

Australia-US research revolutionises how chemotherapy is used for colon cancer patients

10 June 2022 | News

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Australian-American researchers have co-designed a blood test that uses circulating tumour DNA (ctDNA) to precisely identify the stage II colon cancer patients that need chemotherapy after surgery. It is the first clinical study to determine whether patients should receive chemotherapy based on their ctDNA result. There was no method of identifying which stage II colon cancer patients would benefit from chemo before this test.

The blood test has the potential to revolutionise how chemotherapy is used for colon cancer patients and accelerate the development of promising new treatment options.

More than 450 patients and over 20 hospitals from across Australia were involved in the world-first clinical trial, which investigated the blood test as a promising aid to cancer treatment decision-making.

The study, co-led by WEHI (Walter and Eliza Hall Institute of Medical Research) in Melbourne, Australia and the Johns Hopkins Kimmel Cancer Centre in the US, found the test could accurately predict which patients would benefit from chemotherapy after their cancer is surgically removed.

While most patients with stage II colon cancer are cured after surgery to remove the cancer from the bowel, the cancer will recur in around 20 per cent of patients. Chemotherapy is currently offered to all stage II colon cancer patients despite a majority not needing it.

"This ctDNA blood test could be used to spare around 600 Australians and over 100,000 people worldwide from unnecessary chemo treatments each year", said the researchers.