# A pilot study of a goal-directed haemodynamic protocol comparison by monitoring with LiDCOrapid or oesophageal Doppler and conventional therapy during liver resection

| Submission date               | Recruitment status No longer recruiting Overall study status | <ul><li>Prospectively registered</li></ul> |  |  |
|-------------------------------|--|--|--|--|
| 10/03/2009                    |  | ☐ Protocol                                 |  |  |
| Registration date             |  | Statistical analysis plan                  |  |  |
| 03/12/2009                    | Completed  | [X] Results                                |  |  |
| <b>Last Edited</b> 20/07/2015 | Condition category   | [] Individual participant data             |  |  |
| ZU/U//ZU/3                    | Suraerv  |  |  |  |

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

### Contact name

**Prof Claudia Spies** 

### Contact details

Augustenburger Platz 1 Berlin Germany 13353

claudia.spies@charite.de

# Additional identifiers

EudraCT/CTIS number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

### Scientific Title

Intra-operative comparison of a goal-directed haemodynamic protocol by monitoring with LiDCOrapid or oesophageal Doppler and conventional therapy during liver resection: a prospective, randomised, controlled, blinded, three-armed single-centre pilot study

### Study objectives

Compared to conventional therapy an intra-operative goal-directed haemodynamic management by monitoring with LiDCOrapid or oesophageal Doppler improves haemodynamics measured by stroke volume (SV) in patients undergoing elective liver resection.

As of 03/11/2010 this record has been updated to include an extended overall trial end date; the initial overall trial end date was 01/03/2010.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Ethics Committee of Charité - University Medicine Berlin, 22/01/2009

### Study design

Prospective randomised controlled blinded three-armed single-centre pilot 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

Elective liver resection surgery

### Interventions

The interventions will take place only during liver resection:

- 1. Conventional intra-operative haemodynamic management
- 2. Intra-opertive LiDCOrapid-guided haemodynamic management
- 3. Intra-operative oesophageal Doppler-guided haemodynamic management

The last study day of the patient will be on the post-operative day 8 or on the day of hospital discharge (less than 8 post-operative days).

### Intervention Type

Procedure/Surgery

### **Phase**

Not Applicable

### Primary outcome measure

Stroke volume before intra-operative start of liver resection

### Secondary outcome measures

All determined within the study period of 8 post-operative days:

- 1. Intra-operative and post-operative haemodynamic parameters
- 2. Intra-operative and post-operative blood loss
- 3. (Cumulative) frequency of organ dysfunctions (cerebral, pulmonal, renal, abdominal, cardiovascular)
- 4. Post-operative liver function (LiMAx-test, ICG-Clearance, liver Doppler, laboratory tests: enzymatic and chemical parameters)
- 5. Peri-operative weight change
- 6. Post-operative incidence of infections
- 7. Satisfaction of the patients, the surgeons and anaesthetists
- 8. Time to fulfilling discharge criteria
- 9. Length of intensive care stay and hospital stay (LOS)
- 10. Quality of life measure (EQ-5D)
- 11. Laboratory tests: peri-operative endothelial and immunological alterations

### Overall study start date

01/03/2009

## Completion date

29/08/2010

# Eligibility

### Key inclusion criteria

Patients aged 18 years and over, either sex, undergoing elective liver resection in Charité -University Medicine Berlin, Campus Virchow-Clinic

# Participant type(s)

Patient

### Age group

Adult

### Lower age limit

18 Years

### Sex

### Target number of participants

60

### Key exclusion criteria

- 1. Aged less than 18 years
- 2. No written informed consent from patient
- 3. For female patients: pregnancy or lactation
- 3. Inability to communicate freely in the German language
- 4. Lack of willingness to safe and hand out pseudonymised data within the clinical study
- 5. Simultaneous participation of the patient in another study
- 6. Accommodation in an institution due to an official or judicial order
- 7. Members of staff of the Charité
- 8. Unclear history of alcohol used disorder
- 9. Advanced disease of the oesophagus of nasopharyngeal cavity
- 10. Operations in the area of the oesophagus or nasopharynx within the last two months
- 11. History of bleeding tendency e.g. Von Willebrands disease
- 12. Neurological or psychiatric disease
- 13. Chronic heart failure New York Heart Association (NYHA) class IV
- 14. American Society of Anaesthesiologists (ASA) classification greater than IV
- 15. Chronic renal failure with dependency of haemodialysis
- 16. Existence of a pulmonary oedema in the pre-operative chest x-ray
- 17. History of intracranial haemorrhage within one year
- 18. Allergy to gelatin

### Date of first enrolment

01/03/2009

### Date of final enrolment

29/08/2010

# Locations

### Countries of recruitment

Germany

# Study participating centre Augustenburger Platz 1

Auguster Berlin Germany 13353

# **Sponsor information**

### Charité - University Medicine Berlin (Charité - Universitätsmedizin Berlin) (Germany)

### Sponsor details

Chariteplatz 1 Berlin Germany 10117

\_\_\_:\_

anaesthesie-virchow-klinikum@charite.de

### Sponsor type

Hospital/treatment centre

### Website

http://www.charite.de/

### **ROR**

https://ror.org/001w7jn25

# Funder(s)

### Funder type

Hospital/treatment centre

### **Funder Name**

Charité Universitätsmedizin Berlin

### Alternative Name(s)

Medical School - Charité - University Medicine Berlin

### **Funding Body Type**

Private sector organisation

# **Funding Body Subtype**

For-profit companies (industry)

### Location

Germany

# **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

# Study outputs

| Output type     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 17/07/2015   |            | Yes            | No              |