# A prospective, multicenter, clinical outcome study of the NANOS neck preserving stem in patients with degenerative hip joint disease.

Published: 03-09-2010 Last updated: 01-05-2024

To prove that the NANOS prosthesis is a good prosthesis to be used in total hip replacement surgery, with low revision rate (< 10%) after 10 years. This percentage is known in the Swedish registry. Second objective is to prove that clinical...

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Joint disorders
Study type	Observational non invasive

## Summary

### ID

NL-OMON46912

**Source** ToetsingOnline

Brief title NANOS Prospective clinical outcome study

### Condition

- Joint disorders
- · Bone and joint therapeutic procedures

**Synonym** osteoarthritis, reumatoid arthritis

**Research involving** Human

### **Sponsors and support**

Primary sponsor: Smith&Nephew, Inc Source(s) of monetary or material Support: Bedrijf

### Intervention

Keyword: Femoral Neck, NANOS, Non-randomized, Prospective

### **Outcome measures**

#### **Primary outcome**

Survival rate at 10 years follow- up.

#### Secondary outcome

Clinical outcome: HHS, HOOS, UCLA and radiographic findings.

# **Study description**

#### **Background summary**

Short-stemmed femoral shaft prostheses, have been introduced especially for younger patients. These endo-prostheses are anchored exclusively in the metaphysic and the proximal part of the diaphysis. Therefore, they are much shorter than the classic standard stems. Short femoral neck implants are claiming less interference with the biomechanics.

The NANOS femoral neck prosthesis has been developed based on clinical experience of various \*short stem prostheses\* and is the third generation of this type of prostheses. The implant requires only minimal bone resection. Therefore a maximum amount of bone is preserved. The cancellous bone around the metaphysic and the greater trochanter are retained to ensure load distribution and transfer.

The surface roughness of the titanium plasma coating on one hand increases the surface area and on the other hand ensures superior primary stability. The additional calcium phosphate coating allows accelerating the osseointegration process.

#### **Study objective**

To prove that the NANOS prosthesis is a good prosthesis to be used in total hip replacement surgery, with low revision rate (< 10%) after 10 years. This

percentage is known in the Swedish registry. Second objective is to prove that clinical outcome (Harris Hip Score, HOOS, UCLA and radiological findings) is comparable to clinical results of other short stemmed femoral shaft prostheses, known from literature.

#### Study design

Prospective, multicenter, observational clinical outcome study.

#### Study burden and risks

This is an observational study with no extra interventions for the patients, as just completing one questionnaire which can be done while waiting to see the surgeon at control visits.

# Contacts

**Public** Smith&Nephew, Inc

Oberneuhofstrasse 10d Baar 6340 CH Scientific Smith&Nephew, Inc

Oberneuhofstrasse 10d Baar 6340 CH

# **Trial sites**

### **Listed location countries**

Netherlands

# **Eligibility criteria**

Age Adults (18-64 years)

3 - A prospective, multicenter, clinical outcome study of the NANOS neck preserving ... 4-05-2025

Elderly (65 years and older)

### **Inclusion criteria**

Patients with degenerative hip disease, age 18-60, requiring a primary neck preserving hip arthroplasty (page 6).

### **Exclusion criteria**

Previous failed endoprosthesis, active local or systemic infection, general health with ASA>2, pronounced femur neck angle of <125 or >145 degrees, insufficient bone stock (femur or acetabulum), proven osteoporosis, body mass index >30. (page 7).

# Study design

### Design

Study type: Observational non invasive		
Masking:	Open (masking not used)	
Control:	Uncontrolled	
Primary purpose:	Treatment	

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	11-07-2011
Enrollment:	50
Туре:	Actual

### **Ethics review**

Approved WMO	
Date:	03-09-2010
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO	

4 - A prospective, multicenter, clinical outcome study of the NANOS neck preserving ... 4-05-2025

Date:	
Application type:	
Review commission:	

03-04-2018 Amendment METC Amsterdam UMC

# **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** CCMO **ID** NL30123.094.10