

MediciNova

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A small company with big potential

MediciNova has five Phase II clinical trials ongoing in progressive multiple sclerosis (MS), Lou Gehrig's Disease (ALS) and addiction. Its lead programme, MN-166 in Phase IIb for progressive MS, has shown a statistically significant improvement on neurodegenerative endpoints (including brain volume loss) and has an extensive safety database.

MN-166, a potential blockbuster for progressive MS

MN-166 has been on the market in Japan for 25 years with a safety database of 3.2 million patients. In a Phase II trial in relapsing-remitting multiple sclerosis (RRMS), MN-166 had a statistically significant reduction in brain volume loss ($p=0.035$) and conversion of acute lesions into persistent black holes (a sign of irreversible demyelination and axonal loss) ($p=0.004$). However, it missed the primary endpoint in that trial (number of new active lesions), which may indicate that it will work better in the more neurodegenerative types of MS than inflammatory (RRMS).

Progressive MS, a major unmet medical need

PPMS and SPMS are major unmet medical needs. The only drug approved for either indication is Novantrone, a chemotherapeutic, for the treatment of SPMS though its cumulative dosing is limited due to cardiotoxicity. PPMS and SPMS have the potential to be as big a market as RRMS (\$18bn+ in 2014), as 90% of those with RRMS eventually progress to SPMS over 20-25 years.

The rest of the pipeline is not to be ignored

MN-166 is also in Phase II for addiction, where it demonstrated statistically significant reductions in certain symptoms (eg craving, perspiration, hot flashes) in previous trials, as well as ALS. MN-001, which has anti-fibrotic and anti-inflammatory properties, has had Phase II protocols for NASH and IPF approved by the FDA and there will be an update on these programmes later this year.

Valuation: EV ~\$70m

The current valuation is supported by the pipeline, which has multiple shots on goal and a potential blockbuster in MN-166 for progressive forms of MS. MediciNova has \$11.7m in cash, which should fund it for over a year (it is been burning ~\$9m pa). Upcoming near-term catalysts could be MS and ALS data presentations at the American Academy of Neurology (AAN) on 21-23 April. Other major catalysts (ALS data in 2016 and MS data in 2017) could provide considerable upside, if positive.

Consensus estimates

Year end	Revenue (\$m)	PBT (\$m)	EPS (\$)	DPS (\$)	P/E (x)	Yield (%)
12/13	6.0	(4.0)	(0.19)	N/A	N/A	N/A
12/14	N/A	(9.2)	(0.38)	N/A	N/A	N/A
12/15e	N/A	(9.4)	(0.33)	N/A	N/A	N/A
12/16e	N/A	(9.9)	(0.29)	N/A	N/A	N/A

Source: MediciNova

Medicnova is a research client of Edison Investment Research Limited

Price **\$3.28**
Market cap **\$81m**

Share price graph



Share details

Code MNOV
 Listing NASDAQ
 Shares in issue 24.62m

Business description

MediciNova is a US-based biopharmaceutical company focused on developing MN-166 for progressive MS, where it is in a Phase IIb trial. It also has a broad pipeline with Phase II programmes for ALS, addiction, NASH and IPF.

Bull

- With an EV of ~\$69m, success in even one indication would provide upside.
- MN-166 has shown statistically significant neuroprotective properties in a previous MS patient trial, indicating potential efficacy in progressive MS.
- MN-001 has had Phase II protocols approved for IPF and NASH, two priority areas for large pharma companies.

Bear

- MN-166 has previously missed the primary endpoint (number of new active lesions) in a trial of RRMS patients.
- Progressive forms of MS have been difficult to treat in the past and there have been many failed trials from a variety of agents.
- MediciNova does not have the funding to move all its programmes itself and is dependent on partners and potentially dilutive financings.

Analysts

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