NCRIS Health Group

Enabling health innovation and translation

NCRIS National Research Infrastructure for Australia An Australian Government Initiative Health Group

Australian Government

Together, we tackle complex, multidisciplinary medical challenges using world-class national research infrastructure. Our experts, data and tools shepherd health discoveries toward better prevention, diagnosis and treatments for Australians. The NCRIS Health Group accelerates Australian health research and industry innovation, reducing the time and costs of getting new health solutions to patients.

Tackling chronic conditions

Improving health outcomes for Australia's ageing population

Delivering dementia and ageing research for better quality of life for older Australians requires long-term evidence, advanced imaging and real-world data. NCRIS Health Group providers are addressing the challenge of improving the quality, safety and effectiveness of care in later years.

Data Connect Australia (formerly the PHRN) has securely linked hospital, screening and mortality data, allowing researchers to follow thousands of older people over 3 decades without repeated clinic visits. This has reduced bias, improved understanding of ageing-related risks, and informed better screening and prevention strategies.

The National Imaging Facility has supported dementia research and treatment development by providing advanced MRI and PET imaging essential for enabling the approval of the first disease-modifying treatment (donanemab) for early-stage Alzheimer's disease in Australia. Microscopy Australia enabled an Australian spin-off that is commercialising a new drug candidate to treat agitation and aggression in dementia – now in phase 2 clinical trials.

The Australian Research Data Commons provides a secure online platform for researchers to combine and analyse data from dementia studies from around the world.

NCRIS Health Group providers are turning complex data and imaging into safer, more effective care for older Australians with real-world evidence for clinicians and policymakers.

Dementia is a huge health burden for Australians. It is the

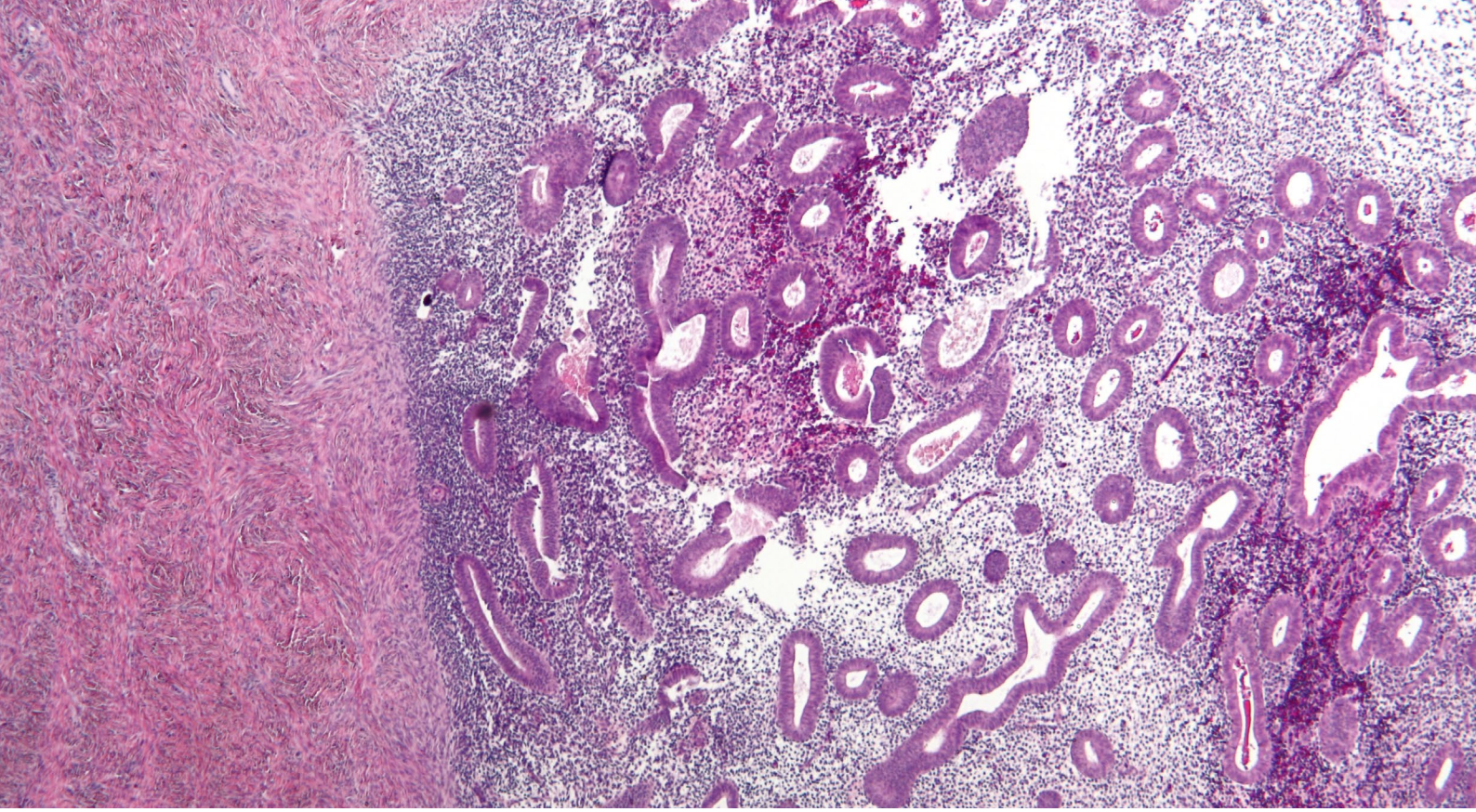
second-leading cause of death

in Australia, affecting nearly half a million Australians, and numbers are expected to double by 2058

"These new therapies are the first to address the underlying disease process in Alzheimer's disease. The approval of donanemab will most likely herald other agents, along with combination therapies. It's an important new era for the management of Alzheimer's disease."

Prof Michael Breakspear, Hunter Medical Research Institute Imaging Centre





Tackling chronic conditions

Harnessing linked health data to transform endometriosis diagnosis and care

Endometriosis affects millions of women and girls worldwide, and an estimated 1 in 7 in Australia, but often goes undiagnosed for years. NCRIS Health Group providers are helping researchers uncover the full impact of endometriosis.

Since 1996, the Australian Longitudinal Study on Women's Health has collected survey data from 57,000 women and, with support from Data Connect Australia (formerly the PHRN), links survey data with hospital and health records. This powerful combination allows researchers to track prevalence, risk factors, co-morbidities, and long-term outcomes. Findings show diagnosis prevalence, with many patients facing chronic pain, reproductive complications and mental health challenges.

By enabling large-scale, linked data analysis, the NCRIS Health Group infrastructure supports practical efforts for tools such as an endometriosis risk calculator with clinical guidelines for health professionals, improving diagnosis and care for Australian women.

"We found that early diagnosis is the key to better outcomes for women. Having a diagnosis before fertility treatment levelled the playing field – outcomes were no different for early-diagnosed women and women without endometriosis."

Prof Gita Mishra, The University of Queensland

40,500
Australian women were hospitalised in 2021–22 for endometriosis-related issues.

It was the
20th most common
reason for hospitalisation among women aged 15–44