Neuren announces cancer xenograft testing results

SYDNEY, Australia, 29 May 2012: Neuren Pharmaceuticals Limited's (ASX:NEU) subsidiary Perseis Therapeutics, a joint venture between Neuren and the New Zealand Breast Cancer Research Trust, is developing monoclonal antibodies against two trefoil factors, TFF-1 and TFF-3 – proteins expressed by a wide range of cancers that increase the spread of the tumor, decrease its susceptibility to current therapy and are associated with more metastatic disease and poorer survival in patients. Our first target is TFF-1 in breast cancer which we are targeting with human monoclonal antibodies produced from antibody fragments selected from a fragment library developed by the University of California San Francisco. The fragments were first selected by screening them for binding against the TFF protein then testing against a human breast cancer cell line in vitro.

The first xenograft experiment has been now been completed. Of the two monoclonal antibodies we tested one, referred to as TFF1.4, resulted in a statistically significant reduction in tumor volume (approximately 35%) compared to a vehicle control as well as 3-fold higher survival at the end of the experiment. Xenograft experiments typically also include an antibody control – an antibody raised against a target that is unrelated to the disease target – in order to differentiate between any possible non-specific antibody effect and the specific effect of the antibody being tested. A technical error on the part of a supplier resulted in our using an antibody directed against a known cancer target which meant that it was biologically active and not a true control. TFF1.4 outperformed that antibody but the study will need to be repeated to measure TFF1.4 effect against a true control. These results, however, support our belief that anti-TFF antibodies inhibit proliferation of human cancer and represent a promising therapeutic approach.

Based on the results from the xenograft study, and with the increased confidence they have given us, we have decided to fund the next step in the program and have formed a relationship with a company in Maryland, United States, called Noble Life Sciences to develop a stable cell line that will produce TFF1.4 antibodies fully capable of going from laboratory to market. Noble also will repeat the xenograft study. Noble specializes in development of drugs and biologics for cancer and was founded by former senior staff from Human Genome Sciences, MedImmune and other companies. They have capabilities from discovery through clinical trials and will help us ensure that development of TFF1.4 is accelerated and that all facets of the program meet full industry standards.

Dr Parmjot Bains has decided to leave the company. The Neuren and Perseis boards wish to thank her for her efforts and wish her well for the future. As we are prioritizing the anti-TFF project as a core Neuren program, Larry Glass, Neuren's CEO, will assume direct oversight of Perseis, including the relationship with Noble.

About Neuren

Neuren Pharmaceuticals is a biopharmaceutical company developing new therapies for brain injury, autism spectrum disorders, chronic neurological diseases and cancer. Neuren presently has two clinical-stage molecules, NNZ-2566 and Motiva®, in Phase 2 clinical trials largely funded by the US Army and the National Health and Medical Research Council, respectively. Through its subsidiary, Perseis Therapeutics Limited, Neuren is developing monoclonal antibodies against Trefoil Factors, proteins produced by cancer cells that are associated with cancer spread and reduced patient survival.

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