# An evaluation of potential therapies to inhibit cerebral emboli in dementia

Submission date	Recruitment status  No longer recruiting	<ul><li>Prospectively registered</li></ul>		
05/06/2007		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
06/07/2007	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
23/06/2020	Mental and Behavioural Disorders			

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Prof Charles McCollum

#### Contact details

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# Additional identifiers

EudraCT/CTIS number

2005-004283-23

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

Protocol version 1, EudraCT number: 2005-004283-23

# Study information

#### Scientific Title

An evaluation of potential therapies to inhibit cerebral emboli in dementia

#### **Study objectives**

The causes of common dementias such as Alzheimers Disease (AD) and Vascular Dementia (VAD), which affect 800,000 people in the UK, remain uncertain. We recently found that both AD and VAD are associated with small particles (emboli) in the circulation to the brain and that patients with these emboli suffer a more rapid progression of dementia. Prior to major clinical trials on whether therapy to inhibit emboli may prevent or treat dementia, we need to study possible therapies that may inhibit these emboli. We plan to compare two therapeutic approaches:

- 1. Platelet inhibition
- 2. An anti-inflammatory lipid therapy thought to stabilise arterial disease

Patients will be given no new treatments. The number of emboli in the cerebral circulation measured by non-invasive ultrasound, assessment of brain function and markers of inflammation associated with dementia will be measured before and after 1 month of the trial treatment. Any treatment or combination of treatments that inhibit cerebral emboli will then be investigated further in major clinical trials on the treatment of established dementia or the prevention of dementia in at risk elderly people.

#### Ethics approval required

Old ethics approval format

# Ethics approval(s)

South Manchester Research Ethics Committee, ref: 05/Q1403/214, Amendment number 1 (06/03/2006)

# Study design

Randomised controlled clinical trial

# Primary study design

Interventional

# Secondary study design

Randomised cross over trial

# Study setting(s)

Not specified

# Study type(s)

Treatment

#### Participant information sheet

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

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

Dementia, Alzheimer's disease and Vascular Dementia

#### **Interventions**

Randomised controlled clinical trial of atorvastatin/clopidogrel/no treatment over 1 month with crossover in 45 patients with Alzheimer's dementia (AD) and 45 with vascular dementia (VaD)

Patients who are already taking aspirin will continue aspirin therapy. No patient will have therapeutic medication withdrawn.

Those with Spontaneous Cerebral Emboli (SCE) will be randomised, stratified for type of dementia, into one of three counterbalanced treatment orders:

- 1. Clopidogrel; Atorvastatin; No treatment
- 2. Atorvastatin; No treatment; Clopidogrel
- 3. No treatment; Clopidogrel; Atorvastatin

Each treatment will last for 1 month, and there is a washout period of 1 week between each treatment. Transcranial Doppler (TCD) measurement of SCE over two separate 1-hour periods on different days in the same week will be repeated after 4 weeks on each therapy.

#### Intervention Type

Drug

#### Phase

Not Applicable

# Drug/device/biological/vaccine name(s)

Atorvastatin, clopidogrel

# Primary outcome measure

The number of SCE counted during two separate 1-hour periods of monitoring by TCD (at baseline and following each therapy)

# Secondary outcome measures

- 1. Any change in the inflammatory markers to Interleukin-6 or C-Reactive Protein as a result of 1 month therapy with the trial medications
- 2. Any change in the measures of cognitive function as a result of 1 month of therapy using the trial medications

# Overall study start date

01/07/2007

# Completion date

30/06/2009

# **Eligibility**

# Key inclusion criteria

1. Dementia: patients must fulfil DSM IV criteria for dementia (Diagnostic and Statistic Manual of Mental Disorders - fourth edition)

2. AD: patients must fulfil the National Institute of Neurological and Communicative Disorders and Stroke-Alzheimer's Disease and Related Disorders Association (NINCDS-ADRDA) criteria 3. VAD: patients must fulfil the National Institute for Neurological and Communicative Disorders and Stroke -Association Internationale pour la Recherche et l'Enseignement en Neurosciences (NINCDS-AIREN) criteria

#### Participant type(s)

Patient

#### Age group

Senior

#### Sex

Both

#### Target number of participants

90 (45 patients with AD and 45 with VaD)

#### Total final enrolment

33

### Key exclusion criteria

- 1. Patients with a Mini-Mental State Examination (MMSE) score of less than 10 and/or severe aphasia (as the study requires considerable co-operation)
- 2. Current anticoagulant treatment (may reduce spontaneous emboli)
- 3. Current clopidogrel treatment
- 4. Current statin treatment
- 5. Diagnosed as suffering from Atrial Fibrillation (AF)
- 6. Diagnosed with significant liver disease: a liver function test will be carried out if liver disease is clinically indicated in any participants
- 7. Diagnosed with active pathological bleeding such as peptic ulcer or intracranial haemorrhage
- 8. Any surgery scheduled during study involvement
- 9. Baseline coagulation parameters suggest unsuitability for clopidogrel/atorvastatin treatment

#### Date of first enrolment

01/07/2007

#### Date of final enrolment

30/06/2009

# Locations

#### Countries of recruitment

England

United Kingdom

#### Study participating centre

## University Hospital of South Manchester

Manchester United Kingdom M23 9LT

# Sponsor information

#### Organisation

University Hospital of South Manchester (UK)

#### Sponsor details

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## Sponsor type

Hospital/treatment centre

#### Website

http://www.researchdirectorate.org.uk/

#### **ROR**

https://ror.org/00he80998

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Alzheimer's Society (UK) (grant ref: 87 [30 January 2007])

#### Alternative Name(s)

alzheimerssoc

## **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

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results			23/06/2020	No	No