December 31, 2014

year-on-year comparisons with previous corresponding period

#### **Favourable Changes**

•Total liabilities to total assets down 19.4% to 0.2.

#### **Unfavourable Changes**

- Net tangible assets per share down 1.7% to USD2.88
- Operating cash flow is negative.

#### **Major Common Size Ratios**

- •Total current assets to total assets up from 6.2% to 28.3%
- Cash to total assets up from 6.2% to 27.1%
- •Intangibles to total assets down from 27.1% to 21.7%.

### 8-K people news

#### June 18: Minerva Neurosciences Elects 2 Directors

Minerva Neurosciences (NERV) held its Annual General Meeting on June 17, 2015. According to an SEC filing under Section 8-K Item 5.07 the following directors were elected:

Michele Ollier, MD Nico Vandervelpen

#### November 06: Minerva Neurosciences appoints Remy Luthringer as president 07 November 2014

Minerva Neurosciences has appointed Remy Luthringer as President. The appointment takes effect from Nov 05, 2014.



### Regulatory Announcements (continued)

#### 8-K other news

#### June 16: Minerva Neurosciences: Regulation FD Disclosure

[News Story]

http://www.buysellsignals.net/hbn/8kviewer.jsp?doc=\_Archiv es\_edgar\_data\_1598646\_000119312515224007\_0001193125-15-224007.txt

Source: 8-K United States Securities and Exchange Commission

#### March 26: Minerva Neurosciences: Results of **Operations and Financial Condition**

[News Story]

http://www.buysellsignals.net/hbn/8kviewer.jsp?doc=\_Archiv es\_edgar\_data\_1598646\_000119312515106926\_0001193125-15-106926.txt

Source: 8-K United States Securities and Exchange Commission

#### March 18: Minerva Neurosciences: Entry into a Material **Definitive Agreement**

[News Story]

http://www.buysellsignals.net/hbn/8kviewer.jsp?doc=\_Archiv es\_edgar\_data\_1598646\_000119312515096955\_0001193125-15-096955.txt

Source: 8-K United States Securities and Exchange Commission

#### March 13: Minerva Neurosciences: Regulation FD Disclosure

[News Story]

http://www.buysellsignals.net/hbn/8kviewer.jsp?doc=\_Archiv es\_edgar\_data\_1598646\_000119312515090350\_0001193125-15-090350.txt

Source: 8-K United States Securities and Exchange Commission

#### March 03: Minerva Neurosciences: Other Events

[News Story]

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Source: 8-K United States Securities and Exchange Commission

### January 21: Minerva Neurosciences: Other Events

[News Story]

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Source: 8-K United States Securities and Exchange Commission

#### January 20: Minerva Neurosciences: Entry into a **Material Definitive Agreement**

[News Story]

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Source: 8-K United States Securities and Exchange Commission

#### January 05: Minerva Neurosciences: Other Events

[News Story]

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Source: 8-K United States Securities and Exchange Commission

#### **December 03: Minerva Neurosciences: Other Events**

[News Story]

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Source: 8-K United States Securities and Exchange Commission

### Changes in Board and Management

#### May 18: Minerva Neurosciences appoints Director

Minerva Neurosciences has appointed Fouzia Laghrissi-Thode as a Director. The effective date is May 18, 2015.

### **Annual Meetings**

#### June 11: Minerva Neurosciences announces AGM

Minerva Neurosciences has announced its Annual General Meeting will take place on June 17, 2015.

#### **Press Releases**

#### June 18: Minerva Neurosciences: Submission of Matters to a Vote of Security Holders

http://www.buysellsignals.net/hbn/8kviewer.jsp?doc=\_Archiv es\_edgar\_data\_1598646\_000119312515226674\_0001193125-15-226674.txt

Source: 8-K United States Securities and Exchange Commission

#### June 18: Minerva Neurosciences director awarded **Stock Options**

Minerva Neurosciences (NASDAQ:NERV) director Laghrissithode Fouzia, has been awarded Stock Options on 25,000 shares. The transaction date was June 17, 2015. The shares last traded at US\$5.62.



### Regulatory Announcements (continued)

### June 16: Minerva Neurosciences Provides Update On Min-202, Selective Orexin-2 Receptor Antagonist

[News Story] Data in Insomnia Presented by Janssen at SLEEP 2015

IND Now in Effect to Expand Clinical Testing into Adjunctive Major Depressive Disorder

WALTHAM, Mass., June 16, 2015 (GLOBE NEWSWIRE) -- Minerva Neurosciences, Inc. (Nasdaq:NERV), a clinical-stage biopharmaceutical company focused on the development of innovative therapies to treat central nervous system (CNS) disorders, today provided an update on MIN-202 (JNJ-42847922), a selective orexin-2 receptor antagonist under joint development with Janssen Pharmaceutica NV. <a href='http://www.nasdaq.com/press-release/minervaneurosciences-provides-update-on-min202-selective-orexin2-receptor-antagonist-20150616-00292'>Read more...</a> Source: Nasdaq Stock Exchange For more details click here.

