



Research We Fund



Project:

Improving GBM Response to Antibody-Drug Conjugate Therapy

Research team:

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Institution: La Trobe University,
Olivia Newton-John Cancer Research Institute

Cancer type: Brain

Years funded: 2019–2020

What is the project?

Our laboratory has developed a new antibody (mAb806) which we've shown in clinical trials to target brain tumours in patients. Linking this new antibody to the potent toxin, MMAF, has produced a new drug (ABT-414) which has shown remarkable responses in clinical trials in Australia and overseas. We want to explore how best to combine this treatment with immunotherapy to inform the design of a new clinical trial to improve treatment outcomes of brain cancer patients.

What is the need?

New therapies for brain cancer are urgently required due to the lack of treatment options and poor outcomes for many patients. While five-year survival has increased for many common cancers, it has hardly improved for those with cancers like brain.

What are you trying to achieve?

There have been a number of patients who achieved remarkable clinical responses with some disease-free over two years post treatment. Unexpectedly, we have identified patients who had clinical and radiological progression while being treated with the new drug who at subsequent surgery have been found to have no viable tumour. Our research suggests this may in part be due to an induction of an immune response. This project aims to explore the ability of this drug to modulate the immune system, and potentially enhance responses by combining this drug with immunotherapy.

Project timeline

Timeline	2019	2020
We will conduct our experiments and analyse tumour samples from patients in the trial treated with ABT-414.		
We will evaluate the role of the immune system in the therapeutic effects of ABT-414 in model systems.		
Complete assessment of combining ABT-414 treatment with immunotherapy.		

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