



NEW CLINICAL TRIAL AVAILABLE FOR CHILDREN WHO HAVE UNDERGONE TREATMENT FOR MEDULLOBLASTOMA

An international clinical trial examining if treatment with metformin can improve cognition in children who have undergone treatment for medulloblastoma is now open in Australia.

Medulloblastoma is a brain cancer which occurs most commonly in children under the age of 10, with 20-30 Australian children diagnosed each year. Through intensifying treatment strategies, survival rates have improved to 75-80%, but this comes at a great cost for patients. Many children who survive medulloblastoma experience devastating treatment-related cognitive impacts for the rest of their lives, including impaired memory, IQ and verbal comprehension skills. There is a desperate need to limit the long term cognitive side effects for these patients.

MET-MED is a phase III clinical trial developed by Canadian and Australian researchers, based on promising data demonstrating that stimulating regenerative brain growth can improve cognitive recovery after an injury or insult.

“Laboratory studies led by our colleagues at The Hospital for Sick Children (Toronto, Canada) showed that metformin could stimulate cognitive recovery in pre-clinical and animal models,” said Professor Jordan Hansford, National Principal Investigator for MET-MED in Australia. “Importantly, a subsequent pilot study demonstrated that metformin is safe for children to use and provided initial promising improvements in the small number of children who participated. MET-MED will now test metformin in a larger group of children and examine a larger range of cognitive functions.”

The Monash Children’s Hospital in Clayton (Victoria) is the first Australian site to activate MET-MED, and the trial will be progressively opened at Children’s Hospital at Westmead, John Hunter Children’s Hospital (Newcastle), Perth Children’s Hospital and Royal Children Hospital in Melbourne. ANZCHOG will be the national sponsor for participating sites in Australia, working closely with the international MET-MED trial team based at The Hospital for Sick Children in Toronto.

“The medulloblastoma research community have tried a number of different strategies to limit the long term effects of treatment on our patients, but they have either been unsuccessful in achieving sustained improvements over time or have compromised survival rates,” explained Professor Hansford. “MET-MED is testing an entirely new approach, and should it be successful, the benefits for patients and their families will be enormous. We can then test metformin in repairing cognitive damage caused by toxic treatments for other brain cancers.”

The MET-MED trial is proudly supported by the Australian Government’s Medical Research Future Fund and the Australian Brain Cancer Mission (<https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/136-million-for-reproductive-childhood-brain-and-other-cancer-clinical-trials>)

ANZCHOG is a non-profit organisation committed to ensuring Australian and New Zealand children receive world-class cancer care. We are the peak professional body for paediatric oncologists and

health professionals who care for children with cancer, spearheading national initiatives to enhance clinical care through communication, research, networking and education. We are also the national cooperative clinical trials group for childhood cancer, actively working with trial consortia around the globe to ensure Australian and New Zealand children have the opportunity to access the latest promising cancer treatments.

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