

# AIR (Artificial Implant to Restore the medial meniscus function)2 clinical investigation

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The Tramppolin® medial meniscus prosthesis is intended to restore the function of the natural meniscus to provide unicompartmental pain relief in the meniscus-deficient knee and redistributes the loads transmitted across the knee joint. The ability...

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON19974

### Bron

NTR

### Verkorte titel

AIR2

### Aandoening

post-meniscectomy pain

### Ondersteuning

**Primaire sponsor:** Atro Medical B.V.

**Overige ondersteuning:** Loan and venture capital

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

Performance of the Tramppolin® medial meniscus prosthesis in improving pain as assessed by the KOOS Pain Sub-scale at 24 months post-operative compared to baseline (pre-operative).

## Toelichting onderzoek

### Achtergrond van het onderzoek

The objective of the clinical investigation is to evaluate the safety and performance of the Tramppolin® medial meniscus prosthesis and to demonstrate that the Tramppolin® medial meniscus prosthesis is able to restore the function of the natural meniscus to provide pain relief in the medial compartment of the meniscus-deficient knee.

### Doel van het onderzoek

The Tramppolin® medial meniscus prosthesis is intended to restore the function of the natural meniscus to provide unicompartmental pain relief in the meniscus-deficient knee and redistributes the loads transmitted across the knee joint.

The ability to restore the function of the natural meniscus to provide pain relief will be assessed by evaluation of the performance of the Tramppolin® medial meniscus prosthesis in improving pain as assessed by the KOOS Pain Sub-scale at 24 months post-operative compared to baseline (pre-operative).

### Onderzoeksopzet

Screening visit (V1), Surgery (V2), Follow up visits will be done at 2 weeks, 6 weeks, 3 months, 6 months, 12 months, and 24 months after surgery.

### Onderzoeksproduct en/of interventie

Screening visit (V1), Surgery (V2), Follow up visits will be done at 2 weeks, 6 weeks, 3 months, 6 months, 12 months, and 24 months after surgery.

## Contactpersonen

### Publiek

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## Wetenschappelijk

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## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Has medial compartment knee pain and had a medial partial or total meniscectomy > 6 months ago. The lack of meniscus tissue is confirmed by patient history and MRI
2. Has a KOOS Pain of  $\leq 75$  (100 being no pain and the highest attainable score)
3. Is between age 18 and 70 years (inclusive) at the time of screening
4. Has neutral alignment  $\pm 5^\circ$  of the mechanical axis, i.e., the angle formed by a line drawn from the center of the femoral head to the medial tibial spine and a line drawn from the medial tibial spine to the center of the ankle joint, as confirmed by X-ray
5. Is willing to be implanted with the Tramppolin® medial meniscus prosthesis
6. Is willing and able to comply to the clinical investigation required follow up visits, questionnaires, X-rays and MRI's
7. Is able and willing to understand and sign the clinical investigation Informed Consent Form
8. Is able to read and understand the national language of the country in which the relevant clinical site is located

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Has a symptomatic knee because of a tear that could potentially be addressed by a repeat partial meniscectomy
2. Has evidence of a modified Outerbridge Grade IV cartilage loss on the medial tibial plateau or femoral condyle that potentially could contact a Tramppolin® medial meniscus prosthesis
3. Has lateral compartment pain and Grade III or Grade IV modified Outerbridge cartilage score in the lateral compartment
4. Has a varus or valgus knee deformity of  $> 5^\circ$  requiring a tibial or femoral osteotomy
5. Has a varus alignment that is not passively correctable
6. Has a laxity level of more than Grade II (IKDC), primary or secondary to an injury of the anterior cruciate ligament (ACL) and/or posterior cruciate ligament (PCL) and/or lateral collateral ligament (LCL) and/or medial collateral ligament (MCL)

7. Has significant trochlear dysplasia, patellar instability or symptomatic patellar misalignment
8. Has patellar compartment pain and Grade III or Grade IV modified Outerbridge cartilage score in the patellar compartment.
9. Compared to a normal knee, has obvious radiological evidence of medial femoral squaring, anatomical variance in the medial tibial plateau, or irregularly shaped cartilage surface
10. Had an ACL reconstruction performed < 9 months prior to surgery
11. Has a BMI > 30 at the time of screening
12. Has a knee flexion contracture > 10°
13. Has a knee flexion < 90°
14. Had a previous High Tibial Osteotomy (HTO) < 1 year ago
15. Has insufficiency fractures or avascular necrosis of the medial compartment
16. Has an active infection or tumor (local or systemic)
17. Has any type of knee joint inflammatory disease including Sjogren's syndrome
18. Has neuropathic knee osteoarthropathy, also known as Charcot joint
19. Has any medical condition that does not allow possible arthroscopy of the knee
20. Has neurological deficit (sensory, motor, or reflex)
21. Is currently involved in another investigation of the lower extremity
22. Anticipates having another lower extremity surgery during the clinical investigation period
23. Has received any corticosteroid knee injections  $\leq$  3 months prior to surgery
24. Has proven osteoporosis
25. Is on immunostimulating or immunosuppressing agents
26. Has ipsilateral or contralateral lower limb joint conditions that may affect ambulation or KOOS (e.g. have a leg length discrepancy > 2.5 cm [1 inch], causing a noticeable limp)
27. Is a female who is lactating, expecting, or is intending to become pregnant during the clinical investigation period
28. Is mentally incapacitated (incapable of appraising or controlling conduct) or have mental disability (e.g., dementia or Alzheimer's)
29. Has a condition or be in a situation that, in the Investigator's opinion, may confound the clinical investigation results, may risk the safety of the patient, or may interfere significantly with the subject's participation in the clinical investigation

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

## Deelname

Nederland  
Status: Werving gestart  
(Verwachte) startdatum: 20-10-2021  
Aantal proefpersonen: 10  
Type: Verwachte startdatum

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nog niet bepaald

## Ethische beoordeling

Positief advies  
Datum: 20-10-2021  
Soort: Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 54484  
Bron: ToetsingOnline  
Titel:

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

Register	ID
NTR-new	NL9805
CCMO	NL75393.000.21
OMON	NL-OMON54484

## Resultaten