

# ROMIO feasibility: Randomised controlled trial of minimally invasive or open oesophagectomy

<b>Submission date</b> 21/02/2013	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 25/02/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 07/06/2024	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

<http://www.cancerresearchuk.org/cancer-help/trials/a-study-comparing-different-types-surgery-treat-cancer-food-pipe-romio-pilot>

## Study website

<https://bristol-trials-centre.bristol.ac.uk/details-of-studies/completed-studies/romio/>

## Contact information

### Type(s)

Scientific

### Contact name

Prof Chris Metcalfe

### Contact details

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## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

## Study information

### Scientific Title

The ROMIO trial - Randomised Oesophagectomy: Minimally Invasive or Open, a feasibility study

### Acronym

ROMIO

### Study objectives

Current study hypothesis:

Study hypothesis

To compare, in patients with cancer of the oesophagus, the clinical and cost-effectiveness of minimally invasive and open surgical procedures in terms of recovery, health-related quality of life, cost and survival.

At present, we are conducting a feasibility study, during which the methodology and infrastructure for the main trial will be established. The core of this preliminary work will be an assessment of the feasibility of comparing surgical procedures for oesophagectomy in a pilot two-centre randomised trial. Specific objectives include:

1. To pilot the randomisation process and investigate reasons for any difficulties in recruitment so that these are tackled before the main trial.
2. To establish the proportion of potentially eligible patients who can be recruited to the trial, and so inform the number of centres required in the main trial.
3. To develop manuals for the different surgical procedures.
4. To develop a manual for the pathological processing.
5. To consider the appropriate statistical model for estimating treatment effectiveness whilst allowing for clustering in the data due to between surgeon variation.
6. To develop and evaluate an acceptable method of keeping patients blind to their allocation in the week after surgery.
7. To establish outcome measures for the main trial which are recognised as a comprehensive, valid and reliable assessment of oesophagectomy outcome.

Previous study hypothesis:

To compare, in patients with cancer of the oesophagus, the clinical and cost-effectiveness of minimally invasive and open surgical procedures in terms of recovery, health-related quality of life, cost and survival.

At present, we are conducting a feasibility study, during which the methodology and infrastructure for the main trial will be established. The core of this preliminary work will be an assessment of the feasibility of comparing surgical procedures for oesophagectomy in a pilot two-centre randomised trial. Specific objectives include:

1. To pilot the randomisation process and investigate reasons for any difficulties in recruitment so that these are tackled before the main trial.
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6. To develop and evaluate an acceptable method of keeping patients blind to their allocation in the week after surgery.
7. To establish outcome measures for the main trial which are recognised as a comprehensive, valid and reliable assessment of oesophagectomy outcome.

More details can be found at: <http://www.nets.nihr.ac.uk/projects/hta/105065>

Protocol can be found at: [http://www.nets.nihr.ac.uk/\\_\\_data/assets/pdf\\_file/0011/81668/PRO-10-50-65.pdf](http://www.nets.nihr.ac.uk/__data/assets/pdf_file/0011/81668/PRO-10-50-65.pdf)

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

NRES Committee South West - Frenchay, 17/07/2012, ref: 12/SW/0161

### **Study design**

Randomised interventional trial

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Hospital

### **Study type(s)**

Treatment

### **Participant information sheet**

Not available in web format, please use the contact details below to request a patient information sheet

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

Upper Gastro-Intestinal Cancer/oesophageal cancer

### **Interventions**

Lap-assisted oesophagectomy, This operation will consist of identical steps as described above, but access to the abdominal cavity will be achieved with four or five 10 or 5mm incisions and surgery performed laparoscopically. Placement of a feeding jejunostomy is at the surgeons discretion and may be performed laparoscopically or by extending a port site to a 8cm abdominal incision. The thoracic part of the operation will be performed as described above.

Open oesophagectomy, The operation consists of a two-phase oesophagectomy (abdomen and right chest) with a two-field lymphadenectomy (abdomen and thorax) and it will involve these key steps.

### Abdominal phase:

The incision, (midline or subcostal) is at the surgeons discretion. Complete gastric mobilisation will be performed based on the right gastroepiploic and right gastric arteries. Pyloroplasty, pyloromyotomy or no drainage is at the surgeons discretion. Lymphadenectomies along the common hepatic artery.

