# Development of novel magnetic resonance imaging (MRI) techniques for neurological applications

| Recruitment status      | Prospectively registered  |
|-------------------------|---|
| No longer recruiting    | ☐ Protocol  |
| Overall study status    | Statistical analysis plan   |
| Completed               | Results   |
| Condition category      | Individual participant data   |
| Nervous System Diseases | Record updated in last year   |
|                         | No longer recruiting  Overall study status  Completed  Condition category |

# Plain English summary of protocol

Not provided at time of registration

# Contact information

## Type(s)

Scientific

#### Contact name

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#### Contact details

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# Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

5580

# Study information

#### Scientific Title

Development of novel magnetic resonance imaging (MRI) techniques for neurological applications

#### Study objectives

Quantitative magnetic resonance imaging (MRI) techniques may provide additional information in the understanding of several neurological and psychiatric disorders. The development of some of these techniques is still incomplete and the interpretation of results in pathology is thus limited. Scanning healthy subjects and analysing their data will help in making the scanning techniques suitable for clinical applications. This is an ongoing process of continual testing and optimisation.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

MREC, ref: 05/Q0502/101

#### Study design

Single-centre non-randomised observational diagnosis and screening study

#### Primary study design

Observational

#### Secondary study design

Non randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Screening

## 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

Topic: Neurological; Subtopic: Neurological (all Subtopics); Disease: Nervous system disorders

#### **Interventions**

Routine MRI examinations only provide qualitative images of the brain. Quantitative MRI techniques, such as MR spectroscopy (MRS), magnetisation transfer imaging (MTI), diffusion imaging (DI), perfusion imaging (PI) and relaxometry can be particularly useful in the investigation of the pathological substrate of several diseases. Their usefulness is well documented in the literature; however, their application is somehow limited by technical problems.

#### Intervention Type

Other

#### **Phase**

Not Applicable

#### Primary outcome measure

- 1. Magnetic resonance imaging (MRI)
- 2. MR spectroscopy (MRS)
- 3. Magnetisation transfer imaging (MTI)
- 4. Diffusion imaging (DI)
- 5. Perfusion imaging (PI)

#### Secondary outcome measures

Not provided at time of registration

#### Overall study start date

01/01/2006

#### Completion date

31/07/2009

# Eligibility

## Key inclusion criteria

Not provided at time of registration

#### Participant type(s)

**Patient** 

#### Age group

**Not Specified** 

#### Sex

**Not Specified** 

## Target number of participants

Planned sample size: 150

#### Key exclusion criteria

Not provided at time of registration

#### Date of first enrolment

01/01/2006

#### Date of final enrolment

31/07/2009

# Locations

#### Countries of recruitment

England

**United Kingdom** 

Study participating centre The Institute of Neurology London United Kingdom WC1N 3BG

# Sponsor information

## Organisation

University College London (UCL) (UK)

#### Sponsor details

UCL Biomedicine Research & Development Unit Maple House 149 Tottenham Court Road London England United Kingdom W1T 7NF

#### Sponsor type

University/education

#### Website

http://www.ucl.ac.uk/

#### ROR

https://ror.org/02jx3x895

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Multiple Sclerosis Society (UK)

## Alternative Name(s)

Multiple Sclerosis Society of Great Britain and Northern Ireland, The MS Society, MS Society UK, Multiple Sclerosis Society UK, MS Society

## **Funding Body Type**

Private sector organisation

## Funding Body Subtype

Associations and societies (private and public)

#### 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