### May 28: Minerva Neurosciences To Present At Upcoming Investor Conferences In June

[News Story] WALTHAM, Mass., May 28, 2015 (GLOBE NEWSWIRE) -- Minerva Neurosciences, Inc. (Nasdaq:NERV), a clinical-stage biopharmaceutical company focused on the development of innovative therapies to treat central nervous system (CNS) diseases and disorders, today announced that it will participate in the following upcoming investor conferences:

Live audio webcasts will be available online from the investor relations section of the company's website at http://ir.minervaneurosciences.com.

For more details click here.

# May 07: Minerva Neurosciences Reports First Quarter 2015 Financial Results and Other Key Business Updates [News Story]

MIN-101 Phase 2b trial for schizophrenia on track with enrollment underway; new regulatory approvals to conduct trials in Europe

MIN-117 Phase 2a study in Major Depressive Disorder (MDD) on track and expected to begin enrollment in second quarter; additional study arm planned

Management to host conference call today at 8:30 a.m. For more details click here.

#### April 30: Events Calendar: Minerva Neurosciences to Host First Quarter 2015 Financial Results Webcast and Conference Call

WALTHAM, Mass., April 30, 2015 -- Minerva Neurosciences, Inc. (Nasdaq:NERV), a clinical-stage biopharmaceutical company focused on the development of innovative therapies to treat central nervous system (CNS) diseases and disorders, today announced that it will release first quarter 2015 financial results before markets open on Thursday, May 7, 2015.

For more details click here.

#### April 16: Minerva Neurosciences director awarded Stock Options

Minerva Neurosciences (NASDAQ:NERV) director Luthringer Remy, has been awarded Stock Options on 399,623 shares at an exercise price of US\$5.19. The transaction date was April 14, 2015. The shares last traded at US\$5.83.

#### April 16: Minerva Neurosciences insider awarded Stock Options

Minerva Neurosciences (NASDAQ:NERV) insider Race Geoff, has been awarded Stock Options on 213,133 shares at an exercise price of US\$5.19. The transaction date was April 14, 2015. The shares last traded at US\$5.83.

#### April 16: Minerva Neurosciences insider awarded Stock Options

Minerva Neurosciences (NASDAQ:NERV) insider Ahlholm Frederick W, has been awarded Stock Options on 57,524 shares at an exercise price of US\$5.19. The transaction date was April 14, 2015. The shares last traded at US\$5.83.

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### March 27: Minerva Neurosciences Reports Fourth Quarter and Full Year 2014 Financial Results

[News Story] - MIN-101 Phase 2b trial for schizophrenia on track -

- Phase 2a trial planned for MIN-202 in primary insomnia in mid-2015; Phase 1b in MDD patients also expected to begin in mid-2015 -
- Company advancing CNS pipeline with MIN-117 and MIN-301 -
- Management to host conference call today at 4:30 p.m. For more details click here.

#### March 19: Events Calendar: Minerva Neurosciences to Host Fourth Quarter and Full Year 2014 Financial Results Webcast and Conference Call

WALTHAM, Mass., March 19, 2015 (GLOBE NEWSWIRE) -- Minerva Neurosciences, Inc. (Nasdaq:NERV), a clinical-stage biopharmaceutical company focused on the development of innovative therapies to treat Central Nervous System (CNS) diseases and disorders, today announced that it will release fourth quarter and full year 2014 financial results after market close on Thursday, March 26, 2015.

For more details click here.



### Regulatory Announcements (continued)

### March 19: Minerva Neurosciences Completes Private Placement, Raises \$31 Million

[News Story] WALTHAM, Mass., March 18, 2015 -- Minerva Neurosciences, Inc. (Nasdaq:NERV) today announced that it has closed the private placement announced on March 13, 2015. Investors in the private placement included Federated Investors, Inc., Highland Capital, Perceptive Advisors, LLC, Cormorant Asset Management LLC, Johnson & Johnson Innovation - JJDC, Index Ventures and Dafna Capital Mgmt LLC.

For more details click here.

### March 13: Minerva Neurosciences Announces \$31 Million Financing

[News Story] WALTHAM, Mass., March 13, 2015 (GLOBE NEWSWIRE) -- Minerva Neurosciences, Inc. (Nasdaq:NERV) today announced that it will raise approximately \$31 million of gross proceeds in a private placement offering to several institutional investors, including 6,281,661 shares of common stock and warrants to purchase up to 6,281,661 shares. For more details click here.

### February 04: Minerva Neurosciences Director awarded Stock Options

Minerva Neurosciences (NASDAQ:NERV) Director Van Heek G Jan, has been awarded Stock Options on 7,500 shares. The transaction date was February 02, 2015. The shares last traded at US\$4.34.



### Board and Management & creation of shareholder value

### Remy Luthringer CEO & President

### Creation of shareholder value in Minerva Neurosciences:

Since appointment as President: The present value of USD1,000 invested on the appointment date of November 05, 2014 at close price of US\$4.35 is US\$1,446, for a capital gain of US\$446.

