FEATURE



Simple test has the potential to change cancer care

"This is about giving patients more time. If we can harness the patient's own immune system to eliminate these aggressive cancer cells, we have the opportunity to change outcomes for people facing metastatic disease."

– PROFESSOR SUDHA RAO

BODY LAB

Listen to the podcast with Professor Sudha Rao and Dr John Friend from Kazia Therapeutics *(pictured below).*



If you have Stage IV Triple-Negative Breast Cancer, please speak with your treating clinician about the PaxPlus-ABC trial.

When someone is diagnosed with an aggressive cancer, every day counts. A new blood test being developed by researchers at QIMR Berghofer could help doctors detect cancer earlier, monitor its progression and better understand how patients are responding to treatment, all without invasive procedures.

Led by Professor Sudha Rao, the team is developing a liquid biopsy test that identifies cancer markers in the blood. A key focus is detecting circulating tumour cell clusters, or 'cancer clusters', which are believed to drive metastasis, the spread of cancer to other organs in the body that's responsible for 90 per cent of cancer-related deaths.

Unlike traditional biopsies, which often require surgery, liquid biopsies offer a faster and less invasive way to track disease progression and treatment response.

"For patients, time is everything. The ability to track cancer progression and treatment response through a simple blood test could fundamentally change how we manage advanced cancers," Professor Rao said.

The technology is being evaluated through the Advanced Breast Cancer-Paxalisib (ABC Pax) clinical trial across Queensland for patients with advanced and triple-negative breast cancer.

Regular blood samples allow researchers to monitor how cancer and immune cells change over time and whether treatments are working.

The trial builds on a breakthrough discovery that revealed how dormant cancer cells evade the immune system before driving metastatic spread. Working with biotechnology company Kazia Therapeutics, researchers found the drug Paxalisib can awaken these hidden cancer cells, enabling the immune system to recognise and attack them. Preclinical studies have shown promising results, including preventing cancer spread.

"This is about giving patients more time. If we can harness the patient's own immune system to eliminate these aggressive cancer cells, we have the opportunity to change outcomes for people facing metastatic disease," Professor Rao said.

The research has been inspired by patients and families affected by cancer, including Daniela Dwyer, whose tissue donations and family, via the Daniela Dwyer Foundation, continue to support the work. Professor Rao's commitment to tackling metastatic cancer has also been shaped by the loss of a close friend and also her father to the disease.

With promising early results and a clinical trial underway, the research marks an important step towards detecting and stopping cancer spread sooner.