# Early Surgery versus optimal Current step-up prActice for chronic PancrEatitis (ESCAPE)

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
04/03/2011		[X] Protocol		
Registration date 25/03/2011	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
22/01/2020	Digestive System			

#### **Plain English Summary**

Background and study aims

Chronic pancreatitis (CP) is a condition where the pancreas becomes permanently damaged from inflammation, causing severe pain. Surgery is kept as a last resort when other treatments have failed and the severity of disease has increased substantially and pain becomes unmanageable. Small studies have suggested that early surgery may be beneficial in terms of pain relief and pancreatic function. The aim of this study is to evaluate the benefits, risks and costs of early surgery as an alternative to current practice for CP.

#### Who can participate?

Patients with CP being treated with opioid painkillers.

#### What does the study involve?

Participants are randomly allocated to either group A or group B. Group A undergo early surgical treatment, while group B follow the current step-up practice (medical management followed by endoscopic treatment followed by surgical treatment if not effective).

What are the possible benefits and risks of participating? Every treatment has its risks for complications.

Where is the study run from? Academic Medical Centre Amsterdam (Netherlands).

When is the study starting and how long is it expected to run for? April 2011 to July 2017.

#### Who is funding the study?

- 1. Dutch Digestive Diseases Foundation (Netherlands)
- 2. ZonMw Health Care Efficiency Research Program (Netherlands)

Who is the main contact? Prof. Dr. M.A. Boermeester m.a.boermeester@amc.uva.nl

#### Study website

http://www.pancreatitis.nl/

## Contact information

#### Type(s)

Scientific

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

## Secondary identifying numbers

DDDF (Grant nr. WO10-21) and ZonMw (Grant nr. 171102016)

# Study information

#### Scientific Title

Early Surgery versus optimal Current step-up prActice for chronic PancrEatitis (ESCAPE): a multicentre randomised controlled trial

#### Acronym

**ESCAPE** 

## Study hypothesis

Early surgical intervention results in less pain over the study period and is more cost-effective than the optimal current step-up practice.

## Ethics approval required

Old ethics approval format

Ethics approval(s)

Medical Ethical Committee of the Academic Medical Centre in Amsterdam, 30/03/2011

#### Study design

Multi-centre strategy randomised controlled trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use contact details below to request a patient information sheet

#### Condition

Chronic pancreatitis

#### **Interventions**

Early surgical intervention:

Surgical drainage of the pancreatic duct (pancreaticojejunostomy) if pancreatic head is not enlarged (< 4 cm) or surgical drainage of the pancreatic duct and resection of the head of the pancreas (Frey procedure) if pancreatic head is enlarged (4cm)

Control group: Optimal current step-up practice

- 1. Step 1 Optimal medical management, if not effective followed by
- 2. Step 2 -Endoscopic intervention, and if not effective followed by
- 3. Step 3 Surgical intervention

The patient follow-up will be completed 18 months after randomisation for the primary endpoint, the secondary endpoints and the other research questions.

### Intervention Type

Procedure/Surgery

#### Primary outcome measure

The primary clinical outcome is the degree of pain as assessed by the Izbicki pain score at 2 weeks intervals during the follow-up period of 18 months

#### Secondary outcome measures

- 1. Cost-effectiveness, total direct and indirect costs-during 18 months follow-up period
- 2. Severe complications related to disease progression or endoscopic and surgical interventions
- 2.1. Mortality (all-cause)
- 2.2. Disease progression: development of pseudocysts, pancreatic insufficiency (endocrine or exocrine), gastric outlet or duodenal obstruction, chronic use of opioids (defined as need for

