



## BioPharmica Limited

### BAR System Passes International EMC Testing

- *BAR System passes international EMC testing*
- *EMC a critical milestone for market access*
- *Prototype validation on Royal Melbourne Hospital patients*

ASX Announcement – 18 March 2005

BioPharmica Ltd (ASX: BPH) announced today that the Brain Anaesthesia Response (BAR) system has passed international compliance testing for electromagnetic compatibility.

Gaining independent verification that the BAR system meets the international EMC standards for medical devices **is a critical milestone in gaining access to international markets.**

The BAR system measures a patient's brain electrical activity (EEG) to indicate how deeply anaesthetised a patient is during an operation via a self-adhesive sensor. This then assists doctors in ensuring patients do not wake up un-expectedly, as well as reducing the incidence of side effects associated with the anaesthetic.

There are 50 million surgical operations worldwide per annum that require general anesthesia. This provides a very large commercial opportunity due to the growing medical and legal issues of patients remembering operations.

An independent laboratory has been testing the BAR system over the last two weeks for compliance with the International Electrotechnical Commission medical equipment standard for electromagnetic compatibility.

International patent coverage is also pending regarding the use of the BAR system in a number of Neuro-diagnostic settings that include detecting the early onset of degenerative diseases like Alzheimer's or Parkinson's as well as being used in drug discovery and evaluation associated with these conditions.

A prototype is currently being used in validation trials with elective surgical patients at the Royal Melbourne Hospital. Recognising the potential importance of the trial the Australian and New Zealand College of Anaesthetists has provided funding support.

Current products targeting this market do not work with all anaesthetic agents, do not work with all patients and have a statistical basis. However the BAR system is able to detect drugs the competitors cannot, works with all patients and responds within a second.

Compared to other similar products the BAR System is based on fundamentally different scientific approach resulting from six years of research and development by Cortical Dynamics Pty Ltd and Dr David Liley, a researcher and senior lecturer in Biophysics and deputy director of the Centre for Intelligent Systems and Complex Processes at Swinburne University of Technology.

David Breeze

Chairman  
BioPharmica Ltd

## **About BioPharmica**

BioPharmica is working to commercialise a portfolio of Australian biomedical research discovered by Australian universities, medical institutes and hospitals targeting large global markets. The Company has several projects currently undergoing development in Australian hospitals.

In conjunction with the University of Western Australia and the Western Australian Institute for Medical Research, the Company is commercialising a molecular marker for early and accurate cancer detection. The HLS5 genetic marker is currently undergoing pre clinical trials at Royal Perth Hospital and is a potential therapeutic and gene therapy target.

In partnership with Cortical Dynamics Pty Ltd, the Company is commercialising the BAR Monitor, a device that measures a patient's brain electrical activity (EEG) to indicate the response to drugs administered during surgery. The BAR Monitor assists doctors to ensure patients do not wake up unexpectedly during an operation, and minimizes associated side effects from post-operative recall of surgical procedures. The BAR Monitor is currently undergoing trials at Royal Melbourne Hospital. Other promising applications for the technology include neuro-diagnostics and drug discovery.

Together with the Royal Melbourne Institute of Technology University and Diagnostic Array Systems, the Company is commercialising faster and more effective methods of detecting infectious diseases using the genetic structure (DNA) of bacteria. Founders Dr Benjamin Fry and Dr Viraj Nawagamuwa are both world leaders in the genetic structure of bacteria.

In conjunction with Swinburne University of Technology and Dr Paul Stoddart, BioPharmica is commercialising the SERS Probe, a fibre optic probe to be used in biosensors for diagnostic testing and drug development. The probe enables the microscopic tip of an optical fibre to be used in biosensors to detect and monitor biological and chemical targets. Biosensor manufacturers have seen rapid growth with the 2003 worldwide market for biosensors at US \$ 7.3 billion.