New clinical trial of a non-invasive liver cancer treatment set to commence

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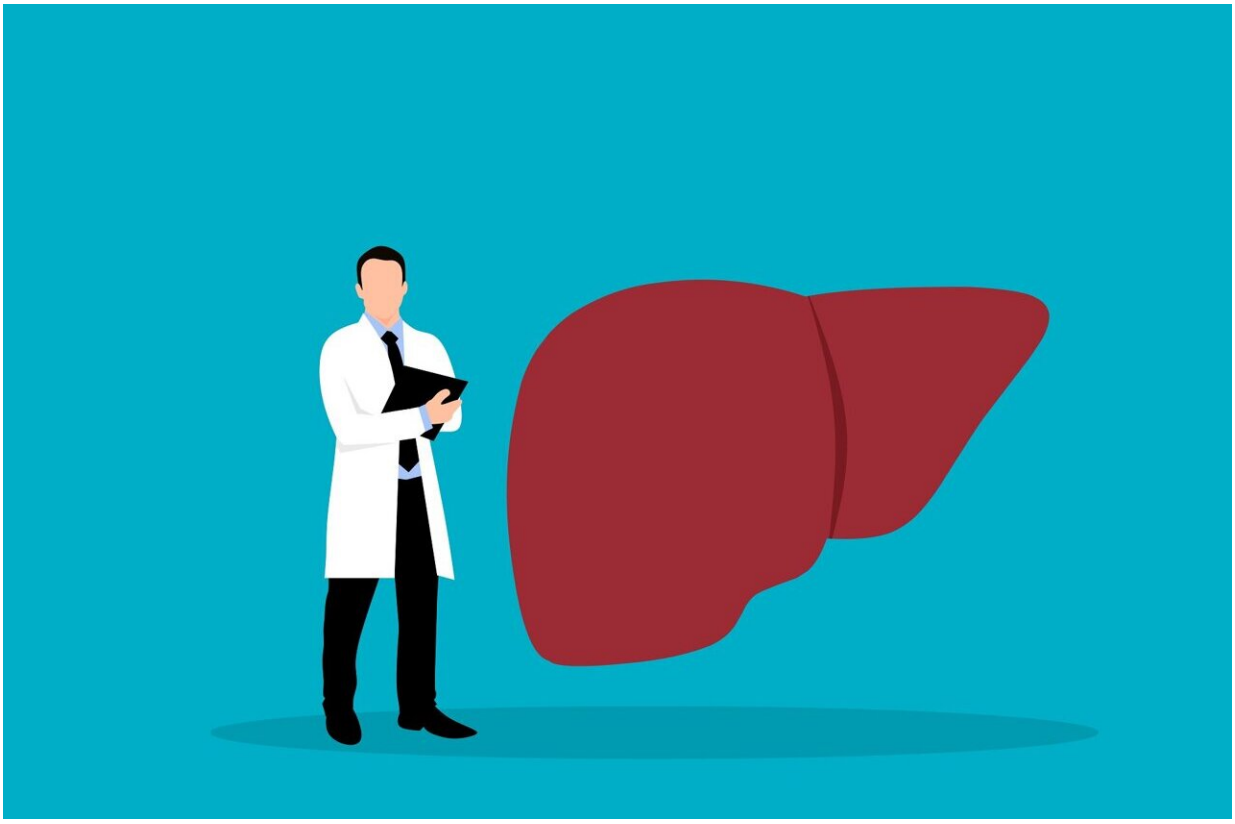

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Researchers are set to test a non-invasive treatment for inoperable early-stage liver cancer, with a new clinical trial to commence this year across Australia.

Led by Professor Alan Wigg from Flinders University's College of Medicine and Public Health, the trial aims to test stereotactic ablative body radiotherapy (SABR), a non-invasive technique that enables high radiation doses to be delivered very precisely.

Currently, the standard of care for hepatocellular carcinoma (HCC), the most common type of liver cancer, is treatment with percutaneous ablation, a thermal ablation treatment (using extreme temperatures to remove the cancer) that is delivered directly into the tumor using a needle.

"Studies have shown the current standard of care is not always successful, with the cancer likely to re-occur in over 30% of cases, and a number of people being unable to access the treatment in the first place, due to the size and position of the tumor," says Professor Wigg.

"Stereotactic ablative body radiotherapy on the other hand is a relatively new radiation technique that has already been used successfully to treat a number of other cancers, but it is not yet widely used to treat cancers of the liver.

"It is delivered non-invasively by targeting the tumor with a number of radiation beams from different angles, allowing delivery of high dose and precise treatment across three to five sessions and reducing the damage to surrounding healthy tissue."

The project, a collaboration between leading hepatologists, radiation oncologists and radiologists across 16 major Australian liver centers, will perform a randomized controlled trial to compare the non-invasive treatment against the current invasive standard of care, with the potential for the results to shift treatment protocols globally.

"Currently, SBRT is considered experimental and only used once first

line treatments have failed," says Professor Wigg.

"However, preliminary research has shown that the treatment has the potential to control tumors with very few adverse events and can reach those that would not be treatable with percutaneous ablation, due to a tumor's size or difficult location."

The researchers say with increasing rates of liver cancer across Australia, it's vital that the best treatment is proven and applied.

"Rates of hepatocellular carcinoma have increased 378% in the last 30 years, the second largest increase of any cancer type, while its mortality rate has had the largest increase of any cancer," says Professor Wigg.

"HCC is the only low survival cancer with a rapidly increasing incidence, so it's vital we find ways to improve outcomes for patients.

"SABR can improve tumor control while at the same time its ability to be delivered in outpatient settings across fewer treatment sessions means it is also likely to be cost-effective and able to be rapidly adopted into clinical practice."

The five-year trial will begin this year with trial sites anticipated in all major states of Australia.

The project is called "A randomised controlled trial of Standard Of Care versus RadioAblaTion in Early Stage HCC (The SOCRATES HCC Study)."'

Provided by Flinders University