

# Postponed or immediate drainage of infected necrotizing pancreatitis (POINTER trial)

<b>Submission date</b> 02/07/2015	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 06/08/2015	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 02/09/2025	<b>Condition category</b> Digestive System	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Acute pancreatitis is a common disease where the pancreas becomes inflamed over a short period of time. During an acute pancreatitis attack, tissue within the pancreas may die (necrotize) and later become infected. Infected necrosis is associated with a mortality (death rate) of 20% and many other complications. Current guidelines recommend a so-called 'step-up approach' in these patients, starting with first catheter drainage. If necessary, patients will have an additional operation to remove their infected necrosis (necrosectomy). All these interventions are preferably delayed until the necrotic collections have reached the stage of walled-off necrosis. This process usually takes 4 weeks. During this waiting period antibiotic treatment is used. There is evidence that necrosectomy (second step) should be postponed until walled-off necrosis. However, evidence regarding the best timing of catheter drainage (first step) is lacking. This study aims to compare immediate and postponed catheter drainage in patients with infected necrotizing pancreatitis with regard to clinical outcomes and medical costs.

### Who can participate?

Adult patients with (suspected) infected necrotizing pancreatitis.

### What does the study involve?

Participants will be randomly allocated to either the intervention or the control group. Participants will undergo the same treatment as non-participating patients. The only difference is that participants in the intervention group will undergo catheter drainage earlier in the disease course. Participants will attend follow-up visits 3 and 6 months later to undergo routine tests (e.g., pancreatic function tests and imaging).

### What are the possible benefits and risks of participating?

There is a rationale in postponing catheter drainage in patients with infected necrotizing pancreatitis. First, antibiotic treatment alone may suffice as treatment. Second, diagnosing infected necrotizing pancreatitis is often easier in a later stage of the disease. Third, catheter drainage may be easier once the stage of walled-off necrosis has been reached. On the other hand there is not always a technical reason to wait several weeks until full encapsulation of the collections and catheter drainage can be performed successfully in the first weeks after onset of

disease. For similar abdominal conditions catheter drainage is also safely performed early in 'non-walled-off' collections. If there is no technical reason for postponing catheter drainage, patients with infected necrotizing pancreatitis may benefit from earlier catheter drainage by reduced complications and length of hospital stay.

Where is the study run from?

The study is initiated by the Dutch Pancreatitis Study Group (DPSG) and 24 Dutch hospitals will participate.

When is the study starting and how long is it expected to run for?

The study will start in July 2015 and will run for 3 years. Thereafter the follow-up will be completed in 6 months, followed by 6 months for data collecting, analysing and reporting. The total duration of the study is 4 years.

Who is funding the study?

Fonds NutsOhra and the Amsterdam UMC, location Academic Medical Center Amsterdam.

Who is the main contact?

1. Dr Lotte Boxhoorn  
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2. Dr Marc Besselink  
m.g.besselink@amsterdamumc.nl

## Contact information

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Scientific

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## **Additional identifiers**

### **Clinical Trials Information System (CTIS)**

Nil known

### **ClinicalTrials.gov (NCT)**

Nil known

### **Protocol serial number**

N/A

## **Study information**

### **Scientific Title**

Postponed or immediate drainage of infected necrotizing pancreatitis: a pragmatic parallel group randomized controlled multicenter superiority trial

### **Acronym**

POINTER trial

### **Study objectives**

Immediate catheter drainage is clinically and economically superior to postponed catheter drainage within the step-up approach in infected necrotizing pancreatitis.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

The medical ethics committee of the Amsterdam UMC, location Academic Medical Center Amsterdam, 19/06/2015, NL52361.018.15

### **Study design**

Pragmatic parallel-group randomized controlled multicenter superiority trial

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

### **Health condition(s) or problem(s) studied**

Infected necrotizing pancreatitis

### **Interventions**

Immediate catheter drainage after diagnosing infected necrosis while starting antibiotic treatment versus current standard treatment with postponing catheter drainage under antibiotic treatment (preferably until walled-off necrosis). If necessary a necrosectomy will be performed and postponed, if feasible, until the stage of walled-off necrosis in both treatment arms.

## **Intervention Type**

Procedure/Surgery

## **Primary outcome(s)**

Current primary outcome measure as of 12/04/2021:

Comprehensive Complication Index (CCI), including all complications other than pre-existent complications (e.g. treatment for infected (extra) pancreatic necrosis) occurring after randomization until 6 months after randomization, and graded according to the Clavien-Dindo classification.