#### Marc D. Beer Chairman



Geoff Race CFO & Executive Vice President

Prior to being named as Minerva Neurosciences' CFO, Mr. Race served as a consultant for the development of MIN-101 and MIN-117. He has previously served as Chief Executive Officer of Funxional Therapeutics Ltd., the lead program of which (FX125L) was acquired by Boehringer Ingelheim in 2012. He also served as Chief Financial Officer at PanGenetics B.V. He is a Fellow of the Chartered Institute of Management Accountants and earned his MBA from Durham University Business School.

### Fouzia Laghrissi-Thode Director

Dr. Laghrissi-Thode has nearly 20 years of experience in the pharmaceutical industry, and has held positions of leadership at AstraZeneca, Roche, Novartis and Sandoz in a broad range of therapeutic areas, including central nervous system, cardiovascular, metabolic disease and genito-urinary health. She is currently vice president of the cardiovascular and metabolism therapy area at AstraZeneca. Her business development and licensing accomplishments include demonstrated successes in global product strategy, franchise development and expansion, collaborations, corporate partnerships and joint ventures. Dr. Laghrissi-Thode holds an M.D. from the University of Tours School of Medicine in France, is board certified in psychiatry and is adjunct professor of psychiatry at the University of Pittsburgh.

### Creation of shareholder value in Minerva Neurosciences:

Since appointment as Director: The present value of USD1,000 invested on the appointment date of May 18, 2015 at close price of US\$5.06 is US\$1,243, for a capital gain of US\$243.



Joseph Reilly
Chief Operating Officer &
Vice President

Joe Reilly was most recently Vice President, Head of Commercial Strategy and Operations at Genzyme Corporation. In more than a decade at Genzyme, he also served as Vice President of Global Business Operations, Vice President of Commercial Operations and Vice President of Finance in the Rare Diseases Division. Joe holds a BS and MS in Finance from Boston College.



Mark Levine
Vice President & General
Counsel

Mark Levine has extensive experience counseling companies on general corporate matters, complex commercial transactions, mergers and acquisitions, securities law, corporate governance and regulatory compliance. Prior to joining Minerva Neurosciences in 2014, he served in senior legal positions at athenahealth, Inc., Clinical Data, Inc., Wheelabrator Technologies Inc., and Xpedior Incorporated. He holds a bachelor of arts degree from Binghamton University, SUNY, and a juris doctor degree from Washington University School of Law in St. Louis.

### Fred Ahlholm Vice President & Chief Accounting Officer

Fred Ahlholm was most recently Vice President of Finance and Chief Accounting Officer for Amarin Corporation plc, where he helped direct the growth of the company from a small clinical-stage drug developer into a commercial enterprise of more than 400 employees. Fred is a CPA and earned his BBA at the University of Notre Dame.

Jan Van Heek Director

Francesco De Rubertis Director-Index Ventures

Michele Ollier
Director-Index Ventures



### Glossary

#### Capital Gain/Loss from n Years Ago to n-1 Years Ago:

Capital Gain or Loss over 1 Year/Price 1 Year Ago (%)

#### Current Ratio (Fig 25):

Current Assets/Current Liabiliites (times)

#### PVUS\$1000 (Fig 7, 5):

Present value of US\$1000 invested 1 year/'n' years ago

#### Price/NTA (Fig 19):

Closing Share Price/Net Tangible Assets Per Share (times)

#### Relative Price Change (Fig 14):

Today's Relative price change with respect to Benchmark Index

#### Return on Assets (Fig 25):

Net Profit/Total Assets (%)

#### Total Liabilities/Total Assets:

Total Liabilities/Total Assets

#### **Turnover Period (Fig 8):**

Time Period required for trading all Outstanding Shares

#### Volatility (Fig 4, 14):

Highest Price minus Lowest Price/Lowest Price (%)

#### Volume Weighted Price (VWP) (Fig 14):

The Volume Weighted Price (VWP) is the summation of turnover divided by total volume in the same period.

#### Cash/MCap:

Cash plus Liquids/Market Capitalisation (times)

#### Moving Average Price (n periods) (Fig 3, 11):

Sum of Prices for each Period/Number of Periods

#### Price Close/Moving Avg Price (Fig 3, 11):

Latest Price/Moving Average Price

#### Price/Sales (Fig 19):

Share Price/Sales Per Share (times)

#### Relative Strength (n-th Period) (Fig 1, 3, 20, 19, 18):

Price close today/Price close 'n' periods ago, then ranked by percentile within the entire market.

#### Return on Equity (Shareholders' Funds) (Fig 25):

Net Profit/Net Assets (%)

#### Turnover (Fig 9):

Last Price \* Volume

#### Turnover Rate (Fig 19, 8):

US Dollar value of annual trading volume as a percentage of market capitalisation

#### Volume Index (Fig 9):

Number of shares traded in the period/Average number of shares traded for the period

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