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Australian startup Cyteph secures $1.5 M for brain cancer immunotherapy trial

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To address pressing, unmet needs in the treatment of cancer



Cyteph, a spin-out biotechnology company from QIMR Berghofer Medical Research Institute in Australia, has been awarded a $1.5 million grant via the CUREator incubator.

This grant signals an official launch milestone for the startup, supporting its imminent plan to conduct a phase 1 clinical trial for its lead candidate CYT-101 in recurrent glioblastoma multiforme (GBM) patients.

Under the guidance of QIMR Berghofer's Professor Rajiv Khanna, the goal is to develop allogeneic or 'off-the-shelf' T cell therapies and a dual-targeting CAR T platform to rapidly advance the treatment of solid tumours.

CYT-101 is an allogeneic cytomegalovirus (CMV)-specific T cell therapy developed by Professor Khanna's team. The novel immunotherapy uses the immune system and the power of virus-specific T cells to recognise and attack cancer cells. CMV-specific T cells are particularly effective at targeting and destroying virus-infected and malignant cells because they are primed in the body as killer T cells which rapidly migrate and penetrate deep into diseased tissues.

The programme has been de-risked through two previous clinical trials using autologous CMV- specific T cell therapy in GBM patients, where it was found to be safe with preliminary efficacy signals.

In addition to CYT-101, Cyteph plans to utilise the unique properties of allogenic CMV-specific T cells as a dual targeting, CAR T delivery platform 'Cyt-ATTAC' (Cytomegalovirus – Allogeneic Tumor TArgeting Car t) to treat solid tumours. Capital raise efforts are underway to support this promising pipeline of medical research.