# A Pilot Randomised controlled trial of Methotrexate for Chronic Inflammatory Demyelinating Polyradiculoneuropathy

Submission date
05/08/2005

**Recruitment status** No longer recruiting

Registration date 01/09/2005

**Overall study status** Completed

Last EditedCondition category16/09/2009Nervous System Diseases

Plain English summary of protocol

Not provided at time of registration

# **Contact information**

**Type(s)** Scientific

**Contact name** Prof Richard Hughes

### Contact details

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# Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

Secondary identifying numbers RMC1 [X] Prospectively registered

Protocol

[] Statistical analysis plan

[] Individual participant data

# Study information

### Scientific Title

### Acronym

**RMC** Trial

### **Study objectives**

Null hypothesis - Because existing treatments are inadequate we will undertake a randomised controlled double blind parallel group study of methotrexate in chronic inflammatory demyelinating polyradiculoneuropathy (CIDP). Our null hypothesis is that addition of the weekly oral methotrexate to existing corticosteroid or intravenous immunoglobulin (IVIg) treatment does not reduce the dose of these agents needed to maintain participants in as good a clinical state as possible. The alternative hypothesis is that oral methotrexate does reduce the amount of these agents needed. The prognosis of CIDP is variable and currently unpredictable. Preliminary observational studies suggest that methotrexate may be moderately effective but is unlikely to be so dramatically effective as to make a placebo-controlled trial unnecessary.

### Ethics approval required

Old ethics approval format

**Ethics approval(s)** Not provided at time of registration

**Study design** Randomised placebo controlled trial

**Primary study design** Interventional

**Secondary study design** Randomised controlled trial

**Study setting(s)** Not specified

**Study type(s)** Treatment

### Participant information sheet

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

Inflammatory Demyelinating Polyradiculoneuropathy

### Interventions

Participants will be randomised to receive oral methotrexate or placebo tablets 7.5 mg weekly for 4 weeks, 10 mg weekly for 4 weeks and then 15 mg weekly for 32 weeks. Both groups will receive folic acid supplements 5 mg twice a week to reduce the risk of side effects from methotrexate. After 16 weeks corticosteroids or IVIg will be reduced, subject to satisfactory progress, at a rate of 20% of the baseline dose every 4 weeks. Such a reduction is done informally in practice by most experts in any case so that the reduction in corticosteroids or IVIg is not a big departure from usual practice. We are doing it in this trial because patients on corticosteroids or IVIg in optimal doses may not experience much improvement in impairment or disability and yet would benefit from reduction or withdrawal of corticosteroids or IVIg. Corticosteroids have well known side effects including obesity, hypertension, diabetes and osteoporosis. IVIg commonly causes headache and flu-like symptoms and requires attendance at hospital for several hours for intravenous infusions. It also has rare serious side effects and is expensive. Reduction in the dose of either treatment would reduce the side effects and costs.

### Intervention Type

Drug

Phase Not Specified

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

Methotrexate

### Primary outcome measure

Percentage change in mean weekly dose of corticosteroid or IVIg during weeks 3740 compared with weeks 14.

### Secondary outcome measures

1. Overall, and average rate of, change of a 12point overall neuropathy disability score at grade 16 and 40 weeks compared with baseline

2. Overall, and average rate of, change in the Amsterdam Linear Disability Scale after 16 and 40 weeks

3. Overall, and average rate of, change in MRC sum score, expanded to include first dorsal interosseus and extensor hallucis longus, after 16 and 40 weeks

4. Serious adverse events (defined as those which are fatal, life-threatening, or require or prolong hospital admission) which are possibly or probably related to treatment

### Overall study start date

01/11/2005

Completion date 31/10/2007

# Eligibility

### Key inclusion criteria

1. Diagnosis of CIDP by a consultant neurologist with a special interest in peripheral neuropathy 2. Chronically progressive, stepwise, or recurrent symmetric proximal and distal weakness with

or without sensory dysfunction of all extremities, developing over at least 2 months

3. Absent or reduced tendon reflexes in all extremities

4. Ongoing treatment with at least one of IVIg (equivalent to at least 0.4 g/kg every 4 weeks) or corticosteroid (equivalent to at least prednisolone 5 mg daily). The dose must have been stable (within 25%) for at least 12 weeks.

5. Duration not less than 6 months

6. At least moderate disability and weakness in arms or legs according to defined criteria at baseline OR following reduction of steroid or IVIg dose at some time during the past year 7. Fulfillment of one of two sets of defined neurophysiological criteria at baseline or within the past 3 years

### Participant type(s)

Patient

### Age group

Adult

**Sex** Both

Target number of participants

62

### Key exclusion criteria

1. Age <18 years

2. Breast-feeding, pregnancy, planned pregnancy or unwillingness to practice contraception 3. Severe concurrent medical conditions which would prevent treatment or assessment, including significant haematological, renal, liver function or chest radiograph abnormalities 4. Alternative cause of peripheral neuropathy, such as drug or toxin, hereditary neuropathy or concomitant diseases such as human immunodeficiency virus (HIV) infection, Lyme disease, chronic active hepatitis, systemic lupus erythematosus, IgM paraprotein with anti-MAG antibodies, vasculitis, hematological and non-hematological malignancies. Diabetes mellitus will not be an exclusion criterion.

5. Presence of sphincter disturbance

6. Multifocal motor neuropathy (fulfilling defined criteria)

7. Atypical CIDP with pure sensory, persistent unifocal impairment or significant central nervous system (CNS) involvement

8. Immunomodulatory treatment other than IVIg or corticosteroids during the previous 12 weeks

### Date of first enrolment

01/11/2005

Date of final enrolment 31/10/2007

## Locations

**Countries of recruitment** England

United Kingdom

**Study participating centre Department of Clinical Neuroscience** London United Kingdom SE1 1UL

### Sponsor information

### Organisation

King's College London and Guy's and St Thomas' NHS Foundation Trust (Co-Sponsors) (UK)

### Sponsor details

Guy's Campus St Thomas Street London United Kingdom SE19RT

### Sponsor type

Not defined

ROR https://ror.org/00j161312

### Funder(s)

**Funder type** University/education

Funder Name King's College London (UK)

## **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?
<u>Results article</u>	results	01/02/2009		Yes	No