

***Investment Brief for
Automated Electrophysiological
Substrate Mapping & Data Analysis***

***NSW
AREA HEALTH
SERVICES***

Office of Commercialisation

***For further information under a Confidential Disclosure
Agreement, please contact the following OoC team member***

***Dr Russell Carrington
Sydney West Area Health Service – Office of Commercialisation
Mob: +61 (0) 425 251 314
Ph: 61 2 9845 6079
e-mail: russell.carrington@officeofcommercialisation.com
Westmead Hospital PO Box 90 Westmead (Sydney) NSW
2145 Australia***

Automated Electrophysiological Substrate Mapping & Data Analysis

Summary

Software system to create rapid, automatic-capture-and-display spatial maps by recording, identifying and cataloguing real-time electrophysiological cardiac beats and synthesizing beat detection, classification, analysis and substrate mapping. An automated digital assistant for EP surgery to locate electro-physiological problems, map them and eliminate them.

Dr Pramesh Kovoor, Network Director Cardiac Services and his team have developed this technology based on their clinical practice.

The Technology

This patented software system is a unique 'digital assistant' for current EP mapping technologies, allowing them to fully utilize all EP data collected from their sensors on every beat, rather than manual sequential data-collection from only selected beats. The digital-assistant makes EP procedures faster and easier by creating rapid, automatic capture-and-display spatial maps. Through comprehensive recording, identification and cataloguing of real-time EP cardiac beats, the systems automatically synthesizes beat detection, classification and referencing, analysis and multi-dimensional colored substrate mapping, adding a new dimension in speed and accuracy of EP mapping for clinicians.

Benefits

The technology can be applied as a digital assistant to existing EP mapping systems or incorporated into new developmental systems. It can be engineered for compatibility with the following EP monitoring systems:

Magnetic (eg. NOGA™ or CARTO™ systems (BioSense-Webster))

ultrasound (eg. RPM (EP Medsystems-Boston Scientific))

impedance(eg. EnSite NavX™ (Endocardial Solutions) or Localisa™ (Medtronic))

Market

The Atrial Fibrillation (AF) related market, in particular, is predicted to grow to US\$4.9 billion by 2010. Sales of non-drug AF products through the year 2010 are expected to increase by 23% annually to nearly \$3.8 billion (\$2.1 billion in core therapies) as the new technologies are gradually refined and adopted. Market analysts attribute much of the growth to emerging options assisted by enabling adjunctive technologies, such as infrared imaging and advanced 3-D real-time mapping.

IP Position

A Provisional Patent application was filed in 2004 and is fully owned by Sydney West Area Health Service.

Commercialisation

We seek a partner to license our technology for integration into their existing EP mapping technology. The licensee may partner with our clinical professionals for further research and development through clinical trials, taking advantage of their extensive experience in clinical EP.