



ASX Announcement



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NRP collaboration: Research on nerve protection compounds published in science journal

- *Research on Neural Regeneration Peptides (NRPs) has been published in international science journal, 'Experimental Cell Research'*
- *NRPs have previously shown promising effects in a rat model of nerve damage and these results have been confirmed using a much lower dose*
- *Formal preclinical development of NRPs expected to commence in 2007*

Neuren Pharmaceuticals (ASX: NEU) and Metabolic Pharmaceuticals (ASX: MBP) are pleased to announce the publication of Neuren's research that led to the discovery of the Neural Regeneration Peptides (NRPs) in the international, peer-reviewed journal, *Experimental Cell Research*. The paper entitled '*Neural regeneration protein is a novel chemoattractive and neuronal survival promoting factor*' outlines the discovery of novel genes that code for a neural regeneration peptide and describes its effects on nerve cells. A copy of the paper is available upon request from Neuren or Metabolic.

Dr Frank Sieg, the senior Neuren scientist on the NRP program, commented "this paper breaks new ground in detailing the effects of a brand new family of brain peptides. The scope of their therapeutic potential appears to be broad at this stage. Moreover, we've seen beneficial effects in vitro and in animal models at extremely low concentrations".

NRPs are a class of peptides that display a broad range of biological effects important for the protection and regeneration of nervous system tissue. Peripheral neuropathy, one of the potential therapeutic applications of the NRPs, is a relatively common and disabling condition characterised by nerve damage due to diseases such as diabetes, or as a result of other treatments, such as chemotherapy. In the US alone peripheral neuropathy affects as many as 2.5 million people and results in more than US\$11 billion in health care costs. Currently the approved drugs for the treatment of peripheral neuropathy, which have combined sales in excess of US\$2 billion per year, provide only symptomatic relief for pain and do not treat or prevent the underlying disease process.

Neuren and Metabolic agreed to jointly develop the NRP project in March 2005 with all intellectual property and commercial outcomes to be equally shared.

Previous animal study and in vitro data

Results from a recently reported animal study relevant to chemotherapy-induced neuropathy positively indicated that the current lead NRP compound, NNZ-4921, has good therapeutic potential. In the study, animals treated with the NRP compound, NNZ-4921, at 4 µg/kg/day showed significantly improved performance in several tests of movement and responsiveness, compared to controls, and displayed a significant reduction in the wasting that typically results from the induced neuropathic condition. These results support the substantial body of *in vitro* data, indicating that NRP compounds are potent neuroactive agents. Indeed, these results have since been successfully repeated with a 100-fold lower dose of the same NRP. Further information regarding these results can be found in the *ASX Announcement* released on 16 February 2006, available in the **Investor Relations** section of www.metabolic.com.au or www.neurenpharma.com.

Next steps in development

Metabolic and Neuren intend to move a lead compound towards the clinic as soon as practicable. Further studies to characterise the effects of NNZ-4921 and other NRP compounds in a range of animal models and at different doses are underway to select a lead compound to progress to human testing. Lead compound selection and manufacture for formal preclinical studies is expected to commence in 2007.

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About Neuren Pharmaceuticals

Neuren Pharmaceuticals (**ASX: NEU**) is a biotechnology company developing novel therapeutics in the fields of neurotherapy and metabolic disorders. The Neuren portfolio consists of six product families, targeting markets with large unmet needs and limited competition. Neuren has two lead candidates, Glypromate® and NNZ-2566, targeting a range of acute and chronic neurological conditions. Neuren has commercial and development partnerships, including Pfizer, the US Army's Walter Reed Army Institute of Research and Metabolic Pharmaceuticals.

For more information, please visit Neuren's website at www.neurenpharma.com.

About Metabolic Pharmaceuticals

Metabolic Pharmaceuticals Limited (**ASX: MBP**, **NASDAQ OTC: MBLPY**) is an ASX listed biotechnology company based in Melbourne, Australia with 285 million shares on issue. The Company employs 24 staff and is led by an experienced and proven management team. The Company's mission is to bring to the market innovative drugs which will improve peoples' lives and return value to stakeholders.

Metabolic has two high-value, innovative drugs in late-stage human clinical development and several exciting drugs in the research pipeline. Both its clinical stage drugs, for obesity and neuropathic pain, address multi-billion dollar markets which are poorly served by existing drugs. Metabolic commenced a Phase 2B human clinical trial of its obesity drug (AOD9604) in October 2005, and plans to commence its Phase 2A human clinical program (two trials) of its pain drug (ACV1) in Q306. Metabolic also has research programs targeting osteoporosis, type 2 diabetes, an oral delivery platform for peptides and a collaboration agreement with Neuren Pharmaceuticals Limited (**ASX:NEU**) in the field of nerve protection and regeneration. For more information, please visit the Company's website at www.metabolic.com.au.

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