



19 November 2012

ASX Market Announcements  
Australian Securities Exchange Limited  
10<sup>th</sup> Floor, 20 Bond Street  
SYDNEY NSW 2000

**Cortical Dynamics Ltd – Second Chinese Patent Granted For BAR Monitoring System**

Please find attached an operational update from BPH Energy Ltd (**ASX: BPH**) investee company Cortical Dynamics Ltd.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "D Ambrosini".

Deborah Ambrosini  
Director and Company Secretary



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## **Second Chinese Patent Granted For BAR Monitoring System**

Cortical Dynamics Ltd (“**Cortical**”) is pleased to announce that a key patent relating to its Brain Anaesthesia Response (BAR) monitoring unit has been granted in the People’s Republic of China. Currently, Cortical has patents awarded in Australia, New Zealand, the United States, Japan and the People’s Republic of China. The issued patent entitled ‘EEG Analysis System’, patent number ZL200780027483.2 is valid until June 2027.

Cortical has developed an extensive patent portfolio encapsulating the BAR monitoring unit, providing patent protection across a number of key brain monitoring markets. Mr David Breeze, Cortical’s Chairman stated ‘We are very pleased with the granting of this second patent in China. The Chinese market represents a growing opportunity for Cortical, and the grant of this second Chinese patent significantly strengthens both Cortical’s IP and its commercial strategy’.

Cortical recently announced the completion of patient recruitment in its first human clinical trial which was conducted at St Vincent’s Hospital, Melbourne. This trial represents a significant event in the BAR monitors’ development program as it is the first time the complete BAR monitoring system has been employed within the operating theatre. The blinded data will now be processed and a clinical report will be produced.

This was the second trial of the BAR monitor, following a study conducted at Swinburne University last year. The Swinburne study provided the necessary verification for the BAR monitoring system to be used in the most recent clinical trial.

### **About the BAR Monitor**

The BAR monitoring system measures a patient’s brain electrical activity, the electroencephalogram (EEG), in order to indicate how deeply anaesthetised a patient is during an operation via an adhesive sensor applied to the forehead. The BAR monitor is designed to assist anaesthetists and intensive care staff in ensuring patients do not wake up unexpectedly, as well as reducing the incidence of side effects associated with the anaesthetic.

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#### **Cortical Dynamics Ltd**

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The BAR monitor improves on currently used EEG monitors by utilising advances in understanding of how the brain's electrical activity is produced, and how it is affected by anaesthetic and sedative drugs. The BAR's unique physiological approach is aimed at independently monitoring the hypnotic and analgesic states associated with anaesthesia, a feature no known existing EEG based depth-of-anaesthesia monitor is able to achieve. Objectively monitoring of hypnotic and analgesic state will lead to improved anaesthetic and surgical outcomes, by reducing recovery times and minimising drug costs.

### **About Cortical Dynamics**

Cortical Dynamics is a medical technology company that was established in 2004 to commercialise intellectual property relating to brain function monitoring developed by Professor David Liley and his scientific team at Melbourne's Swinburne University of Technology.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "D. Breeze". The signature is fluid and cursive, with a period at the end.

David Breeze  
Chairman

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