



19 May 2009  
BioPharmica (ASX: BPH) ASX Announcement

### **NZ PATENT GRANTED FOR CORTICAL DYNAMICS**

Cortical Dynamics, an investee company of BioPharmica Limited is pleased to announce that the patent application "Method of monitoring brain function" No. 541615 has been issued as a patent in New Zealand.

Cortical Dynamics is developing a unique depth of anaesthesia monitoring system for use during major surgery. The core technology is based on real time analysis of the patients electroencephalogram (EEG) using a proprietary algorithm based on a mathematically and physiologically detailed understanding of the brain's rhythmic electrical activity. The theory has been developed by Professor David Liley, who heads the scientific team at Cortical Dynamics located at Swinburne University of Technology.

The Cortical Dynamics team have completed analysing the data from the second trial which was designed to evaluate the sensitivity of the BAR methodology to opioids and a number of intravenous anaesthetic agents. The results of this study have helped to better characterize the performance of the BAR methodology. The successful nitrous oxide trial results were published in the peer reviewed journal *Computers in Biology and Medicine* (Liley *et al*, Dissociating the effects of nitrous oxide on brain electrical activity using fixed order time series modeling. *Comp. Biol. Med* 2008 38;1121-1130). In order to validate these results arrangements are currently being made to source high quality data for further analysis from a number of clinical anaesthetic research centres in Europe.

Yours faithfully,

David Breeze  
Chairman

For more information contact:

Mr David Breeze  
Chairman  
BioPharmica Limited  
Tel : +61 8 9328 8366

A/Prof David Liley MBChB, PhD  
Brain Research Group, Brain Sciences Institute  
Swinburne University of Technology  
Tel: +61 3 9214 8812