

# A prospective, randomized, controlled trial of retransfusion of intra-operatively collected filtered whole blood in total hip surgery.

Published: 30-03-2009

Last updated: 05-05-2024

The purpose of this study is to document the efficacy, measured by allogeneic blood transfusion rate, of the Sangvia® Blood Management System when used for intra-operative, and if bleeding continues after surgery, possibly also postoperative...

|                              |  |
|------------------------------|--|
| <b>Ethical review</b>        | Approved WMO                                   |
| <b>Status</b>                | Recruitment stopped                            |
| <b>Health condition type</b> | Therapeutic procedures and supportive care NEC |
| <b>Study type</b>            | Interventional                                 |

## Summary

### ID

NL-OMON33014

### Source

ToetsingOnline

### Brief title

Sangvia in total hip replacement

### Condition

- Therapeutic procedures and supportive care NEC

### Synonym

retransfusion of autologous blood, Sangvia Blood Management System

### Research involving

Human

### Sponsors and support

**Primary sponsor:** AstraTech AB

**Source(s) of monetary or material Support:** sponsor: AstraTech

## Intervention

**Keyword:** allogeneic transfusion, intraoperative autotransfusion system, total hip replacement

## Outcome measures

### Primary outcome

- Frequency and amount of allogeneic blood transfusion

### Secondary outcome

- Post-operative infection rate (SIRS reaction, clinical symptoms, wound infection, CRP and LPC)
- Post-operative antibiotic use
- Length of hospital stay
- Post-operative haemoglobin concentration
- Demographical data (e.g. vital signs, age, gender etc)
- Health status questionnaire (i.e. EQ-5D)

## Study description

### Background summary

Transfusion of postoperative autologous blood has been found to reduce the need for allogeneic

blood transfusion and also reduce the number of postoperative infections.

Publications

on the effect of intraoperative filtrated whole blood collection and transfusion are however today

very limited or non-existing. The purpose of this study is to document the efficacy, measured by

allogeneic blood transfusion rate, of the Sangvia® Blood Management System when used for

intra-operative, and if bleeding continues after surgery, possibly also

postoperative autologous whole blood transfusion in total hip replacement surgery. The study will also add safety data to previously reported studies.

### **Study objective**

The purpose of this study is to document the efficacy, measured by allogeneic blood transfusion rate, of the Sangvia® Blood Management System when used for intra-operative, and if bleeding continues after surgery, possibly also postoperative autologous whole blood transfusion in total hip replacement surgery. The study will also add safety data to previously reported studies.

### **Study design**

The study is an assessor blind, prospective, randomized, controlled, multi-centre investigation of 300 patients. Patients will be followed during their hospital stay and at 2 months after discharge.

### **Intervention**

Intra-operative, and if bleeding continues after surgery, possibly also post-operative autologous blood transfusion with the Sangvia® system (test group).

### **Study burden and risks**

Patients will as much as possible be followed during hospital stay and at routine follow-up. The extra blood samples taken from the patient can also be combined with standard hospital policy.

## **Contacts**

### **Public**

AstraTech AB

Aminogatan 1  
SE-432 21 Molndal  
Sweden

### **Scientific**

AstraTech AB

Aminogatan 1  
SE-432 21 Molndal  
Sweden

## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- provision of informed consent
- scheduled for primary or secondary, cemented or non-cemented, total hip arthroplasty
- ASA classification I-III

### Exclusion criteria

- current symptoms of haemophilia
- current symptoms of hyperkalaemia
- current symptoms of impaired renal function (normal reference level)
- current untreated anaemia (Hb level < 7 mmol/L)

## Study design

### Design

|                     |                |
|---------------------|----------------|
| Study phase:        | 4              |
| Study type:         | Interventional |
| Intervention model: | Other          |

Allocation: Randomized controlled trial  
Masking: Double blinded (masking used)  
**Primary purpose:** Prevention

## Recruitment

NL  
Recruitment status: Recruitment stopped  
Start date (anticipated): 10-06-2009  
Enrollment: 150  
Type: Actual

## Medical products/devices used

Generic name: Sangvia blood salvage system  
Registration: Yes - CE intended use

## Ethics review

Approved WMO  
Date: 30-03-2009  
Application type: First submission  
Review commission: METC Leiden-Den Haag-Delft (Leiden)  
metc-ldd@lumc.nl

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

### Register

ClinicalTrials.gov

CCMO

### ID

NCT00822588

NL26575.098.09