Previous primary outcome measure:

The Comprehensive Complication Index (CCI), including all complications between randomization and 6 months after

## **Key secondary outcome(s)**

Current secondary outcome measures as of 12/04/2021:

1. Mortality
2. New onset (multi-)organ failure
3. Bleeding requiring intervention
4. Perforation of a visceral organ requiring intervention
5. Enterocutaneous fistula
6. Pancreaticocutaneous fistula
7. Incisional hernia
8. Wound infections
9. Endocrine and exocrine pancreas insufficiency
10. Number of patients with severe complications (Clavien-Dindo III or higher)
11. Number of patients per Clavien-Dindo classification
12. Number of surgical, endoscopic and radiologic interventions
13. Length of hospital stay
14. Length of ICU admission
15. QALYs
16. Total direct and indirect costs
17. Budget impact

All secondary endpoints occurring within 6 months after randomization will be measured

Previous secondary outcome measures:

1. Mortality
2. New onset (multi-)organ failure
3. Bleeding requiring intervention
4. Perforation requiring intervention
5. Fistula
6. Incisional hernia
7. Wound infections
8. Endocrine and exocrine pancreas insufficiency

9. Number of patients with severe complications (Clavien-Dindo III or higher)

10. Number of patients per Clavien-Dindo classification

11. Number of (re-)interventions

12. Hospital and ICU length of stay

13. QALYs

14. (In)direct costs

15. Budget impact

All secondary endpoints occurring within 6 months after randomization will be measured.

### **Completion date**

11/04/2019

## **Eligibility**

### **Key inclusion criteria**

Adult patients with (suspected) infected necrotizing pancreatitis; all patients with necrotizing pancreatitis will be screened for eligibility including a protocolized approach to patients with signs of infection

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Sex**

All

### **Total final enrolment**

104

### **Key exclusion criteria**

1. More than 35 days after onset of acute pancreatitis

2. Indication for emergency laparotomy for abdominal catastrophe (e.g. bleeding, bowel perforation, abdominal compartment syndrome)

3. Previous retroperitoneal intervention for necrotizing pancreatitis

4. Documented chronic pancreatitis

### **Date of first enrolment**

04/08/2015

### **Date of final enrolment**

11/10/2019

## **Locations**

### **Countries of recruitment**

Netherlands

**Study participating centre**

**Amsterdam UMC, location Academic Medical Center**

Amsterdam

Netherlands

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**Study participating centre**

**Erasmus Medical Center**

Rotterdam

Netherlands

-

**Study participating centre**

**St. Antonius Hospital**

Nieuwegein

Netherlands

-

**Study participating centre**

**Maastricht University Medical Center**

Maastricht

Netherlands

-

**Study participating centre**

**Radboudumc**

Nijmegen

Netherlands

-

**Study participating centre**

**University Medical Center Groningen**

Groningen

Netherlands

-

**Study participating centre**  
**University Medical Center Utrecht**  
Utrecht  
Netherlands

-

**Study participating centre**  
**Jeroen Bosch Hospital**  
's-Hertogenbosch  
Netherlands

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**Study participating centre**  
**Reinier de Graaf Gasthuis**  
Delft  
Netherlands

-

**Study participating centre**  
**Amsterdam UMC, location VU University Medical Center**  
Amsterdam  
Netherlands

-

**Study participating centre**  
**Meander Medical Center**  
Amersfoort  
Netherlands

-

**Study participating centre**  
**Hospital Gelderse Vallei**  
Ede  
Netherlands

-

**Study participating centre**

**Maxima Medisch Centrum**  
Veldhoven  
Netherlands  
-

**Study participating centre**  
**Isala Klinieken**  
Zwolle  
Netherlands  
-

**Study participating centre**  
**Rijnstate Hospital**  
Arnhem  
Netherlands  
-

**Study participating centre**  
**Medisch Spectrum Twente**  
Enschede  
Netherlands  
-

**Study participating centre**  
**Catharina Hospital**  
Eindhoven  
Netherlands  
-

**Study participating centre**  
**Gelre Hospital**  
Apeldoorn  
Netherlands  
-

**Study participating centre**

**Medical Center Leeuwarden**

Leeuwarden  
Netherlands

-

**Study participating centre**

**Onze Lieve Vrouwe Gasthuis**

Amsterdam  
Netherlands

-

**Study participating centre**

**Amphia Hospital**

Breda  
Netherlands

-

**Study participating centre**

**Maastad Hospital**

Rotterdam  
Netherlands

-

**Study participating centre**

**Spaarne Gasthuis**

Haarlem  
Netherlands

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**Study participating centre**

**Albert Schweitzer Hospital**

Dordrecht  
Netherlands

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**Sponsor information**

## Organisation

Academic Medical Center

## ROR

<https://ror.org/03t4gr691>

## Funder(s)

### Funder type

Charity

### Funder Name

Fonds NutsOhra

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Prof. dr. Marc Besselink ([m.g.besselink@amsterdamumc.nl](mailto:m.g.besselink@amsterdamumc.nl))

### IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		07/10/2021	07/10/2021	Yes	No
<a href="#">Results article</a>		17/07/2023	17/07/2023	Yes	No
<a href="#">Protocol article</a>	protocol	25/04/2019	29/04/2019	Yes	No
<a href="#">Other publications</a>	Secondary analysis	25/04/2025	02/09/2025	Yes	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes