

# Liver resection surgery versus thermal ablation for colorectal liver metastases

Submission date	Recruitment status	<input checked="" type="checkbox"/> Prospectively registered
09/03/2016	Stopped	<input checked="" type="checkbox"/> Protocol
Registration date	Overall study status	<input type="checkbox"/> Statistical analysis plan
09/03/2016	Stopped	<input checked="" type="checkbox"/> Results
Last Edited	Condition category	<input type="checkbox"/> Individual participant data
11/05/2020	Cancer	<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

<http://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-comparing-surgery-ablation-treatment-people-bowel-cancer-spread-liver-lava>

## Contact information

Type(s)  
Public

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## Additional identifiers

Protocol serial number  
20592

## Study information

Scientific Title  
LAVA: Liver resection surgery versus thermal Ablation for colorectal liVer metAstases

Acronym

## **Study objectives**

The aim of this study is to compare the effectiveness of liver resection surgery and thermal ablation for the treatment of colorectal liver metastases.

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

16/LO/0058

## **Study design**

Randomised controlled trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

## **Health condition(s) or problem(s) studied**

Topic: Surgery; Subtopic: Surgery; Disease: Surgery (All Surgery)

## **Interventions**

Participants are randomly allocated to one of two treatment groups.

**Surgical resection:** Surgical liver resection will be performed in accordance with each site's usual practice. Patients may be offered open or laparoscopic liver resection depending on site and stage of disease. Procedures for patients with extensive metastatic disease can include two stage liver resection, venous embolization, or the ALPPS procedure (Associated Liver Partition and Portal vein ligation for Staged hepatectomy).

**Thermal ablation:** Either radiofrequency ablation (RFA) or microwave ablation (MWA) will be carried out according to the local availability of equipment and expertise. Ablation may be performed at laparoscopic or open surgery if the percutaneous approach is contra-indicated.

## **Intervention Type**

Procedure/Surgery

## **Primary outcome(s)**

Disease free survival at 2 years is calculated from participant assessments at 3, 6, 12, 18 and 24 months post-randomisation

## **Key secondary outcome(s)**

1. Local and distant recurrence of disease at 2 years is calculated from participant assessments at 3, 6, 12, 18 and 24 months post-randomisation
2. Overall survival is determined at 2 and 5 years post-randomisation
3. Post treatment complications are recorded at participant assessments at 3, 6, 12, 18 and 24 months post-randomisation
4. Disease free survival (DFS) (measured from end of intervention) at 2 years post-randomisation

5. Use of subsequent therapies for treatment failure over 2 years post-randomisation
6. Health related quality of life is measured using EQ-5D, EORTC QLQ-C30, EORTC LMC21 at baseline 3 and 6 months post randomisation
7. Length of intensive therapy unit (ITU) and inpatient stay
8. Resource use collected retrospectively at 3, 6, 12, 18, and 24 months post-randomisation

**Completion date**

30/09/2020

**Reason abandoned (if study stopped)**

Participant recruitment issue

## Eligibility

**Key inclusion criteria**

1. Aged  $\geq$  18 years
2. Able to provide written informed consent
3. MDT diagnosis of colorectal liver metastases considered to be resectable with curative intent
4. Resected colorectal primary or plan for primary resection with curative intent
5. Meets one or more of the following criteria:
  - 5.1. Considered high risk for surgery due to age e.g. Age greater than 75 years of age
  - 5.2. Major co-morbidities as judged by the treating clinician. Examples include history of myocardial infarction, severe chronic airway disease, major cerebrovascular accidents (CVA), pulmonary embolism (PE)
  - 5.3. Liver metastases with poor prognosis and or high risk surgery due to tumour burden, Examples include extensive synchronous disease, need for two stage resection or ALLPS, small anticipated remnant liver volume, resectable or ablatable extra-hepatic disease, downstaged with chemotherapy, poor response after chemotherapy or portal vein embolization but still resectable
6. Suitable candidate for either liver resection surgery or thermal ablation as judged by the MDT
7. Able and willing to comply with the terms of the protocol including QoL questionnaire

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

9

## **Key exclusion criteria**

1. Incurable extra-hepatic metastases
2. Concurrent malignant disease (except basal cell carcinoma)
3. Patients who have undergone previous surgery or ablation for colorectal liver metastases
4. Planned simultaneous resection for primary and liver metastases disease
5. Pregnancy

## **Date of first enrolment**

01/10/2016

## **Date of final enrolment**

30/09/2020

## **Locations**

### **Countries of recruitment**

United Kingdom

England

### **Study participating centre**

University of Leeds

Clinical Trials Research Unit

17 Springfield Mount

Leeds

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## **Sponsor information**

### **Organisation**

University College London

### **ROR**

<https://ror.org/02jx3x895>

## **Funder(s)**

### **Funder type**

Government

### **Funder Name**

**Alternative Name(s)**

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

United Kingdom

## Results and Publications

### Individual participant data (IPD) sharing plan

**IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/04/2020	11/05/2020	Yes	No
<a href="#">Protocol article</a>	protocol	13/02/2018		Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes