# Bioimpedance as a tool for fluid management in peritoneal dialysis patients

| Submission date               | <b>Recruitment status</b> No longer recruiting     | Prospectively registered    |  |  |
|-------------------------------|--|-----------------------------|--|--|
| 29/11/2008                    |  | ☐ Protocol                  |  |  |
| Registration date             | Overall study status                               | Statistical analysis plan   |  |  |
| 18/12/2009                    | Completed  | [X] Results                 |  |  |
| <b>Last Edited</b> 11/01/2017 | Condition category Urological and Genital Diseases | Individual participant data |  |  |

### Plain English summary of protocol

Not provided at time of registration

# Contact information

### Type(s)

Scientific

#### Contact name

**Prof Simon Davies** 

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

NCT00801112

Secondary identifying numbers

# Study information

### Scientific Title

Developing bioimpedance as a tool for fluid management in peritoneal dialysis patients: a validation study

### **Study objectives**

Regular monitoring of bioimpedance (BIA) adds value to the management of fluid status in peritoneal dialysis (PD) patients.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

North Staffordshire Local Research Ethics Committee - submission pending as of 29/11/2008

### Study design

Multi-centre randomised controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Hospital

### Study type(s)

Other

### Participant information sheet

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

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

End stage renal disease on peritoneal dialysis

#### **Interventions**

Clinician to use whatever tools at their disposal to achieve dry weight in PD patients including restricted dietary salt and fluid intake, increased use of hypertonic PD solutions and modality change. BIA to track fluid status changes. BIA measurements will also be taken for the control group but the results will not be acted upon

BIA measurements for all patients will be taken at 3 months intervals. The total duration of the intervention is 1 year.

### Intervention Type

Other

#### Phase

Not Applicable

### Primary outcome measure

Extra-cellular fluid volume (ECFv) determined from BIA

### Secondary outcome measures

Outcomes will be measured at 6-month intervals:

- 1. Blood pressure control (clinic)
- 2. Residual urine volume:
- 2.1. Development of anuria (<200 ml/day)
- 2.2. Time to halving of urine volume at randomisation
- 3. Membrane function:
- 3.1. Glucose exposure
- 3.2. Solute transport
- 3.3. Ultrafiltration (UF) capacity
- 3.4. Free water transport (limited centres, own resources)
- 4. Cardiac function:
- 4.1. Brain natriuretic peptide (BNP) (all centres)
- 4.2. Echocardiography (ECHO) (limited centres, own resources)
- 5. Fluid status using gold standard methods (limited centres, own resources)

### Overall study start date

15/01/2009

### Completion date

15/11/2011

# **Eligibility**

#### Key inclusion criteria

- 1. All PD patients who are clinically stable
- 2. Age >16 years

### Participant type(s)

Patient

#### Age group

Adult

#### Sex

Both

### Target number of participants

100

### Key exclusion criteria

- 1. Patients planning discontinuation of PD within 6 months
- 2. Patients who are unable to give consent
- 3. Patients who have peritonitis the last 30 days prior to study enrollment
- 4. Patients who are pregnant

### Date of first enrolment

15/01/2009

### Date of final enrolment

15/11/2011

# Locations

### Countries of recruitment

England

Italy

Netherlands

Spain

Sweden

United Kingdom

Study participating centre University Hospital of North Staffordshire Stoke on Trent

United Kingdom ST4 7LN

# Sponsor information

### Organisation

University Hospital of North Staffordshire (UK)

# Sponsor details

Princes Road Hartshill Stoke on Trent United Kingdom ST4 7LN

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darren.clement@uhns.nhs.uk

### Sponsor type

Government

### Website

http://www.uhns.nhs.uk

# Funder(s)

### Funder type

Industry

### Funder Name

Baxter (UK) - Clinical Evidence Council

# **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 | 01/02/2016   |            | Yes            | No              |