

# The impact of a hematocrit of 20% during normothermic cardiopulmonary bypass for elective coronary artery bypass graft surgery on oxygen delivery and clinical outcome: a randomised controlled study

|                                        |                                                   |                                                                                                   |
|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>11/01/2006   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol            |
| <b>Registration date</b><br>19/01/2006 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>29/03/2010       | <b>Condition category</b><br>Circulatory System   | <input type="checkbox"/> Individual participant data                                              |

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

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Claudia Spies

**Contact details**  
Dept. of Anesthesiology and Intensive Care Medicine  
Charite-University Hospital Berlin  
Schumannstr. 20-21  
Berlin  
Germany  
10098  
+49 (0)3045 053 1012  
claudia.spies@charite.de

## Additional identifiers

## Study information

Scientific Title

**Acronym**

krit hematocrit study

**Study objectives**

To evaluate whether a hematocrit of 20% versus 25% during normothermic cardiopulmonary bypass for Coronary Artery Bypass Graft (CABG) surgery influences oxygen delivery and oxygen consumption.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Ethics approval received from the local medical ethics committee

**Primary study design**

Interventional

**Study design**

Randomised controlled trial

**Study type(s)**

Screening

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

Coronary artery disease requiring surgical revascularisation

**Interventions**

Hemodilution during cardiopulmonary bypass achieving a hematocrit of 20% versus 25%.

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome(s)**

Oxygen delivery and oxygen consumption.

**Key secondary outcome(s)**

1. Myocardial infarction
2. Renal insufficiency measured as creatinine and urine volume
3. Neurological deficits displayed as agitated arousal reactions and stroke

**Completion date**

31/01/2005

**Eligibility**

**Key inclusion criteria**

Coronary artery disease patients to about to undergo coronary artery bypass graft surgery.

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

1. Ejection fraction less than 40%
2. Chronic Obstructive Pulmonary Disease (COPD)
3. Renal insufficiency
4. Peripheral artery disease
5. Hepatic dysfunction

**Date of first enrolment**

01/02/2004

**Date of final enrolment**

31/01/2005

**Locations****Countries of recruitment**

Germany

**Study participating centre**

Dept. of Anesthesiology and Intensive Care Medicine

Berlin

Germany

10098

**Sponsor information****Organisation**

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

ROR

<https://ror.org/001w7jn25>

## Funder(s)

### Funder type

Hospital/treatment centre

### Funder Name

Charité - University Medicine Berlin (Charité - Universitätsmedizin Berlin) (Germany) - institutional funding

## 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 | 01/07/2006   |            | Yes            | No              |
| <a href="#">Results article</a> | results | 01/07/2009   |            | Yes            | No              |