

# THE EFFECT OF MESH TYPE (ULTRAPRO VERSUS PROLENE) ON POSTOPERATIVE PAIN AND WELL-BEING FOLLOWING TOTALLY EXTRAPERITONEAL (TEP) LAPAROSCOPIC HERNIA REPAIR: A RANDOMIZED CONTROLLED TRIAL.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON19969

### Source

Nationaal Trial Register

### Brief title

TULP

### Health condition

(Endoscopic) hernia repair surgery/ (endoscopische) liesbreukchirurgie

Chronic pain/ Chronische pijnklachten

## Sponsors and support

**Primary sponsor:** Diaconessenhuis Utrecht/Zeist

The Netherlands

**Source(s) of monetary or material Support:** Diaconessenhuis Utrecht/Zeist

The Netherlands

## Intervention

## Outcome measures

### Primary outcome

Frequency of chronic pain after Totally Extraperitoneal (TEP) endoscopic hernia repair.

### Secondary outcome

1. Recurrence Rate;
2. Mesh 'feeling';
3. Sensitivity disorders (such as hypo- or hyperaesthesia);
4. Sexual functioning related to pain;
5. Postoperative complications (such as wound infection/hematoma/urinary tract infection/hydrocele etc.);
6. Time to postoperative recovery (return to work and daily activities);
7. Occurrence of long-term complications (e.g. testicular atrophy).

## Study description

### Background summary

In this trial a lightweight mesh (Ultrapro) will be compared with a standard heavyweight mesh (Prolene) on chronic postoperative pain and quality of life after endoscopic inguinal hernia repair.

### Study objective

To assess the outcomes of endoscopic hernia repair (TEP) after implantation of a lightweight mesh (Ultrapro) versus a heavyweight mesh (Prolene). The hypothesis is that an endoscopic hernia repair with implantation of a lightweight mesh results in less chronic postoperative pain than endoscopic repair with implantation of a heavyweight (standard Prolene) mesh.

### Study design

Screening/Baseline, day 1, 1 week, 6 weeks, 3 months, 1 year, 2 year, 3 year after surgery.  
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29-05-2025

## Intervention

Arm 1 (intervention group): lightweight mesh (Ultrapro):  
50% of participants will be randomized to receive this mesh.  
Mesh characteristics are:

1. Structure: Multifilament with large pores (3-4 mm);
2. Polymer fiber: Polypropylene (PP) + Monocryl component (Poliglecapron);
3. Weight: 28 g/m<sup>2</sup> (part of polypropylene which is not absorbed).

The monocryl part (polyglecapron) is absorbed in 90-120 days due to hydrolysis; a lightweight mesh with a pore size of 3-4 mm is what remains.

Arm 2 (Control group): heavyweight mesh (Prolene):  
The heavyweight mesh Prolene® is the standard used at a TEP hernia repair in the Hernia Centre Zeist (Dutch: Liesbreukcentrum Zeist). 50% of participants will be randomized to receive this mesh.  
Mesh characteristics are:

1. Structure: monofilament with small pores;
2. Polymer fiber: Polypropyleen;
3. Weight: 80-85 g/m<sup>2</sup>.

## Contacts

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## Eligibility criteria

### Inclusion criteria

1. Male patients;
2.  $\geq 18$  year old;
3. Primary, unilateral, symptomatic, reducible hernia;
4. Totally Extraperitoneal (TEP) endoscopic hernia repair.

### Exclusion criteria

1. Bilateral hernia;
2. Scrotal hernia;
3. Recurrent hernia;
4. Walking distance  $< 500$  m;
5. Collagen disorders, such as Marfan Syndrome;
6. Likely problems, in the judgment of the investigators, with maintaining follow-up (e.g., patients with no fixed address or insufficient comprehension of Dutch language will be excluded).

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Active

## Recruitment

NL  
Recruitment status: Pending  
Start date (anticipated): 01-01-2010  
Enrollment: 950  
Type: Anticipated

## Ethics review

Positive opinion  
Date: 03-12-2009  
Application type: First submission

## Study registrations

### Followed up by the following (possibly more current) registration

ID: 38149  
Bron: ToetsingOnline  
Titel:

### Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
NTR-new	NL2014
NTR-old	NTR2131
CCMO	NL30223.100.09
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON38149

## Study results

## Summary results

N/A