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Anaesthetists Survey Highlights Future Trends

Cortical Dynamics Ltd ("**Cortical**") is pleased to provide details of a recent survey of european anaesthetists conducted by Creative Medical Research Ltd. The findings of the survey reveal a range of issues affecting anaesthetists in relation to current and future medical technologies.

The survey interviewed 104 anaesthetists across key Western European markets during March 2013. The anaesthetists were asked a number of pertinent questions regarding current technologies within their profession. The subsequent findings clearly depict future trends in anaesthesiology technology and provide a number of priorities for anaesthesia technology manufacturers.

A significant trend noted in the report was the need for better safety innovation in patient monitoring, in particular depth of anaesthesia monitoring. The survey establishes a clear need for depth of anaesthesia monitors that have greater accuracy and are more reliable. The surveyed anaesthetists believe that greater accuracy is demanded as they are looking to balance the opposing risks of unintended patient awareness with administering unnecessarily high doses of general anaesthesia, potentially hindering patient recovery. It was also noted that while the Bispectral Index (BIS), Covidien plc, is currently seen as the 'gold standard' of depth of anaesthesia monitoring there is only data to support its use with particular drugs. The recently published survey clearly establishes a need for better depth of anaesthesia monitoring.

Based on the results of previous studies it appears that the BAR monitor may be able to detect a wider range of agents, which Cortical believes will produce measurements that are more reliable and accurate than the measurements of competing monitors. Cortical's BAR monitor has also shown to detect the affects of analgesic agents, a critical component of general anaesthesia, something no other known EEG based depth of anaesthesia monitor is capable of.

By overcoming the limitations seen in current depth of anaesthesia models Cortical believes it is well positioned to satisfy current and future trends in anaesthesia technology.

A full copy of the article can be found within the media section at Cortical Dynamics website www.corticaldynamics.com.

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About the BAR Monitor

The Brain Anaesthesia Response (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 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 may lead to improved anaesthetic and surgical outcomes, by reducing recovery times and minimising drug costs.

Cortical has completed its first human clinical trial using the BAR monitoring system which was conducted at St Vincent's Hospital, Melbourne. The findings of the St Vincent's trial were recently presented at the 2013 Annual Scientific Meeting of the Australian and New Zealand College of Anaesthetists.

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.

About Cortical Dynamics

Cortical Dynamics Ltd 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.

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