

# Biotech Daily

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## NEUREN ON THE CUSP

### [MARC SINATRA'S BIOGUIDE: NEUREN PHARMACEUTICALS](#)

Neuren Pharmaceuticals is on the cusp of joining the small, but elite group of ASX listed life science companies with a compound in phase III clinical trials.

Despite this, Neuren's share price has spent most of its time since listing trading in a band 20 cents either side of its 40 cents float price.

The developmental progress of a company's products should, in most cases, translate into a higher share price if the company is capturing the value for its shareholders.

**Overview:** Neuren Pharmaceuticals is a New Zealand-based company developing therapeutics to treat individuals who are at risk of or have suffered brain injury. Neuren's strategy is to develop its compounds up to certain points relative to the complexity and cost of regulatory approval and the market characteristics (such as the absence of approved treatments) of the indication for which they are being developed.

The most advanced compound, Glypromate, is entering phase III clinical trials to assess its ability to treat the loss of brain function that may occur during bypass surgery. The company also has three phase II studies that will be starting soon for other compounds and/or indications, while at least four other projects are set for near-term for out-licencing.

**Financials:** Market cap: \$42 million; cash: \$12.1 million; last quarter cash burn: \$3.1 million. Neuren raised an additional \$1.6 million from a share purchase plan on November 3, 2006.

**Directors:** chairman, Dr Robin Congreve; managing director and chief executive officer, David Clarke; director and chief medical officer, Dr Douglas Wilson; non-executive director, Tom Amos; non-executive director, Dr Graeme Howie; non-executive director, Trevor Scott.

**Management:** chief scientific officer, Prof Peter Gluckman; chief financial officer, Rob Turnbull; group science manager, Dr Mike Bickerdike; chief development officer, Robyn Murdoch; executive vice-president – US, Lawrence Glass

The directors and management have wide-ranging experience and credentials with emphasis on drug development, management and finance of new ventures.

**Technology:** Neuren has patents covering a number of proprietary compounds. Many of those active in neuronal rescue target a window that occurs between the initial injury and a wave of subsequent cell death.

These compounds block multiple mechanisms leading to this wave of cell death, unlike existing drugs that have tended to only address the effects of the disrupted blood supply that occurs to the area of the brain injury.

Neuren also owns intellectual property covering a family of genes involved in neuronal repair, growth hormone analogues with improved benefit to side-effect profiles, a potential cancer treatment and an ongoing right to acquire intellectual property produced by New Zealand University's Liggins Institute relating to neuronal repair, rescue, growth and metabolism.

**Products in Development:** The following are Neuren's main compounds, the indication(s) for which they are being developed and their next development stage.

- 1) Glypromate - bypass surgery - phase III starting late 2006 – early 2007;
- 2) Glypromate - cardiac arrest - phase II to starting mid 2007;
- 3) NNZ-2566 - traumatic brain injury (mild-moderate) - phase II starting 1<sup>st</sup> half, 2007;
- 4) NNZ-2566 - traumatic brain injury (severe) - phase II starting 1<sup>st</sup> half, 2007;
- 5) NNZ-2566 - Alzheimer's disease - out-licence;
- 6) NNZ-2591 - Parkinson's disease - phase I starting 1<sup>st</sup> quarter, 2008;
- 7) NNZ-4921 - peripheral neuropathy - out-licence;
- 8) NNZ-3006 - obesity - out-licence;
- 9) NNZ-8000 - cancer - out-licence.

The phase III Glypromate study will be self funded and cost approximately \$10 million. The phase II Glypromate study in cardiac arrest is being sponsored by the US Army and Neuren will incur minimal cost while retaining full marketing rights.

Neuren has also partnered with the US Army to develop NNZ-2566 for traumatic brain injury. Neuren covers 50 percent of costs while retaining rights to 98-99 percent of the market. NNZ-2921 is currently the subject of a co-development agreement between Neuren and Metabolic Pharmaceuticals.

**Product markets:** There are no agreed treatments for brain injury resulting from bypass surgery and cardiac arrest. Therapeutics can be used in traumatic brain injury to control swelling and seizures, but do not specifically target the injury. Products in development to treat these indications are also very limited with only a couple in clinical trials. Both are in phase II for bypass surgery, with only one likely to compete directly with Neuren's product. The worldwide markets for each of these indications are around the \$US1 billion mark. The picture is similar, but not as clear-cut for Neuren's other projects.

**Verdict:** Neuren has progressed compounds into later stage clinical trials for indications in which it should be able to garner significant market share, while utilizing its non-core intellectual property to create out-licencing opportunities. Based on potential cash flows and comparison with a similar listed company (Allon Therapeutics, TSX: NPC), Neuren Pharmaceuticals market capitalisation of \$42 million appears to be below fair value. Commencement and subsequent results from a range of clinical trials as well as out-licencing deals may see the company move to a fairer value in the not-too-distant future.

Neuren closed up one cent or 2.74 percent at 37.5 cents.

Marc Sinatra's Bioguide

Bioguide Consultants

Email: [m.sinatra@alumni.mbs.edu](mailto:m.sinatra@alumni.mbs.edu)