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Efficacy and Safety of Memantine Hydrochloride, a low affinity antagonist to N-Methyl-D-Aspartate (NMDA) type receptors, in the prevention of cognitive decline and disease progression in older people with Down's syndrome, with and without dementia

| Submission date 28/02/2005 | Recruitment status No longer recruiting |
|-------------------------------------|--|
| Registration date 16/05/2005 | Overall study status Completed |
| Last Edited 23/02/2012 | Condition category Nervous System Diseases |

- [X] Prospectively registered
- [] Protocol
- [] Statistical analysis plan
- [X] Results
- [] Individual participant data

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s) Scientific

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Additional identifiers

EudraCT/CTIS number

2005-000381-39

IRAS number

ClinicalTrials.gov number NCT00240760

Secondary identifying numbers KCL/DS/MEM/1

Study information

Scientific Title

Acronym MEADOWS study

Study objectives

This is a prospective, fifty-two week, multicentre, randomised, double-blind, placebo-controlled parallel group clinical trial in people with Down's syndrome, age over 40 and people with Down's syndrome and/or dementia. The study is designed to evaluate the efficacy, safety and tolerability of memantine in this population.

Primary Aims:

1. Clinical: To determine the clinical efficacy of memantine versus placebo in preventing cognitive decline in people with Down's syndrome (DS). To compare the safety and tolerability of memantine versus placebo in people with Down's syndrome (DS).

2. Biochemical and pathological: To examine the ability of memantine to alter markers of disease progression in DS patients.

Secondary Aims:

1. Clinical: To determine whether memantine has, as compared with placebo, a significant positive impact on: the independent functioning level as measured by the carer-rated adaptive behavioural scale, (ABS) in adults with Down's syndrome suffering from dementia, quality of life in adults with Down's syndrome suffering from dementia.

2. Biochemical and pathological: To investigate putative markers of memantine's mechanism of action in peripheral samples from living patients with DS.

Ethics approval required

Old ethics approval format

Ethics approval(s) Not provided at time of registration

Study design Randomised controlled trial

Primary study design Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Not specified

Study type(s)

Not Specified

Participant information sheet

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

Health condition(s) or problem(s) studied

Cognitive decline and dementia in Down's syndrome

Interventions

Randomized, double blind, placebo controlled trial of Memantine versus placebo to assess the safety and efficacy of Memantine in preventing cognitive decline in adults with Down syndrome; effect of memantine on key progression disease markers of Alzheimer's disease in Down's syndrome.

Intervention Type

Drug

Phase Not Specified

Drug/device/biological/vaccine name(s)

memantine

Primary outcome measure

Comparing Memantine to placebo. Changes in performance from baseline on a neuropsychological battery of tests for people with DS focussing upon 3 cognitive areas: attention, memory and executive function (the DAME, battery).

Secondary outcome measures

Comparing Memantine to placebo:

1. Incidence of dementia (International Statistical Classification of Diseases and Related Health Problems - tenth revision [ICD-10] criteria)

2. Changes in performance from baseline on the Adaptive Behavioural Scale (ABS)

3. Changes in performance from baseline on quality of life (QOL-AD)

4. Changes in performance from baseline on Clinical Global Impression of Change

5. Changes in key biomarkers

Overall study start date

01/07/2005

Completion date

31/07/2006

Eligibility

Key inclusion criteria People with Down's syndrome over the age of 40 and/or dementia

Participant type(s) Patient

Age group Adult

Sex Not Specified

Target number of participants 180

Key exclusion criteria Not provided at time of registration

Date of first enrolment 01/07/2005

Date of final enrolment 31/07/2006

Locations

Countries of recruitment England

United Kingdom

Study participating centre King's College London London United Kingdom SE1 1UL

Sponsor information

Organisation King's College London (UK)

Sponsor details

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Sponsor type

Not defined

ROR https://ror.org/0220mzb33

Funder(s)

Funder type Industry

Funder Name Lundbeck

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 | 11/02/2012 | | Yes | No |