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CORTICAL DYNAMICS SUCCESSFULLY COMPLETES NHMRC GRANT

Cortical Dynamics, an investee company of BioPharmica is pleased to announce that it has successfully completed the work that was funded by a National Health and Medical Research Council (NHMRC) Development Grant entitled "*Commercial testing of a physiologically based theory of oscillatory brain electrical activity in anaesthesia monitoring*".

The grant was awarded in 2007 and has enabled further commercial development and testing of a physiologically based anaesthesia monitoring process which monitors brain electrical activity. The grant was administered through Swinburne University (SUT) under the control of Professor David Liley.

The Cortical Dynamics team 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 research funded through this development grant by David Liley and his team at SUT has enabled substantial improvements in the performance of the Brain Anaesthesia Response (BAR) monitor. In particular it has resulted in the development of a modified sensor layout having improved performance and sensitivity, as well as an upgrade of the data acquisition module to enable a greater resilience to the effects of noise and artefact in a range of clinical monitoring situations.

From a clinical monitoring perspective these hardware developments translate into significant improvements in the ability of the BAR monitor to detect a wide range of anaesthetic drug effects. This work concludes the most important components of the system development and integration of the BAR monitor and will now allow a full suite of testing and calibration trials to occur prior to the monitor's full production and distribution.

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