

# A neurophysiological study of near infrared spectroscopy haemoencephalography neurofeedback treatment in Alzheimer's disease and related cognitive impairments

<b>Submission date</b> 29/09/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 29/09/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 07/06/2017	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## 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

### Protocol serial number

N0151176859

## Study information

**Scientific Title**

A neurophysiological study of near infrared spectroscopy haemoencephalography neurofeedback treatment in Alzheimer's disease and related cognitive impairments

**Study objectives**

Can the memory and attention difficulties seen in Alzheimer's disease (AD) and its preclinical stages be treated with a biofeedback procedure that allows you to voluntarily increase blood flow and activation in specific parts of the brain?

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Essex 1 Research Committee, 20/12/2005, ref: 05/Q0301/38

**Study design**

Randomised controlled trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Nervous System Diseases: Alzheimer's disease

**Interventions**

Phase 1 - establish the neurofeedback protocols, monitor treatment effects and side effects and confirm the number of participants required for Phase 2.

Phase 2 - baseline and post treatment fMRI on five groups of patients AMCI treated with NIRS-HEG biofeedback, AMCI treated with placebo NIRS-HEG biofeedback, elderly controls treated with NIRS-HEG biofeedback, mild AD treated with NIRS-HEG and mild AD treated with placebo NIRS-HEG biofeedback.

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome(s)**

Change in cognition and/or behaviour following treatment.

**Key secondary outcome(s)**

Not provided at time of registration

**Completion date**

01/10/2008

# Eligibility

## Key inclusion criteria

Phase 1: 10 patients with AMCI and 10 with mild AD

Phase 2: 12-15 patients in each group depending upon the results of phase 1 of the study

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Senior

## Sex

All

## Key exclusion criteria

Not provided at time of registration

## Date of first enrolment

01/10/2005

## Date of final enrolment

01/10/2008

# Locations

## Countries of recruitment

United Kingdom

England

## Study participating centre

St Margaret's Hospital

Epping

United Kingdom

CM16 6TN

# Sponsor information

## Organisation

Record Provided by the NHSTCT Register - 2006 Update - Department of Health

# Funder(s)

## Funder type

Hospital/treatment centre

## Funder Name

North Essex Mental Health Partnership NHS Trust (UK)

## Funder Name

NHS R&D Support Funding

# 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="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes