## Liver resection surgery compared with thermal ablation in high surgical risk patients with colorectal liver metastases: the LAVA international RCT

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## **Plain English summary**

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# **Plain English summary**

n about 50% of people with bowel cancer, cancer spreads to the liver (colorectal liver metastases) within 5 years of detection and treatment. Liver resection (i.e. surgical removal of a portion of the liver) is the standard treatment in people below 70 years of age who are otherwise well, provided that the liver cancer is confined to a limited part of the liver. Such patients are considered 'low-risk' patients. Older patients and those with major medical problems or extensive cancers are considered 'high-risk' patients, as they are at a higher risk of developing complications following liver resection. Thermal ablation destroys the liver cancers using a needle that heats the cancer deposits until they are destroyed. There is significant uncertainty as to whether or not ablation can offer equivalent survival compared with surgery for 'high-risk' patients.

We planned and conducted a randomised controlled trial comparing ablation with surgery to resolve this uncertainty. In this trial, some patients received ablation and others received surgery. The treatment was allocated at random with neither patients nor the study organisers choosing the treatment. The trial had an internal pilot (i.e. a smaller version of the full trial to resolve any 'teething problems' and ensure that a sufficient number of participants can be included in the full trial). Only nine patients were recruited in the 1-year internal pilot, compared with the anticipated recruitment of 45 patients. Therefore, the trial closed early as a result of poor recruitment, and the uncertainty about the best treatment for high-risk patients with colorectal liver metastases continues. The main reasons for the poor recruitment included fewer than anticipated eligible participants, clinicians' unconscious bias towards surgery, and patients' preference for one treatment or the other. In the future, comparisons involving two very different treatments may benefit from a feasibility study or a longer period of pilot study to resolve any difficulties.

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