11C- metomidate positron emission tomography (PET) scanning for Conn's syndrome

| Submission date | Recruitment status No longer recruiting | Prospectively registered | |
|---------------------------------|--|--|--|
| 12/05/2010 | | ☐ Protocol | |
| Registration date 12/05/2010 | Completed Condition category | Statistical analysis plan | |
| | | [X] Results | |
| Last Edited | | [] Individual participant data | |
| 02/06/2015 | Nutritional, Metabolic, Endocrine | | |

Plain English Summary

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Timothy J. Burton

Contact details

Clinical Pharmacology Unit Hills Road Cambridge United Kingdom CB2 0QQ

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

6936

Study information

Scientific Title

Hypertension due to Conn's adenoma - the localisation of adrenal cortical adenomas by 11C-metomidate PET scanning following dexamethasone and fludrocortisone suppression

Study hypothesis

In order to ensure appropriate treatment, it is important to be able to identify Conn's adenoma reliably from other adrenal conditions. Current identification techniques, such as adrenal venous sampling, are time consuming, often invasive and probematic making treatment decisions difficult. It is proposed that non-invasive PET/CT scanning using 11C-metomidate as a radiomarker will identify people with Conn's adenoma as well as currently used invasive techniques.

More details can be found here: http://public.ukcrn.org.uk/Search/StudyDetail.aspx? StudyID=6936

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cambridgeshire 4 Research Ethics Board, 12/05/2008, ref: 08/H0305/20

Study design

Single-centre non-randomised treatment trial

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

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

Condition

Topic: Metabolic and Endocrine; Subtopic: Metabolic and Endocrine (all Subtopics); Disease: Metabolic & Endocrine (not diabetes)

Interventions

In addition to standard investigations for suspected Conn's adenoma, each participant will undergo a positron emission tomography (PET)/computed tomography (CT) scan with intravenous 11C-metomidate (500 MBq) as a radio-label. The first 6 participants will undergo 3

scans to evaluate which suppression protocol produces the clearest image:

- 1. Without any additional drug therapies
- 2. Oral 0.5 mg dexamethosone 6-hourly for 48 hours prior to scan
- 3. Oral 0.5 mg dexamethosone 6-hourly for 48 hours prior to scan with the addition of 400 μ g of fludrocortisone for 3 days prior to the scan

Intervention Type

Other

Phase

Phase IV

Primary outcome measure

The sensitivity of 11C-metamidate PET/CT scanning for detecting Conn's adenoma

Secondary outcome measures

- 1. The specificity of 11C-metomidate PET/CT scanning for detecting Conn's Syndrome
- 2. To determine the suppression protocol that leads to the best sensitivity of 11C-metomidate PET/CT scanning for detecting Conn's Syndrome

Overall study start date

17/04/2009

Overall study end date

30/04/2012

Eligibility

Participant inclusion criteria

- 1. Male or female
- 2. Aged 18 years or over
- 3. Suspected Conn's syndrome or suspected adrenal hyperplasia or healthy with non-functional adenoma

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

Planned sample size: 50

Participant exclusion criteria

- 1. Inability to give informed consent
- 2. Heart failure
- 3. Women of childbearing potential not using contraception
- 4. Pregnant or breast feeding women

Recruitment start date

17/04/2009

Recruitment end date

30/04/2012

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Addenbrooke's Hospital

Cambridge United Kingdom CB2 0QQ

Sponsor information

Organisation

Cambridge University Hospitals NHS Foundation Trust (UK)

Sponsor details

Addenbrooke's Hospital Box 277, Hills Road Cambridge England United Kingdom CB2 2QQ

Sponsor type

Hospital/treatment centre

Website

http://www.cuh.org.uk/research/research_index.html

ROR

https://ror.org/04v54gj93

Funder(s)

Funder type

Charity

Funder Name

British Heart Foundation (BHF) (UK)

Alternative Name(s)

the_bhf, The British Heart Foundation, BHF

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United Kingdom

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 01/01/2012 | | Yes | No |