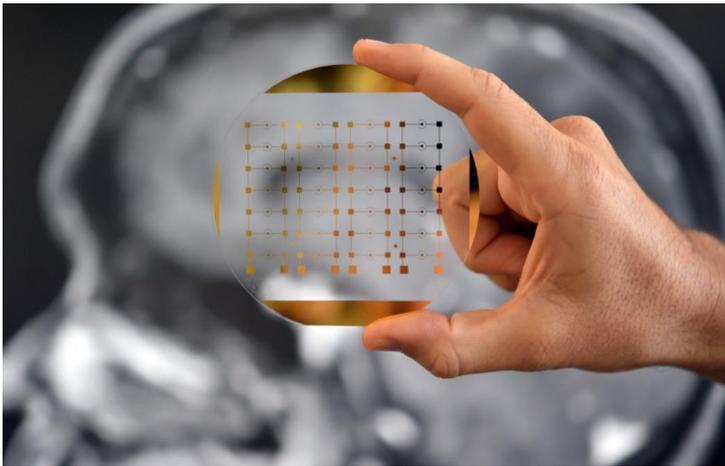


Researchers in Australia open ‘window to the brain’™ with powerful cancer tech

02 February 2026 | News

Device has been validated in more than 40 brain cancer patients



Researchers have opened a ‘window to the brain’ with a new diagnostic device that can tell how deadly brain tumours respond to treatment from a simple blood test.

Technology created at The University of Queensland (UQ) in Australia could improve the odds of surviving brain cancer and change how we treat a range of neurological conditions.

The new device, called a Phenotype Analyzer Chip, was developed in the laboratory of ARC Laureate Professor Matt Trau and reads tiny biological particles in a patient’s bloodstream to get fast and accurate information on glioblastoma.

The Phenotype Analyzer Chip works by examining small samples of blood and capturing messenger cells known as extracellular vesicles that originate from glioblastoma tumour tissue.

The device has been validated in more than 40 brain cancer patients and the Trau lab is now engaging with translational partners to implement the technology into clinical trials.

The hypersensitivity of the device, enabled through unique bionanotechnology innovations specifically developed in the Trau lab, makes it an ideal platform technology that could be tweaked to monitor other neurological disorders associated with inflammatory processes.