

# **The effect of two anterior approaches to inguinal hernia repair, pre peritoneal Bard® Polysoft™ self expanding patch versus a ProGrip self-fixing semi-resorbable mesh, on the development of acute and chronic inguinal pain.**

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Compared to a ProGrip self-fixing semi-resorbable mesh the use of a Bard® Polysoft™ preperitoneal mesh results in less chronic groin pain in inguinal herniorrhaphy patients.

<b>Ethische beoordeling</b>	Niet van toepassing
<b>Status</b>	Werving nog niet gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## **Samenvatting**

### **ID**

NL-OMON24826

### **Bron**

NTR

### **Verkorte titel**

SoftGrip Trial

### **Aandoening**

Inguinal hernia, chronic pain, mesh

### **Ondersteuning**

**Primaire sponsor:** Ziekenhuis Gelderse Vallei, Department of General Surgery

**Overige ondersteuning:** none

# Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

Does the use of Bard® Polysoft™ preperitoneal mesh result in less chronic groin pain than the use of the ProGrip™ self-fixing semi-resorbable mesh in inguinal herniorrhaphy patients?

## Toelichting onderzoek

### Achtergrond van het onderzoek

Background:

With the introduction of prosthesis material, the Lichtenstein technique has reduced the recurrence rate after inguinal hernia surgery to an acceptable level (2%). Polypropylene mesh is the first choice prosthesis material in most Dutch hospitals.

However, chronic pain after inguinal hernia surgery remains a problem. A number of studies demonstrated that 20 - 40% of patients experience chronic pain after elective inguinal hernia surgery. This is due to the occurrence of extensive fibrosis that is induced by a standard polypropylene mesh, although the method of fixation, with non-resolvable stitches, might also play a role in the pathogenesis of chronic pain.

Therefore two new types of mesh prostheses have been developed to prevent the occurrence of chronic pain. The first type is self-adhesive and light-weight, the second is self-fixing and has the advantage of a preperitoneal correction through an open anterior approach. In theory this could possibly prevent chronic pain on both pathogenesis pathways.

Both the extent of fibrosis, as the chance of nerve-incarceration and/or periostitis through incorrectly placed sutures, could be reduced.

Objective of the Trial:

Primary: Does the use of a Bard® Polysoft™ preperitoneal mesh result in less chronic pain than after the use of a ProGrip™ self-fixing semi-resorbable mesh for patients with an inguinal hernia repair through an anterior approach?

Secondary:

1. Does the use of Bard® Polysoft™ mesh result in a different recurrence rate than the use of a ProGrip™ mesh?
2. Does the use of a Bard® Polysoft™ mesh attend with less peri- and early postoperative complications than the use of a ProGrip™ mesh?
3. Does the use of a Bard® Polysoft™ mesh result in a faster resumption of work than the use of a ProGrip™ mesh?
4. Does the use of a Bard® Polysoft™ mesh result in a higher quality of life than the use of a ProGrip™ mesh.

#### Trial Design:

This study is a double blind randomized controlled trial in patients with a unilateral primary inguinal hernia. A total of 460 patients will be included into the entire study and randomized into either ARM A, the control group, ProGrip™ mesh (230 patients). or ARM B, Bard® Polysoft™ mesh (230 patients) The Bard® Polysoft™ mesh will be placed preperitoneal, whilst the ProGrip mesh will be placed according to the Lichtenstein technique. In both groups correction will be performed through an anterior approach.

#### Follow-up:

Patients will be followed-up for at least one year. At 2, 12 weeks and 12 months the following factors will be registered: pain, inguinal hernia recurrence, occurrence of complications, quality of life and work resume.

#### **Doel van het onderzoek**

Compared to a ProGrip self-fixing semi-resorbable mesh the use of a Bard® Polysoft™ preperitoneal mesh results in less chronic groin pain in inguinal herniorrhaphy patients.

#### **Onderzoeksopzet**

1. 2 weeks;
2. 12 weeks;
3. 12 months;
4. Possibly 5 years.

## Onderzoeksproduct en/of interventie

Inguinal herniorrhaphy by using the ProGrip™ self-fixing semi-resorbable mesh (group A) or the Bard® Polysoft™ preperitoneal mesh (group B).

## Contactpersonen

### Publiek

Department of General Surgery, Ziekenhuis Gelderse Vallei, Willy Brandtlaan 10  
D. &#268;adanová  
Department of General Surgery, Ziekenhuis Gelderse Vallei, Willy Brandtlaan 10  
Ede 6716 RP  
The Netherlands  
+31-318-434343

### Wetenschappelijk

Department of General Surgery, Ziekenhuis Gelderse Vallei, Willy Brandtlaan 10  
D. &#268;adanová  
Department of General Surgery, Ziekenhuis Gelderse Vallei, Willy Brandtlaan 10  
Ede 6716 RP  
The Netherlands  
+31-318-434343

## Deelname eisen

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

1. Age of 18 years or older;
2. A unilateral primary inguinal hernia;
3. Adequate follow-up possible.

### Belangrijkste redenen om niet deel te kunnen nemen

## **(Exclusiecriteria)**

1. Incarcerated inguinal hernia;
2. Recurrent inguinal hernia;
3. Local inguinal inflammation;
4. Concurrent femoral hernia;
5. ASA 4 or more;
6. Adequate follow-up impossible;
7. Previous inguinal surgery.

## **Onderzoeksopzet**

### **Opzet**

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Dubbelblind
Controle:	Geneesmiddel

### **Deelname**

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	05-01-2009
Aantal proefpersonen:	460
Type:	Verwachte startdatum

## **Ethische beoordeling**

Niet van toepassing	
Soort:	Niet van toepassing

## 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	NL1853
NTR-old	NTR1965
Ander register	METC number : 09-162
ISRCTN	ISRCTN wordt niet meer aangevraagd.

## Resultaten

### Samenvatting resultaten

N/A