



MEDIA RELEASE

COVID-19 in immunocompromised people: study launched

A world-first Australian study could help determine which existing treatments are protective against COVID-19

(SYDNEY, Wednesday 15 April 2020) A world-first Australian study will observe and evaluate the impact of COVID-19 on people with compromised immune systems, in order to uncover potentially life-saving information about how alterations in the immune system affect COVID-19 infection.

Coordinated by the Kirby Institute at UNSW Sydney, the study is a collaboration between a number of Australia's leading medical research organisations, including St Vincent's Hospital Sydney, the Garvan Institute and Institute of Clinical Pathology & Medical Research (ICPMR) at Westmead Hospital.

Associate Professor Mark Polizzotto from the Kirby Institute said that we do not know enough about how COVID-19 impacts people with compromised immune systems. "While all Australians are rightfully apprehensive about contracting COVID-19, it is possible that people with compromised immune systems are at increased risk of serious consequences of infection."

This study will enrol people who have tested positive for COVID-19 and who are also either undergoing cancer treatment, have had a solid organ transplant or stem cell transplant, are living with HIV, have an inherited immunodeficiency, or are taking immunomodulatory therapies.

Phil Pryke has a blood cancer called multiple myeloma, which will ultimately require a stem cell transplant. While he has an extraordinarily positive outlook for his health, thanks in a large part to his experience of Australia's health system as "truly world class", he has had to make big changes to his lifestyle to minimise the risk of contracting COVID-19.

"My partner and I only leave the house twice a week for my medical appointments, and I haven't seen my children or grandchildren since January. We are being very careful, and are maximising protection wherever we can," he says. "I manage the need for isolation by having very open conversations with my medical teams, my family, my friends and my colleagues about where my health is at. This has opened up an incredible network of support for me."

"But with COVID-19 there are so many unknowns, especially for people like me with compromised immune systems. That's why this research is so important. Clinicians need to know how to manage COVID-19 in people like me if I were to contract it."

Dr Barbara Withers is a haematologist at St Vincent's Hospital Sydney, and is Mr Pryke's doctor. She will lead the analysis of COVID-19 in people with cancer. "These population groups are typically more vulnerable to influenza and common coronaviruses, as well as to bacterial and

opportunistic infections. We also know older people are at higher risk of severe COVID-19 infection."

"Given many of our patients with cancer are over the age of 65, this may increase their risk on two fronts. This study may also provide information about whether certain cancer therapies are associated with higher risks of severe infection."

The potential to accelerate promising therapies to controlled trials

Dr Sarah Sasson, an immunologist at the Kirby Institute, NSW Health Pathology and ICPMR at Westmead Hospital is leading the analysis of immune therapies. She says that the study may also offer the possibility of accelerating the identification of promising therapies for COVID-19, which can then be prioritised for study in controlled clinical trials.

"For example, some of the most feared complications of COVID-19 appear to arise from an overactive immune response attacking the lungs late in infection. It is possible that immune therapies could dampen this overactive response, with potentially beneficial outcomes."

"If through this study we identify a treatment that appears to be protective against severe COVID-19, we can rapidly move it into the controlled trials, the gold standard to test whether a new treatment works."

The study will be conducted at approximately 30 clinical sites in Australia, and has been designed in close consultation with community organisations such as Positive Life NSW and Cancer Council. It is being funded by the Australian Government Department of Health, and Gilead Sciences.

Associate Professor Mark Polizzotto is supported by a fellowship from the Cancer Institute of NSW.

Other collaborators include Kinghorn Cancer Centre, Holdsworth House, Cancer Council NSW, Melanoma Institute Australia, Royal North Shore Hospital, NSW Health Pathology, Westmead Hospital, Blacktown Hospital and St Vincent's Health Network Sydney.

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Stakeholder quotes:

"Positive Life NSW is very pleased to be supporting this significant and timely research into COVID-19 and its impacts especially for people living with HIV. As the representative body for all people living with HIV in NSW, we recognise this research will answer many questions our community is grappling with in the current uncertain environment."

Ms Jane Costello, CEO of Positive Life NSW.

"Gilead Sciences is proud to support this important research, and help Australians living with immunocompromised illnesses navigate this challenging time. We are grounded by the desire to help patients, through our mission to discover and develop innovative therapeutics in the areas of unmet medical needs that improve patient care. We remain committed to ongoing support in these areas through collaboration with academia, healthcare professionals and advocacy on significant projects like these."

Dr Paul Slade, Senior Director, Medical Affairs, Gilead Sciences Australia/New Zealand

About the Kirby Institute

The <u>Kirby Institute</u> is a leading global research institute dedicated to the prevention and treatment of infectious diseases. We were established in 1986 in response to the then emerging HIV epidemic. We now contribute to knowledge on a broad range of diseases, including viral hepatitis and sexually transmissible infections.