# What are the first measurable signs of the early phase of chronic pancreatitis?

Submission date 03/12/2018	<b>Recruitment status</b> Suspended	<ul><li>Prospectively registered</li><li>[X] Protocol</li></ul>
<b>Registration date</b> 05/02/2019	<b>Overall study status</b> Ongoing	<ul> <li>Statistical analysis plan</li> <li>Results</li> </ul>
Last Edited 11/01/2024	<b>Condition category</b> Digestive System	<ul> <li>Individual participant data</li> <li>Record updated in last year</li> </ul>

#### Plain English summary of protocol

Background and study aims

Chronic pancreatitis (CP) is a severe disease which might be prevented by changing diet, smoking, alcohol consumption habits, and physical activity, however it is not known what to suggest to patients to decrease the risk of disease development. This study aims to find the first signs of the disease, when the progression could be slowed down and the prevention of recurrent acute pancreatitis (RAP) and CP could be started at the optimal time. The aim is to find the risk factors which worsen the progress of acute pancreatitis (AP) to RAP and CP. With this information, we could save lives, enhance the quality of life of patients, reduce the costs of health care, and new therapeutic targets could also be identified.

Who can participate?

Patients with acute pancreatitis enrolled in the GOULASH study

#### What does the study involve?

Participants are followed up 1, 2, 3, 4, 5 and 6 years after the episode of AP. Data about eating habits, stress and physical activity will be collected by questionnaires. Laboratory tests are carried out on blood samples and genetic tests are performed for the genes already known to be associated with CP. The researchers also test for diabetes and ineffective pancreas enzyme production. Pancreas imaging is also performed every year. Blood and faeces samples are stored in the biobank for later laboratory tests.

What are the possible benefits and risks of participating?

Participants might benefit from regular and thorough monitoring for the earliest signs of CP development. The only potential disadvantage in participating is that filling in the questionnaires is time-consuming and must be filled in with the help of a trained healthcare worker, which means it can't be done prior to the follow-up visit.

#### Where is the study run from?

It is a multicentre trial, open for centres who take part in the GOULASH study, designed with help of the Centre for Translational Medicine at the University of Pécs, the leading centre of the study.

When is the study starting and how long is it expected to run for? December 2017 to February 2030

Who is funding the study? The University of Pécs using grants from the Hungarian government

Who is the main contact? Dr Alexandra Mikó miko.alexandra@pte.hu

Study website www.tm-centre.org

# **Contact information**

**Type(s)** Scientific

**Contact name** Prof Péter Hegyi

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#### **Contact details**

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# Additional identifiers

**EudraCT/CTIS number** Nil known

**IRAS number** 

**ClinicalTrials.gov number** Nil known

**Secondary identifying numbers** Nil known

# Study information

Scientific Title

Observational longitudinal multicentre investigation of acute pancreatitis. (GOULASH PLUS): Follow-up of the GOULASH study

#### Acronym

**GOULASH PLUS** 

#### **Study objectives**

Current hypothesis as of 08/04/2019:

Acute pancreatitis (AP) is an inflammatory condition, which can lead to late consequences. In 20% of patients recurrent AP (RAP) develops and in 7-12% chronic pancreatitis (CP) occurs. Chronic pancreatitis (CP) usually diagnosed at the end-stage, when fibrosis and exocrine and/or endocrine insufficiency are present. There is no gold standard therapy yet. In order to detect the first signs, risk factors and measurable parameters of early CP we plan to follow the late complications of acute and recurrent pancreatitis. By the early recognition of CP or the risks of CP the outcome of the disease can be improved, life expectancy can be increased, therefore the quality of life can improve and costs can be decreased.

The aim of the GOULASH-PLUS study is to understand the influencing factors and to determine which parameters should be measured to detect the early phase of CP.

#### Previous hypothesis:

Acute pancreatitis (AP) is an inflammatory condition, which can lead to late consequences. In 20% of patients recurrent AP (RAP) develops and in 5% chronic pancreatitis (CP) occurs. Chronic pancreatitis (CP) usually diagnosed at the end-stage, when fibrosis and exocrine and/or endocrine insufficiency are present. There is no gold standard therapy yet. In order to detect the first signs, risk factors and measurable parameters of early CP we plan to follow the late complications of acute and recurrent pancreatitis. By the early recognition of CP or the risks of CP the outcome of the disease can be improved, life expectancy can be increased, therefore the quality of life can improve and costs can be decreased.

