

NHMRC grant for breakthrough blood research

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A \$1.9 million Australian and New Zealand research study into the safe use of frozen blood platelets that can be stored for up to four years could revolutionise the way blood is used in the treatment of critical care patients.

Led by Professor Michael Reade, Chair of Military Medicine and Surgery at the University of Queensland, along with colleagues at the Australian Red Cross Blood Service, the CLIP-II (Cryopreserved vs Liquid Platelet) National Health and Medical Research (NHMRC) trial will study a group of 800 cardiac surgery patients requiring blood transfusions in 12 Australian and New Zealand hospitals over four years.

The study will be hosted by the Australian and New Zealand Intensive Care Research Centre at Monash University, which has an international reputation for this type of research.

Blood platelet transfusions are life-saving for trauma cases but with a short shelf life of five days they are usually not available in regional and remote civilian hospitals and military field hospitals.

Professor Reade is an anaesthetist and intensive care specialist in the Australian Defence Force.

Melbourne anaesthetist Professor Kate Leslie and Adelaide anaesthetist Dr Thomas Painter were also awarded a \$1.2 million NHMRC grant to set up an Australian and New Zealand study as part of an international clinical trial into tranexamic acid, a drug used to treat or prevent excessive blood loss. The POISE-3 study of 10,000 patients worldwide will run for five years.

Professor Reade said it was hoped the frozen platelet study would lead to frozen blood platelets being registered by the Therapeutic Goods Administration for widespread use.

"If the study shows frozen platelets are safe and effective it will change the way blood is stored worldwide, and make transfusions possible in the many small hospitals that currently have no platelet blood bank.

"Freezing platelets extends their shelf life to between two and four years which would make them available in both military hospitals and small to medium sized civilian hospitals," he said.

"Both Defence and the Australian civilian community would benefit enormously if frozen platelets could be introduced into widespread practice."

An earlier CLIP pilot trial led by Professor Reade was funded by an Australian and New Zealand College of Anaesthetists (ANZCA) Academic Enhancement Grant through the ANZCA Research Foundation.