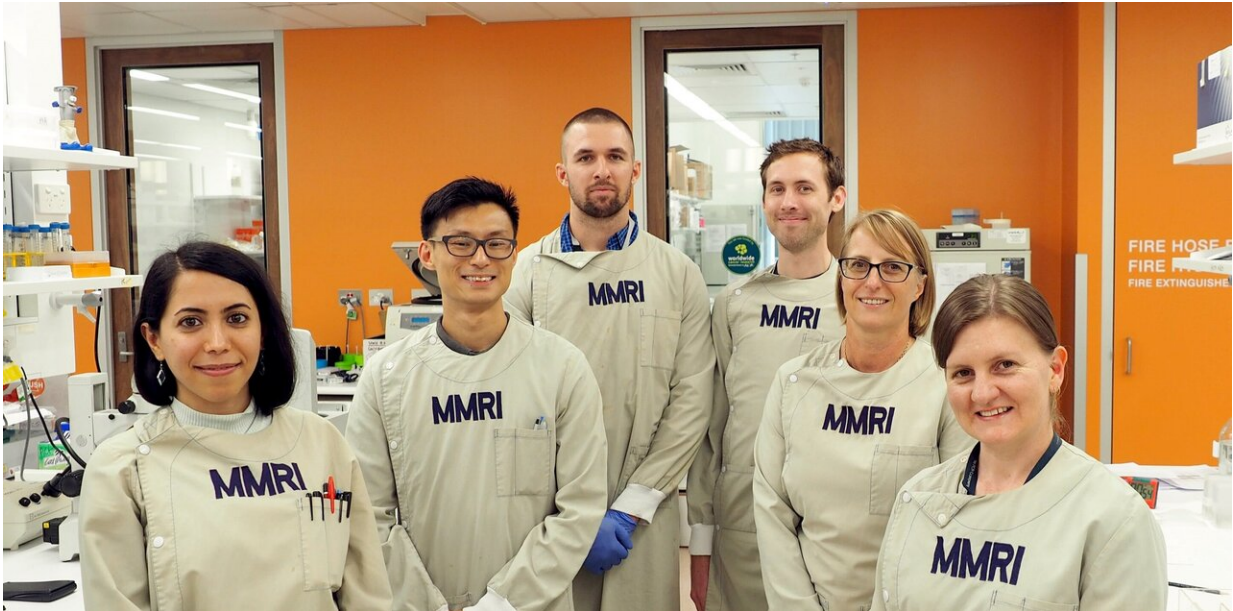


A breakthrough with a new cancer vaccine

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Credit: Translational Research Institute

Scientists are ready to trial a new cancer vaccine in humans following the successful outcome of their preclinical studies.

The new [vaccine](#) was developed by a Mater Research team based at The Translational Research Institute in collaboration with The University of Queensland.

Lead Researcher Associate Professor Kristen Radford says the vaccine has the potential to treat a variety of blood cancers and malignancies and

is a major breakthrough for cancer vaccinations.

"We are hoping this vaccine could be used to treat blood cancers, such as myeloid leukemia, non-Hodgkin's lymphoma, multiple myeloma, and pediatric leukaemias, plus solid malignancies including breast, lung, renal, ovarian, and pancreatic cancers, and glioblastoma," she said.

"Our new vaccine is comprised of human antibodies fused with tumor-specific protein, and we are investigating its capacity to target [human cells](#) while activating the memory of the tumor cells."

Associate Professor Radford says the vaccine offers several key advantages over existing cancer vaccines, which have already shown promise in [early clinical trials](#).

"First, it can be produced as an 'off the shelf' clinical grade formulation, which circumvents the financial and logistical issues associated with patient-specific vaccines," she said.

"Secondly, this prototype vaccine targets the key tumor cells required for the initiation of tumor-specific immune responses, thereby maximizing potential effectiveness of treatment, while minimizing potential side effects.

"We are very happy to see our research published in a prestigious journal, and we hope our continued work towards finding a safe and effective cancer vaccine will benefit [cancer patients](#) in the future."

The study was published in the highly ranked journal *Clinical and Translational Immunology*.

More information: Frances E Pearson et al, Human CLEC9A antibodies deliver Wilms' tumor 1 (WT1) antigen to CD141 + dendritic

cells to activate naïve and memory WT1-specific CD8 + T cells, *Clinical & Translational Immunology* (2020). [DOI: 10.1002/cti2.1141](https://doi.org/10.1002/cti2.1141)

Provided by Translational Research Institute

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