The aim of the GOULASH-PLUS study is to understand the influencing factors and to determine which parameters should be measured to detect the early phase of CP.

#### Ethics approval required

Ethics approval required

#### Ethics approval(s)

Approved 08/02/2018, Secretary of Medical Research Council Scientific and Research Ethics Committee (P.O.B 314, Budapest, H-1903, Hungary; (+36 1) 795 1192; attilane.gombos@bm.gov. hu), ref: 5753-2/2018/EKU

#### Study design

Observational prospective follow-up study

**Primary study design** Observational

Secondary study design Longitudinal study **Study setting(s)** Hospital

Study type(s)

Other

#### Participant information sheet

Not available in web format, please use contact details to request a participant information sheet.

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

Acute pancreatitis

#### Interventions

Current intervention as of 08/04/2019:

This trial is designed as an observational study, no intervention is performed.

Anamnestic data will be collected by the following questionnaires at 1, 2, 3, 4, 5 and 6 years after the episode of acute pancreatitis:

i) Diet History Questionnaire

ii) SF-36

iii) physical activity questionnaire

iv) stress questionnaire

Genetic tests will be performed for the genes already known to be associated with chronic pancreatitis.

The exocrine and endocrine pancreatic, liver and kidney functions will be determined by several laboratory tests and stool sample analyses at 1, 2, 3, 4, 5 and 6 years, and imaging (abdominal ultrasound in years 1, 3 and 5 and endoscopic ultrasound in years 2, 4 and 6).

Cost-effectiveness will be analyzed to examine the relationship between events of interest and health-related quality of life or to explore differences of the subgroup .

Participants will be followed up at 1, 2, 3, 4, 5 and 6 years after the episode of acute pancreatitis.

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Participants will be followed up at 1, 2, 3, 4 and 5 years after the episode of acute pancreatitis.

#### Intervention Type

Other

#### Primary outcome measure

Current primary outcome measures as of 08/04/2019:

1. Incidence of CP assessed once yearly for 6 years using abdominal ultrasound in years 1, 3 and 5 and endoscopic ultrasound in years 2, 4 and 6

2. Incidence of recurrent AP based on the IAP/APA guideline's 2 out of 3 rule. Patients will be followed up at least once a year for 6 years and will be asked to bring all medical records for review and discussion.

3. Incidence of exocrine pancreatic insufficiency assessed using the presence of steatorrhoea and the fecal elastase test assesed once yearly for 6 years

4. Incidence of endocrine pancreatic insufficiency (based on oral glucose tolerance test [OGTT] and fasting plasma glucose [FPG] test) once yearly for 6 years if the patient has not already been diagnosed with diabetes mellitus and the fasting plasma glucose level is ≤7 mmol/l

Previous primary outcome measures:

1. Incidence of CP assessed once yearly for 5 years using abdominal ultrasound in years 1, 3 and 4 and endoscopic ultrasound in years 2 and 5

2. Incidence of recurrent AP based on the IAP/APA guideline's 2 out of 3 rule. Patients will be followed up at least once a year for 5 years and will be asked to bring all medical records for review and discussion.

3. Incidence of exocrine pancreatic insufficiency assessed using the presence of steatorrhoea and the fecal elastase test assesed once yearly for 5 years

4. Incidence of endocrine pancreatic insufficiency (based on oral glucose tolerance test [OGTT] and fasting plasma glucose [FPG] test) once yearly for 5 years if the patient has not already been diagnosed with diabetes mellitus and the fasting plasma glucose level is ≤7 mmol/l

#### Secondary outcome measures

Current secondary outcome measures as of 08/04/2019:

1. Need for radiological/surgical interventions assessed by reviewing patient medical records in every follow-up visit during the 6-year follow-up period.

