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## **Ethics Approval Obtained for BAR Monitor Trial in Melbourne**

Cortical Dynamics Ltd (“**Cortical**”), an investee company of BPH Energy Limited (ASX: BPH), is pleased to announce that it has obtained ethics approval from the Human Research Ethics Committee of St Vincent’s Hospital (**St Vincent’s**), Melbourne. The study will employ the Brain Anaesthesia Response (BAR) monitor to detect varying levels of anaesthetic agents in an operating room environment where the presence of multiple artifacts are known to complicate the EEG assessment of anaesthetic action.

The principle investigator in the trial will be Dr Desmond McGlade, Senior Staff Anaesthetist, from the Department of Anaesthesia at St Vincent’s. Cortical has worked closely with Dr Desmond McGlade and his team to develop protocols and reporting procedures. The trial is anticipated to commence in December. Dr McGlade said, “Trialling devices such as the BAR monitor in the OR is a critical step before gaining the approval of the broader anaesthetic community to not only use them, but to be involved in their necessary ongoing development and improvement”.

This will be the second trial of the BAR monitor, following a study conducted at Swinburne University earlier this year. This earlier study concluded that all the signal gathering and analysing components of the BAR monitor were functioning correctly, providing the necessary verification for the BAR system to be used in St Vincent’s 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.

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.