

# Minimally invasive surgery in total hip arthroplasty: the two-incision technique versus conventional total hip arthroplasty - a prospective, randomised, controlled trial

<b>Submission date</b> 09/01/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 09/01/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 03/11/2008	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<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

### Contact name

Dr M J J Veth

### Contact details

Academic Medical Centre  
Department of Orthopedics  
P.O. Box 22660  
Amsterdam  
Netherlands  
1100 DD  
[m.j.veth@amc.uva.nl](mailto:m.j.veth@amc.uva.nl)

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

## Secondary identifying numbers

NTR500

# Study information

## Scientific Title

### Study objectives

Anatomy sparing two-incision total hip arthroplasty (THA) has a better functional outcome than conventional THA.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Received from the local medical ethics committee

### Study design

Multicentre, randomised, controlled, parallel group trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Hospital

### Study type(s)

Treatment

## Participant information sheet

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

Total hip replacement (THR), arthritis

### Interventions

Total hip arthroplasty: conventional lateral approach or two-incision anatomy sparing approach.

### Intervention Type

Other

### Phase

Not Specified

## Primary outcome measure

The purpose of the study is to scientifically determine the functional effectiveness of anatomy sparing surgery in total hip arthroplasty in comparison with traditional open surgery, measured by the Harris Hip Score.

### **Secondary outcome measures**

1. Number of virtual admission days. Virtual is defined as the number of days until the patient is ready for discharge in the opinion of the surgeon and the patient. Any additional days due to logistic circumstances are not included in this main objective. Virtual discharge criteria are:
  - 1.1. Function, measured in: 50 m walking, walking 1 stairs, getting in and out of bed
  - 1.2. Pain (Visual Analogue Scale [VAS] cm function)
  - 1.3. Wound assessment: including effusion and aspect
2. The Western Ontario and McMaster Universities Osteoarthritis Index
3. Visual Analogue Scale (VAS) is used to measure severity of pain during different activities
4. Use of analgesics
5. The 36-item Short Form Health Survey (SF-36) (pre-operative and at 1 year follow-up)
6. Patient satisfaction
7. Total operation time
8. Number and kind of complications (including wound infection, wound haematoma, dislocations)
9. Need for blood transfusion
10. Wound aspect during treatment period

### **Overall study start date**

01/11/2005

### **Completion date**

01/01/2009

## **Eligibility**

### **Key inclusion criteria**

1. Male or female being 18 years or older
2. Patients meet the criteria for osteoarthritis:
  - 2.1. Pain in hip
  - 2.2. Arthritic changes on radiograph: joint space narrowing femoral/acetabular osteofytes
3. Patients not responding to conservative therapy
4. Written informed consent for study participation

### **Participant type(s)**

Patient

### **Age group**

Adult

### **Lower age limit**

18 Years

### **Sex**

Both

**Target number of participants**

110

**Key exclusion criteria**

1. Patients who are mentally impaired and not able to fill in questionnaires
2. Patients who do not know the Dutch language
3. Patients with a body mass index (BMI) of more than 40
4. Patients with skeletal immaturity
5. Patients with a life expectancy of less than 3 years
6. Patients with altered anatomy resulting in impossibility for the MIS procedure, according to the surgeon e.g.:
  - 6.1. Hip dysplasia with high luxation
  - 6.2. Post-traumatic severe anatomy change
  - 6.3. Post-correction osteotomy
7. Patients with extremity amputation
8. Patients with an active malignant disease or current cytostatic treatment
9. Patients who are participating in another trial
10. Known alcohol or drug abuse

**Date of first enrolment**

01/11/2005

**Date of final enrolment**

01/01/2009

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

Netherlands

**Study participating centre**

**Academic Medical Centre**

Amsterdam

Netherlands

1100 DD

**Sponsor information****Organisation**

Zimmer, Inc. (USA)

**Sponsor details**

P.O. Box 708

1800 West Center Street

Warsaw, IN

United States of America  
46581-0708

**Sponsor type**  
Industry

**Website**  
<http://www.zimmer.com>

**ROR**  
<https://ror.org/02bn55144>

## **Funder(s)**

**Funder type**  
Not defined

**Funder Name**  
Not provided at time of registration

## **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