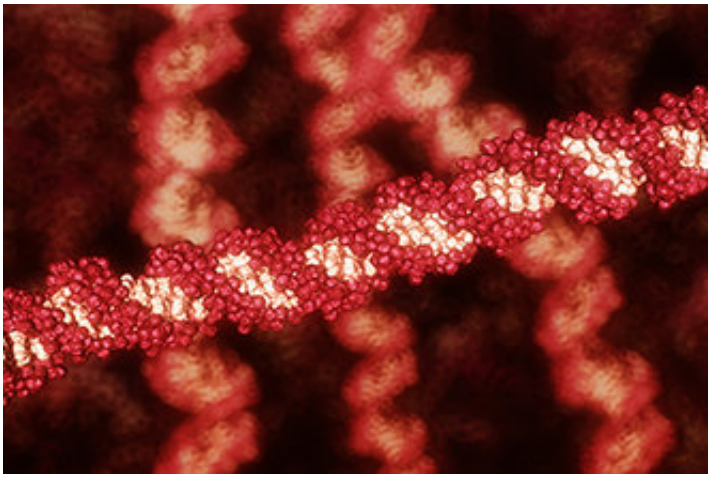
Genomic sequencing offers new hope for rare cancers

November 13 2018



Genetic sequencing shows promise for matching people with rare cancers to the right treatments, according to a new clinical trial. Credit: Walter and Eliza Hall Institute of Medical Research

A cancer's genetic sequence may be the key to matching people with rare cancers to the right anti-cancer treatments, according to a new clinical trial instigated by patients.

The national trial indicated that genomic profiling of rare cancers – which collectively account for more than 20 per cent of cancer diagnoses in Australia – has the potential to improve a patient's diagnosis and treatment.

The trial, which will be presented today at the Clinical Oncology Society of Australia Annual Scientific Meeting, was the first of its kind in Australia to be instigated by people affected by rare cancers.

The pilot study was conducted at four centres across Australia, and was led by Walter and Eliza Hall Institute researcher Professor Clare Scott, who is a medical oncologist at the Peter MacCallum Cancer Centre and the Royal Women's Hospital.

Finding better treatments

A cancer type is considered rare if it affects fewer than 6 people per year per 100,000 people. Despite being individually uncommon, rare cancers collectively account for more than 20 per cent of cancer diagnoses in Australia.

Better approaches to diagnosing and treating rare cancers are urgently needed, said Professor Scott. "More people die from rare cancers in Australia than any other single cancer type. This is because treatments for many rare cancers have not advanced at the same pace as treatments for more common cancers," she said.

The trial sequenced a panel of genomic markers in participants' cancers to identify molecular features or mutations in the cancer that could be targeted with existing treatments used in other cancer types with the same characteristics.

"While genomic testing is becoming increasingly used in other cancer types, this is one of the first national studies of its kind in Australia to look at the potential benefits for those with rare cancers," Professor Scott said.

Promising results

The NOMINATOR Pilot Study results released today included 36 patients. The two-year study will eventually include 100 patients and will lay the groundwork for other national initiatives looking into genomic profiling across a range of cancer types.

"Australians in this trial came to us after they had exhausted all their options. Using genomic profiling we were able to uncover new information that gave many patients new treatment options – and ultimately, new hope," said Professor Scott.

"Genomic profiling provided meaningful information that influenced diagnosis and treatment in around half of the participants. 20 percent of those tested got a new treatment plan as a result and 6 percent of participants were given a new diagnosis."

Professor Phyllis Butow, President, Clinical Oncology Society of Australia said one of the impressive things about the study was that it was driven by Australians directly affected by rare cancers.

"Around 52,000 Australians are diagnosed with rare or less common cancers each year. Those directly affected by the disease helped call for and fund this research, so it's great to see these initial promising results being presented to cancer experts from across the country."

The trial was funded by Rare Cancers Australia, the Melbourne Genomics Health Alliance, the Australian Genomics Health Alliance, Melanie and Neil Rae and the Royal Brisbane and Women's Hospital Foundation.

Professor Scott's research is supported by the Stafford Fox Medical Research Foundation, the Victorian Cancer Agency and the Victorian

Cancer Council.

The Walter and Eliza Hall Institute, the Peter MacCallum Cancer Centre and the Royal Women's Hospital are part of the Victorian Comprehensive Cancer Centre Alliance.

How to participate in the trial:

The NOMINATOR trial is currently recruiting participants with rare cancers and few standard treatment options. Patients are advised to discuss their eligibility and involvement with their oncologist.

More information: More information is available via nominator@mh.org.au

Provided by Walter and Eliza Hall Institute of Medical Research

Citation: Genomic sequencing offers new hope for rare cancers (2018, November 13) retrieved 6 May 2024 from https://medicalxpress.com/news/2018-11-genomic-sequencing-rare-cancers.html