

Case Study

CAMERA2

MRSA Treatment for the Menzies School of Health Research

The **CAMERA2** study (Combination Antibiotic Treatment for Methicillin Resistant Staphylococcus Aureus) is an investigator-initiated, multi centered, parallel group, open label, randomised controlled trial:

- To determine whether a novel combination antibiotic treatment is superior to the standard antibiotic treatment for hospitalised patients suffering with MRSA
- Studies 440 hospitalised patients across 25 sites across Australia, Israel, New Zealand and Singapore spanning a 4 year period

A novel approach to treating Methicillin Resistant Staphylococcus Aureus Infection (MRSA)

The Menzies School of Health Research in Darwin, Australia, was established as an independent health research institute, initially with links to Sydney University. In the past decade, it has become associated with Charles Darwin University. It is Australia's only medical research school dedicated to improving health in Australia and the Asia Pacific, with a special focus on Indigenous Australians.

CAMERA is driven by Associate Professor Steven Tong and Infectious Diseases Specialist Dr Joshua Davis. Dr Davis's main clinical interests are in viral hepatitis, hepatology, HIV infection, refugee health and infection in critical care settings.

The accepted standard treatment for MRSA uses a traditional antibiotic (vancomycin/daptomycin) which results in an approximate 30 - 40% mortality rate. The **CAMERA** trial takes an innovative approach combining vancomycin with another common antibiotic, β Lactam. Earlier lab tests suggest that the combination of the two antibiotics leads to more efficient killing of bacteria.

The **CAMERA** trial started with an in-house pilot (**CAMERA 1**) of just 60 patients - the first time the combined antibiotics were tested on patients. The promising results meant the Menzies School secured funding from the Australian National Health and Medical Research Centre (NHMRC) for **CAMERA2**.

Looking for expertise in multi-site, web based clinical trials

When it came to selecting a technology partner for **CAMERA2** Dr Davis considered various options from free web based data capture tools through to large global suppliers. He was looking for a technology partner that was cost effective and had proven expertise in multi-site, web-based database clinical trials.

A four year, multi centred, randomised trial

The study is an investigator-initiated, multi centered, parallel group, open label, randomised controlled trial. Initially it includes 440 participants in infectious disease inpatient units across 25 hospitals from July 2015 – June 2019. The trial is being carried out in collaboration with:

- Australasian Society for Infectious Diseases
- Singapore Infectious Diseases Clinical Research Network
- Australasian Kidney Trial Network

Dr Davis found Spiral and Spinnaker through personal recommendations from the Research Co-ordinators involved in the HEAT (Permissive Hyperthermia Through Avoidance of Paracetamol in Known or Suspected Infection in the Intensive Care Unit) and SPLIT (Saline vs Plasma-Lyte 148 for Intensive Care fluid Therapy study) trials which use Spinnaker. Spinnaker offered an easy to use, tailored solution that met budget constraints. Dr Davis was impressed to find that Spinnaker provided a single solution integrating the database and randomisation into one system.

He says “When it came to choosing the technology I liked the fact that Spinnaker is locally developed for the Australasian market. It is really well presented, easy to use, easy to understand and in the end it is very human.”



“Working with Audrey and Spinnaker has been fantastic and I would definitely recommend them to anyone who has a funded clinical trial to establish.”

DR JOSH DAVIS

Tailored, personal approach impresses

The **CAMERA** trial software was developed using the existing building block modules within Spinnaker. With this head start Spiral was able to deliver a solution quickly, cost effectively, and one that was fully tailored to **CAMERA**'s specific requirements.

CAMERA went live in July 2015 and already Dr Davis says that the project is going better than expected. “In my experience with clinical trials they never meet the original expectations. Things go wrong and you often don't get what you were originally after. However with Spinnaker and **CAMERA2**, I have been pleasantly surprised. It has met all my original expectations and I don't have a single negative thing to say about it. Spinnaker has turned out to be much faster, more responsive, agile and easier to use than the other options I have used in the past.”

Dr Davis recognises that it is the personalised nature of what Spiral does and this ability to rapidly tailor make a solution to their needs that make Spinnaker stand out. He says, “The solution works as a completely tailor-made project but without the long development times and hassle.”

It is not only the software that is personalised. Dr Davis goes on to say “What is also unusual is that we get to deal directly with Audrey. Of course I know she is not the only one in the office but it is great that she obviously thinks this trial is important enough for her to communicate directly with us. It is great for us!”

About us



You can find out more about Spinnaker and get a free software trial at www.spinnakersoftware.co.nz



Discover Spiral at www.spiral.co.nz, or contact Audrey on +64 21395316 or audrey@spiral.co.nz



Find out more about the Menzies School of Health Research at www.menzies.edu.au

Looking forward

With the trial well underway and operating very smoothly across the various sites the Menzies School and Spiral are working together to include several more hospitals into the trial. Audrey Shearer, Managing Director of Spiral says, “Our agile approach to software delivery means Spinnaker is responsive, easy to use and flexible. Project managers are able to add in as many patients, users and locations that are needed. And because Spinnaker sails in the cloud updates take place in real-time, it is easily accessible from anywhere and adding new users and extra hospitals into the **CAMERA** trial will be easily achieved.”



*“We believe in working smarter, not longer. Being adaptable, not rigid and in keeping it simple. We carry this ethos right through our business and our clinical trial projects. With the **CAMERA** trial we adapted Spinnaker, from our existing code-base, to suit what Josh needed, saving both investigator time and project time. It is exciting to be developing software and working with Josh on a project that has the potential to significantly change patient outcomes.”*

**AUDREY SHEARER,
MANAGING DIRECTOR,
SPIRAL WEB SOLUTIONS**