

# Ischaemic preconditioning in liver resections studied with microdialysis

<b>Submission date</b> 09/02/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 27/03/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 09/12/2009	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N/A

## Study information

**Scientific Title**

Ischaemic preconditioning in liver resections studied with microdialysis: a randomised single-blinded single-centre controlled trial

### **Study objectives**

Does ischaemic preconditioning before 15/5 Pringles manoeuvre change metabolism or ischaemia-reperfusion injury compared to 15/5 Pringles manoeuvre alone in surgical liver resections?

As of 09/12/2009 this record has been updated to the actual end date of trial recruitment - the initial anticipated end date for this trial was 30/04/2009.

### **Ethics approval required**

Old ethics approval format

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

Regional ethics committee in Linköping Sweden gave approval in June 2006 (ref: M100-06)

### **Study design**

Randomised single-blinded single-centre controlled 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**

Liver tumour

### **Interventions**

All patients will receive intrahepatic microdialysis catheters intra-operatively. Pringle manoeuvre means closure of the portal pedicle. The treatment arm will begin surgery with 10 minutes of Pringle and then 10 minutes of reperfusion (i.e. ischaemic preconditioning) will be allowed before regular 15 minutes of ischaemia and 5 minutes of reperfusion in cycles until the transection is finished.

The control arm will not have preconditioning, otherwise Pringle will be used in the same manner.

Both arms are followed for 5 days post-operatively with microdialysis and laboratory testing and then a follow-up visit is held at the outpatient clinic about 30-days post-operatively where complications and pathological diagnosis is documented.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome measure**

1. Changes in metabolism (anaerobic/aerobic), studied with microdialysis
2. Ischaemia-reperfusion injury (histology, myeloperoxidase [MPO], etc)

Results of the microdialysis samples are recorded continuously for 5 days post-operatively (and blood samples daily for 5 days), but data are not compiled and analysed until the last study participant has completed the 30-day follow-up time.

**Secondary outcome measures**

Extent of the resected liver volume, recorded continuously and the volume of resection will be recorded immediately after the operation. Data are not compiled and analysed until the last study participant has completed the 30-day follow-up time.

**Overall study start date**

01/02/2008

**Completion date**

21/09/2009

**Eligibility****Key inclusion criteria**

1. Aged greater than 17 years of age (either sex)
2. Suspected malignant tumour in the liver
3. Assigned to curative liver resection of more than one liver segment

**Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Both

**Target number of participants**

32

**Key exclusion criteria**

1. Synchronous resection of another hollow viscus
2. Jaundice (bilirubin greater than 60 mM)
3. Ongoing infection
4. Child's B or worse

**Date of first enrolment**

01/02/2008

**Date of final enrolment**

21/09/2009

## Locations

**Countries of recruitment**

Sweden

**Study participating centre**

Department of Surgery

Linköping

Sweden

581 85

## Sponsor information

**Organisation**

The Bengt Ihre Foundation (Sweden)

**Sponsor details**

Swedish Society of Medicine

Box 73

Stockholm

Sweden

101 35

**Sponsor type**

Charity

**Website**

<http://www.sls.se/svls.cs>

## Funder(s)

**Funder type**

Research council

**Funder Name**

The Health Research Council of South-East of Sweden (FORSS Sydöstra sjukvårdsregionen) (Sweden)

**Funder Name**

The Bengt Ihre Foundation (Sweden) - through the Swedish Society of Medicine

## **Results and Publications**

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date**

**Individual participant data (IPD) sharing plan**

**IPD sharing plan summary**

Not provided at time of registration