

# **Biological implants for the reconstruction of complex, contaminated abdominal wall defects.**

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The use of a biological mesh in a contaminated/infected field is expected to have better outcomes on mortality, morbidity, performance, durability, postoperative complications and reoperations compared to use of a synthetic mesh. One of the...

**Ethische beoordeling** Positief advies

**Status** Werving gestart

**Type aandoening** -

**Onderzoekstype** Observationeel onderzoek, zonder invasieve metingen

## **Samenvatting**

### **ID**

NL-OMON24625

### **Bron**

NTR

### **Onderzoeksproduct en/of interventie**

### **Uitkomstmaten**

#### **Primaire uitkomstmaten**

The primary outcome measure is the possible advantage of a biological mesh compared to the synthetic mesh, expressed in recurrence, morbidity, durability of the mesh (measured in the time passed postoperatively) and postoperative complications (measured in sepsis, reoperation and fistulation).

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

**Background:** Approximately 2-24% of the 100.000 laparotomy procedures performed in The Netherlands annually result in an incisional or abdominal wall hernia. Use of synthetic mesh is contra-indicated when the field is complicated, infected and/or contaminated because of the risk of adhesions, (chronic) sepsis and erosion. The results of the modern biological implants demonstrate that the biological grafts become recellularized and revascularized without being resorbed with fewer adhesions compared to synthetic meshes. Permacol, acellular porcine dermis, is the biological mesh of choice in Atrium Medical Centre Heerlen and Orbis Medical Centre Sittard.

**Objective:** A retrospective review of Atrium Medical Centre's in Heerlen and Orbis Medical Centre's in Sittard experience using Permacol for the repair of abdominal wall defects and a cost-effective analysis comparing the use of a synthetic mesh versus Permacol in complex abdominal wall hernia repair.

**Methods:** Retrospective review of medical records of patients undergoing abdominal wall reconstruction with Permacol compared with a case-matched control group in which a synthetic mesh has been used to determine the advantages and cost-effectiveness of the biological mesh.

## **Doel van het onderzoek**

The use of a biological mesh in a contaminated/infected field is expected to have better outcomes on mortality, morbidity, performance, durability, postoperative complications and reoperations compared to use of a synthetic mesh. One of the explanations is because of their compliance with the host leukocyte response.

The costs of the more expensive biological implant weigh against the benefits of its use as explained above.

## **Onderzoeksopzet**

N/A

## **Onderzoeksproduct en/of interventie**

N/A

## **Contactpersonen**

## **Publiek**

Surgery Department<br>Atrium Medisch Centrum, Heerlen<br>

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The Netherlands

## **Wetenschappelijk**

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## **Deelname eisen**

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

1. Patients with complex, contaminated wall defects, repaired with a biological mesh;
2. Patients with complex, contaminated wall defects, repaired with a synthetic mesh.

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

N/A

## **Onderzoeksopzet**

### **Opzet**

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Parallel
Toewijzing:	Niet-gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

## Deelname

Nederland  
Status: Werving gestart  
(Verwachte) startdatum: 26-04-2013  
Aantal proefpersonen: 80  
Type: Verwachte startdatum

## Ethische beoordeling

Positief advies  
Datum: 26-04-2013  
Soort: Eerste indiening

## Registraties

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

Geen registraties gevonden.

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

Geen registraties gevonden.

## In overige registers

Register	ID
NTR-new	NL3799
NTR-old	NTR3972
Ander register	: 13-N-48
ISRCTN	ISRCTN wordt niet meer aangevraagd.

## Resultaten

### Samenvatting resultaten

N/A