Totally minimally invasive oesophagectomy (MIO): This will consist of performing the steps of the abdominal and chest phases of the operation as described above, but using laparoscopic and thoracoscopic techniques for each phase respectively. It may be a 3 phase minimally invasive operation. And the anastomosis is performed with a left cervical incision.

Follow Up Length: 6 month(s)

### Intervention Type

Procedure/Surgery

### Primary outcome measure

Fatigue (MFI-20); Timepoint(s): 2, 6, 42, 90, 185 days

### Secondary outcome measures

1. Bang Blinding Index; Timepoint(s): 2, 6 days
2. HRQL; Timepoint(s): Pre-surgery, 6, 42, 90, 185 days
3. Length of hospital stay; Timepoint(s): day 42
4. Pain; Timepoint(s): Pre-surgery, 2, 3, 6 days
5. Procedural outcome measures; Timepoint(s): Lymph node count, positive resection margins, duration of operation, blood loss - day 42
6. Resource use; Timepoint(s): 6, 42, 90, 185 days
7. Spirometry (lung function); Timepoint(s): Pre-surgery, 3, 6 days
8. Surgical morbidity (Accordian & Clavien-Dindo classifications); Timepoint(s): 2, 3, 6 days
9. Survival time; Timepoint(s): 6 months

### Overall study start date

31/01/2013

### Completion date

21/10/2016

## Eligibility

### Key inclusion criteria

1. Male or female patients
2. Over 18 years of age
3. Oesophageal or oesophagogastric junctional adenocarcinoma, squamous cell cancer or high grade dysplasia
4. Endoscopic evidence before treatment of a tumour starting more than 5cm below cricopharyngeus
5. Endoscopic evidence before treatment of a tumour involving less than 4 centimetres of the gastric wall
6. Final tumour stage between high grade dysplasia and T3N1M0

7. Referred for primary oesophagectomy or referred for oesophagectomy after neoadjuvant treatment

8. Able to provide written informed consent

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

Planned Sample Size: 72; UK Sample Size: 72

**Total final enrolment**

273

**Key exclusion criteria**

1. Stage 4 disease

2. Type 3 tumours of the oesophagogastric junction

3. Localised squamous cell cancer who elect to undergo definitive chemoradiotherapy

4. High grade dysplasia who elect to undergo radiofrequency ablation or endoscopic mucosal resection

5. Evidence of previous complex thoracotomies or laparotomies

6. Evidence of previous/concomitant malignancy that would interfere with the study protocol

7. Pregnancy

8. Participating randomised trials that may interfere with this protocol

**Date of first enrolment**

08/04/2013

**Date of final enrolment**

21/10/2016

**Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

University of Bristol

Senate House, Tyndall Avenue

Bristol  
United Kingdom  
BS8 1TH

## Sponsor information

### Organisation

University of Bristol (UK)

### Sponsor details

Senate House  
Tyndall Avenue  
Bristol  
England  
United Kingdom  
BS8 1TH

### Sponsor type

University/education

### Website

<http://www.bris.ac.uk/>

### ROR

<https://ror.org/0524sp257>

## Funder(s)

### Funder type

Government

### Funder Name

Health Technology Assessment Programme

### Alternative Name(s)

NIHR Health Technology Assessment Programme, HTA

### Funding Body Type

Government organisation

### Funding Body Subtype

National government

### Location

## Results and Publications

### Publication and dissemination plan

Not provided at time of registration

### Intention to publish date

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be available on request from [chris.metcalfe@bristol.ac.uk](mailto:chris.metcalfe@bristol.ac.uk) after publication of the main results of the research. Thereafter, anonymised individual patient data will be made available for secondary research, conditional on assurance from the secondary researcher that the proposed use of the data is compliant with the MRC Policy on Data Preservation and Sharing regarding scientific quality, ethical requirements and value for money. A minimum requirement with respect to scientific quality will be a publicly available pre-specified protocol describing the purpose, methods and analysis of the secondary research, e.g. a protocol for a Cochrane systematic review. The second file containing patient identifiers would be made available for record linkage or a similar purpose, subject to confirmation that the secondary research protocol has been approved by a UK REC or other similar, approved ethics review body.

### IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	protocol	02/06/2014		Yes	No
<a href="#">Results article</a>	results	01/06/2016		Yes	No
<a href="#">Protocol article</a>	quality assurance protocol	01/03/2019	30/03/2020	Yes	No