

# Amiloride Clinical Trial in Optic Neuritis

<b>Submission date</b> 03/05/2013	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 03/05/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 06/01/2017	<b>Condition category</b> Eye Diseases	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Matthew Craner

### Contact details

Dept of Clinical Neurology

Level 6

West wing

Headley Way

Headington

Oxford

United Kingdom

OX3 9DU

+44 1865 222351

matthew.craner@ndcn.ox.ac.uk

## Additional identifiers

### EudraCT/CTIS number

2012-004980-39

### IRAS number

### ClinicalTrials.gov number

NCT01802489

### Secondary identifying numbers

## Study information

### Scientific Title

Amiloride Clinical Trial in Optic Neuritis

### Acronym

ACTION

### Study objectives

The aim of this study is to investigate the neuroprotective efficacy of amiloride in the treatment of multiple sclerosis (MS).

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

21/01/2013, ref: 13/SC/0022

### Study design

Randomised interventional treatment trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Hospital

### Study type(s)

Treatment

### Participant information sheet

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

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

### Interventions

Amiloride, 10mg per day active group with a double blind randomised placebo group.  
Study Entry : Single Randomisation only

### Intervention Type

Drug

### Phase

Phase II

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

Amiloride

**Primary outcome measure**

Scanning Laser Polarimetry determined retinal fibre layer thickness measured at baseline, 6 and 12 months.

**Secondary outcome measures**

1. Colour Vision measured at baseline, and 6 months
2. Non-conventional surrogate marker of white matter and grey matter injury and connectivity by 3T MRI measured at baseline, 6 and 12 months
3. Optical Coherence Tomography - determined difference in retinal nerve fibre layer thickness measured at baseline, 6 and 12 months
4. Quality of Life Questionnaires measured at baseline, 6 and 12 months
5. Visual Electrophysiology measured at baseline and 6 months
6. Visual Function measured at baseline, 6 and 12 months

**Overall study start date**

19/03/2013

**Completion date**

31/03/2015

**Eligibility****Key inclusion criteria**

1. Patients with a first episode of unilateral ON
2. Participants with an existing diagnosis of relapsing remitting MS and new onset of ON are eligible if they have not had a previous episode of ON
3. A duration of disease of  $\leq 10$  years
4. An EDSS (Expanded Disability Status Scale) of  $\leq 3$
5. No immune modulating treatment other than  $\beta$ -Interferon or Glatiramer Acetate at time of recruitment
6. Able to be randomised within 28 days of onset of visual symptoms
7. Visual acuity of  $\leq 6/9$
8. Participant is willing and able to give informed consent for participation in the study and able to comply with study visits
9. Male or Female, aged between 18-55 years.
10. Stable dose of current regular medication for at least 4 weeks prior to study entry
11. Female participants of child bearing potential must be willing to use two effective methods of contraception (barrier methods, hormonal methods or abstinence) during the initial 5 month treatment period of the study and for one month thereafter.
12. Participant has clinically acceptable urea and electrolytes and estimated glomerular filtration rate (eGFR)  $>60$
13. Able and willing to comply with all study requirements.
14. Willing to allow his or her General Practitioner to be notified of participation in the study.

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

UK Sample Size: 46; Description: 23 in the active group and 23 in the placebo comparator group

**Key exclusion criteria**

1. Previous diagnosis of ON
2. Any concomitant immune suppressing or immune modulating therapy excluding  $\beta$ -interferon or glatiramer acetate.
3. Female participants who are pregnant, lactating or planning pregnancy during the course of the study.
4. Concomitant potassium supplements, angiotensin converting enzyme inhibitors, angiotensin II antagonists, cyclosporine, tacrolimus or lithium
5. Any contra-indication to MRI severe claustrophobia, metal implant, pacemaker, etc.
6. Participant who is terminally ill or is inappropriate for placebo medication
7. Impaired renal function : eGFR  $\leq 60$ , anuria, acute or chronic renal insufficiency and evidence of diabetic nephropathy
8. Raised serum potassium ( $K^+$   $> 5.5$ mmol/l)
9. Diabetes
10. Significant concomitant eye disease in either eye that may affect diseased or fellow eye results.
11. Any other significant disease or disorder which, in the opinion of the investigator, may either put the participants at risk because of participation in the study, or may influence the result of the study, or the participants ability to participate in the study.
12. Participants who have participated in another research study involving an investigational product in the past 12 weeks.

**Date of first enrolment**

19/03/2013

**Date of final enrolment**

31/03/2015

**Locations****Countries of recruitment**

England

United Kingdom

**Study participating centre**

**Dept of Clinical Neurology**  
Oxford  
United Kingdom  
OX3 9DU

## **Sponsor information**

### **Organisation**

University of Oxford (UK)

### **Sponsor details**

University Offices  
Wellington Square  
Oxford  
England  
United Kingdom  
OX1 2JD

### **Sponsor type**

University/education

### **Website**

<http://www.ox.ac.uk/>

### **ROR**

<https://ror.org/052gg0110>

## **Funder(s)**

### **Funder type**

Charity

### **Funder Name**

Multiple Sclerosis Society (of Great Britain & Northern Ireland); Grant Codes: 952/11

### **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**

Planned publication in a peer reviewed journal.

**Intention to publish date**

31/12/2015

**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="#">Results article</a>	results	09/11/2015		Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No