Pharmaceuticals

Opportunity
The resistance of pathogenic bacterial species to antibiotics persists as one of the greatest threats to global public health. One example of bacterial species is Methicillin-resistant Staphylococcus aureus (MRSA), a bacterium that causes infections in different parts of the body and is responsible for several difficult-to-treat infections in humans. There is a need for the development of new approaches and the identification of new compounds for use in the treatment of bacterial infections, particularly bacterial infections which develop resistance to conventional antibiotic treatment.

Technology
This invention relates to a new class of compounds that are of potential utility against methicillin-resistant Staphylococcus aureus (MRSA).
One compound has been identified from a library on the basis that it significantly inhibits MRSA growth and displays limited cytotoxicity in three mammalian cell lines.
Proof of concept has been demonstrated in both in vitro and in vivo models.

Inventors
This technology was developed by Prof Michael Kassiou, Prof James Triccas, Dr Tristan Reekie, Dr Gayathri Nagalingam, Mr Timothy Katte, & Ms Maria Galletta of the University of Sydney and the Centenary Institute.

Intellectual Property Status
This technology is the subject of an Australian provisional patent application.

Commercial Opportunity
This is an opportunity to acquire a novel class of antibiotic compounds capable of treating MRSA (methicillin-resistant Staphylococcus aureus ). These compounds have the potential to significantly change the treatment and mortality rates of patients infected with MRSA.

The University is seeking industry partners for licensing and co-development partnerships for the development of this technology through clinical phases and into market.