

# The impact of combined modality positron emission tomography with computerised tomography scanning (PET/CT) in the diagnosis and management of pancreatic cancer

|                   |                      |  |
|-------------------|----------------------|--|
| Submission date   | Recruitment status   | <input type="checkbox"/> Prospectively registered    |
| 08/01/2015        | No longer recruiting | <input type="checkbox"/> Protocol                    |
| Registration date | Overall study status | <input type="checkbox"/> Statistical analysis plan   |
| 09/01/2015        | Completed            | <input checked="" type="checkbox"/> Results          |
| Last Edited       | Condition category   | <input type="checkbox"/> Individual participant data |
| 24/05/2019        | Cancer               |  |

## Plain English summary of protocol

<http://www.cancerresearchuk.org/about-cancer/trials/a-study-looking-pet-ct-scans-diagnose-cancer-pancreas-pet-panc>

## Contact information

### Type(s)

Scientific

### Contact name

Mr Robert Hanson

### Contact details

University of Liverpool  
Cancer Research UK Liverpool Cancer Trials Unit  
200 London Road  
Liverpool  
United Kingdom  
L3 9TA

## Additional identifiers

### Protocol serial number

8166

## Study information

**Scientific Title**

The impact of combined modality positron emission tomography with computerised tomography scanning (PET/CT) in the diagnosis and management of pancreatic cancer

**Acronym**

PET-PANC

**Study objectives**

The diagnosis of pancreatic cancer has improved with the use of multidetector CT, EUS, ERCP and additional use of MRI. There are, however, up to 10-20% of patients in whom an accurate diagnosis is difficult. This proportion is increasing due in part to larger numbers of asymptomatic patients undergoing cross sectional imaging. Invasive methods of diagnosis such as EUS +/- FNA can add to the accuracy of multidetector CT but may require an in-patient stay and have a recognised complication rate (1-2%). Currently patients with chronic pancreatitis, autoimmune pancreatitis, cystic lesions, small tumours <2cm, a bulky or diffusely enlarged pancreas on CT, a dilated pancreatic duct and no mass on CT, small volume metastatic disease and suspected recurrent disease (with no mass on CT) following resection are the most challenging patients to diagnose. A major goal of accurate diagnosis and staging is to avoid major pancreatic resection in patients who will not benefit. The use of a functional imaging technique such as PET/CT may add to staging of pancreatic cancer by diagnosing small volume metastatic disease and differentiate between benign and malignant lesions. Earlier diagnosis of pancreatic cancer will lead to a better prognosis for patients and PET/CT may be able to identify small volume disease or cancer arising in patients with chronic pancreatitis. There have been a number of studies to address diagnostic accuracy of PET/CT and two have looked at the issue of changes in management due to PET/CT. The main drawbacks of previous PET/CT studies tend to be that these are single centre studies with small numbers of patients and difficulties in standardising PET/CT protocol in pancreatic cancer. This prospective multicentre study aims to address these issues in a large group of patients to identify whether there is a role for PET/CT in addition to standard diagnostic work up in pancreatic cancer.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

NRES Committee North West - GM East (Cheshire), 18/03/2010, ref: 10/H1017/8

**Study design**

Non-randomised; Interventional

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Topic: Cancer, Surgery; Subtopic: Upper Gastro-Intestinal Cancer, Surgery; Disease: Pancreas

**Interventions**

Combined modality positron emission tomography with computerised tomography scanning (PET/CT) in the diagnostic work up of patients with suspected pancreatic malignancy; Follow up length: 12 month(s).

## **Intervention Type**

Procedure/Surgery

## **Primary outcome(s)**

The incremental diagnostic accuracy and impact of PET/CT to standard diagnostic work up;

Timepoint(s): Outcome time point will be assessed after 12 Months of follow up

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

1. Determine cost effectiveness of addition of PET/CT in diagnosis, staging and management.;

Timepoint(s): After 12 months follow up

2. Evaluate addition of PET/CT in differentiating pancreatic malignancy from chronic pancreatitis; Timepoint(s): After 12 months follow up

3. Evaluate change in diagnosis, staging and intended patient management through the addition of PET/CT; Timepoint(s): After 12 months follow up

4. Report the incremental diagnostic value of PET/CT for particular types of pancreatic tumour; Timepoint(s): After 12 months follow up

5. To identify which groups of patients would most benefit from PET/CT; Timepoint(s): After 12 months follow up

## **Completion date**

26/04/2013

## **Eligibility**

### **Key inclusion criteria**

1. Patients with suspected pancreatic malignancy as defined by one or more of:

1.1. Focal lesion in the pancreas/bulky pancreas/dilated pancreatic duct (+/- metastases) detected on Multidetector CT scan (+/- MRI/EUS/USS)

1.2. Jaundice due to distal obstruction of the common bile duct or ampulla (not due to calculi) defined as serum bilirubin. 35 µmol/l

1.3. Serum CA19.9 value above 37KU/l

2. Able to attend for PET/CT scan

3. Able to undergo Multidetector CT scan

4. Able to attend for up to 12 months follow-up

5. Fully informed written consent given

6. Gender: Male & Female

7. Lower Age Limit 18 years

## **Participant type(s)**

Patient

## **Healthy volunteers allowed**

No

## **Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

589

**Key exclusion criteria**

1. Patients younger than 18 years
2. Pregnancy
3. Patients with poorly controlled diabetes

**Date of first enrolment**

06/01/2011

**Date of final enrolment**

26/04/2013

## Locations

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

University of Liverpool

Cancer Research UK Liverpool Cancer Trials Unit

200 London Road

Liverpool

United Kingdom

L3 9TA

## Sponsor information

**Organisation**

University of Liverpool

**ROR**

<https://ror.org/04xs57h96>

# Funder(s)

## Funder type

Government

## Funder Name

National Institute for Health Research

## Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

## Funding Body Type

Government organisation

## Funding Body Subtype

National government

## Location

United Kingdom

# Results and Publications

## 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? |
|---|-------------------------------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a>               | results                       | 01/02/2018   |            | Yes            | No              |
| <a href="#">Participant information sheet</a> | Participant information sheet | 11/11/2025   | 11/11/2025 | No             | Yes             |
| <a href="#">Plain English results</a>         |                               |              |            | No             | Yes             |