2. Dietary intake assessed using Diet History Questionnaire (Version 2.0. National Institutes of Health) on follow-up visits once a year for 6 years

3. Quality of life assessed using RAND 36-Item Health Survey Version 1.0 SF-36 once a year for 6 years

4. Stress assessed using the 10-item Perceived Stress Scale once a year for 6 years

5. Physical activity assessed using International Physical Activity Questionnaire (IPAQ; long, usual week version) once a year for 6 years

6. Pain assessed by RAND 36-Item Health Survey Version 1.0 SF-36 once a year for 6 years

7. Development of pancreas tumor and cystic lesions assessed by reviewing patient medical records once a year for 6 years

8. Laboratory parameters to assess organ function – inflammatory cytokines, pancreatic peptides etc once a year for 6 years

Previous secondary outcome measures:

1. Need for radiological/surgical interventions assessed by reviewing patient medical records in every follow-up visit during the 5-year follow-up period.

2. Dietary intake assessed using Diet History Questionnaire (Version 2.0. National Institutes of Health) on follow-up visits once a year for 5 years

3. Quality of life assessed using RAND 36-Item Health Survey Version 1.0 SF-36 once a year for 5 years

4. Stress assessed using the 10-item Perceived Stress Scale once a year for 5 years

5. Physical activity assessed using International Physical Activity Questionnaire (IPAQ; long, usual

week version) once a year for 5 years 6. Pain assessed by RAND 36-Item Health Survey Version 1.0 SF-36 once a year for 5 years 7. Development of pancreas tumor and cystic lesions assessed by reviewing patient medical records once a year for 5 years 8. Laboratory parameters to assess organ function – inflammatory cytokines, pancreatic peptides etc once a year for 5 years

#### Overall study start date

01/12/2017

#### **Completion date**

28/02/2030

# Eligibility

#### Key inclusion criteria

1. Aged over 18 years

2. Diagnosed with AP on the basis of the '2 out of 3' rule of the IAP/APA guideline: (a) upper abdominal pain; (b) serum amylase or lipase >3x upper limit of normal range; (c) characteristic findings on pancreatic imaging; however those patients without abdominal pain will be excluded because the onset of acute pancreatitis cannot be assessed

3. Participated in GOULASH study and signed the informed consent form

Participant type(s) Patient

**Age group** Adult

## Lower age limit

18 Years

Sex

Both

**Target number of participants** 577

**Key exclusion criteria** Does not meet the inclusion criteria

Date of first enrolment 31/01/2019

Date of final enrolment 28/01/2025

## Locations

Countries of recruitment

Hungary

**Study participating centre University of Pécs Medical School Institute for Translational Medicine** Szigeti str 12 Pécs Hungary H-7624

**Study participating centre University of Debrecen 2nd Department of Internal Medicine, Division of Gastroenterology** 98 Nagyerdei boulevard Debrecen Hungary H-4012

**Study participating centre Centre of Székesfehérvár Szent György University Teaching Hospital of Fejér County** 3 Seregélyesi Street Székesfehérvár Hungary H-8000

**Study participating centre Institute of Pancreatic Diseases, Semmelweis University** Tömő Street 25-29. Budapest Hungary 1083

### Sponsor information

**Organisation** University of Pécs, Medical School

**Sponsor details** Szigeti str 12 Pécs Hungary H-7624 +36 72 536250 hegyi.peter@pte.hu

**Sponsor type** Government

Website www.aok.pte.hu

ROR https://ror.org/037b5pv06

## Funder(s)

**Funder type** University/education

**Funder Name** University of Pécs Medical School

**Funder Name** Momentum Grant of the Hungarian Academy of Sciences (LP2014-10/2014)

**Funder Name** Highly Cited Publication Grant (KH 125678) of the National Research Development

**Funder Name** Innovation Office (GINOP 2.3.2-15-2016-00048 Stay Alive)

**Funder Name** Innovation Office (EFOP 3.6.2-16-2017-00006 Live Longer)

**Funder Name** Translational Medicine Foundation

# **Results and Publications**

#### Publication and dissemination plan

We plan to publish the trial results in a Q1 high-quality international journal.

#### Intention to publish date

31/12/2025

#### Individual participant data (IPD) sharing plan

All parameters of the dataset will be available upon request from the principal investigator (Prof Péter Hegyi, University of Pécs Medical School Institute for Translational Medicine) after the results have been published.

#### IPD sharing plan summary

Available on request

#### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	03/09/2019	21/08/2020	Yes	No