opioids for a period > 6 months), hospital admissions for CP upflares

- 2.3. Endoscopic intervention: (acute) pancreatitis flare up, cholangitis, acute cholecystitis, retroperitioneal or bowel perforation, abdominal sepsis, intra-abdominal abscesses needing intervention, bleeding needing transfusion or intervention, any relaparotomy for other reasons
- 2.4. Surgical intervention: anastomotic leakage, bleeding needing transfusion or intervention, abdominal sepsis, intra-abdominal abscesses needing intervention, burst abdomen, severe wound infection (requiring prolonged hospital stay), any relaparotomy for other reasons
- 3. Quality of life-assessed by validated questionnaires.
- 4. Izbicki score at 18 months follow-up
- 5. Endocrine pancreatic insufficiency-determined by use of anti-diabetic medication or abnormal serum glucose levels (fasting serum glucose levels > 6,0 mmol/L in capillary blood or > 6,9 mmol/L in venous plasma at two different days
- 6. Exocrine pancreatic insufficiency-determined by fecal elastase levels (< 200µg/g)
- 7. Additional pain measurements-due to the heterogeneity in reporting of pain in previous trials and in order for the results of this trial to be comparable with other important trials in literature, the following additional measures of pain will be reported as well:
- 7.1. Proportion of patients with complete and partial pain relief at end of follow-up, defined as follows:
- 7.1.1. Complete pain relief: an Izbicki pain score = 10 points
- 7.1.2. Partial pain relief: a decrease of >50% from baseline in the Izbicki score with a final score >10 points
- 7.2. Visual analogue score (VAS) for pain: measured as part of the Izbicki score
- 7.3. Büchler pain score: alternative pain measure based on the Izbicki questionnaire, and calculated by the multiplication of two of the four items of the Izbicki questionnaire (i.e. pain frequency and pain intensity)
- 8. Number and duration of hospital admissions during study period-Total number of hospital admission during 18 months of follow-up period and days outside the hospital in 18 months of follow-up
- 9. Number of performed interventions-total number of endoscopic and surgical interventions, including initial intervention.
- 10. Number of pancreatitis flare ups during study period-total number during 18 months follow-up period documented by computed tomography (CT) or magnetic resonance imaging (MRI)

Overall study start date 01/04/2011

Overall study end date 01/07/2017

# **Eligibility**

#### Participant inclusion criteria

Registration criteria:

- 1. Age 18 years
- 2. Confirmed chronic pancreatitis: according to the M-ANNHEIM diagnostic criteria
- 3. Dilated pancreatic duct [5 mm, established by magnetic resonance cholangiopancreatography (MRCP), Computerised Tomography (CT) or Endoscopic ultrasound (EUS)], with or without enlargement of the pancreatic head
- 4. Presence of moderate, non-debilitating pain. This will be defined as chronic abdominal pain (present for at least 3 months) sufficiently relieved with non-opioid analgesics

Randomisation criteria (after fulfilling inclusion criteria for registration):

- 1. Need for upgrade from non-opioids to opioid analgesics: newly developed need for opioids analgesics (opioids needed at least 3 days per week) and persistently needed for at least 2 weeks in a row
- 2. Informed consent for randomisation

#### Participant type(s)

Patient

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Both

#### Target number of participants

88

#### Total final enrolment

88

#### Participant exclusion criteria

- 1. History of prolonged need of opioids for chronic pancreatitis for a period over 2 months in the last 2 years
- 2. Previous pancreatic surgery
- 3. Previous endoscopic dilatation or stenting of the pancreatic duct
- 4. Episode of biliary obstruction in the last 2 months (defined as jaundice or bilirubine levels 25 micromol / L) or the presence of a stent in the common bile duct (CBD)
- 5. Proven autoimmune pancreatitis (including elevated levels of gamma-globulins (IgG))
- 6. Suspected or established pancreatic malignancies
- 7. Life expectancy of < 1 year for any reason
- 8. Presence of duodenal obstruction necessitating surgery, as judged by the expert panel
- 9. Presence of a pseudocyst larger than 6 cm necessitating intervention, as judged by the expert panel
- 10. Contra-indications for surgery, always evaluated by the expert panel (e.g. American Society of Anesthesiology class IV, severe portal hypertension due to occluded portal vein)
- 11. Pregnancy

#### Recruitment start date

01/04/2011

#### Recruitment end date

01/07/2017

## Locations

#### Countries of recruitment

Study participating centre
Academic Medical Center Amsterdam
Amsterdam
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1100 DD

# Sponsor information

#### Organisation

Academic Medical Centre Amsterdam (Netherlands)

#### Sponsor details

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#### Sponsor type

Hospital/treatment centre

#### Website

http://www.amc.uva.nl/

# Funder(s)

#### Funder type

Government

#### **Funder Name**

Dutch Digestive Diseases Foundation (Netherlands) (ref: Grant nr. WO10-21)

#### **Funder Name**

ZonMw Health Care Efficiency Research Program (Netherlands) (ref: Grant nr. 171102016)

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

# Intention to publish date

31/03/2019

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	18/03/2013		Yes	No
Results article	results	21/01/2020	22/01/2020	Yes	No