

Cannabinoids in progressive inflammatory brain disease (CUPID)

Submission date 03/05/2005	Recruitment status No longer recruiting	☒ Prospectively registered ☐ Protocol
Registration date 21/06/2005	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 13/04/2016	Condition category Nervous System Diseases	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Multiple sclerosis is the commonest cause of neurological disability in young adults, affecting around 100,000 people in the UK. Healthy nerves are coated in a fatty casing (myelin sheath) which helps messages to travel quickly and smoothly along nerves. When a person is suffering from MS, the immune system, which normally helps to protect against infection, attacks the myelin sheath, stripping it from the nerves (demyelination). This demyelination means that messages cannot travel along the nerves effectively causing a range of disabilities, including mobility problems, problems with thinking, learning and planning (cognitive function), vision, and speech and swallowing. Around 15% of people diagnosed with MS have the primary-progressive type (PPMS). This involves the progressive worsening of disability from the onset of symptoms, without any periods of recovery. Secondary-progressive MS (SPMS), also known as late stage MS, involves the progressive worsening of disability after a relapsing-remitting phase (characterised by periods where the symptoms are very mild or disappear completely). Currently, there are limited treatment options for the progressive types of MS. It has been reported that the active ingredient of cannabis (tetrahydrocannabinol, THC) could be helpful in treating MS symptoms. The aim of this study is to find out whether THC can help to slow or stop the progression of disability in patients with progressive MS.

Who can participate?

Adults with primary or secondary progressive MS.

What does the study involve?

Participants are randomly allocated to one of two groups. Those in the first group receive THC to take by mouth every day for six months. The dosage is calculated based on body weight, but can be a maximum of 28mg/kg. Those in the second group receive a placebo (dummy pill) to take every day for six months. Participants in both groups are followed up every six months for up to 36 or 42 months. At the follow up visits, the progression (worsening) of the disease is measured using physical evaluations and a walking test, to find out if it has had an effect on disability.

What are the possible benefits and risks of participating?

Not provided at time of registration

Where is the study run from?
Peninsula Medical School (UK)

When is the study starting and how long is it expected to run for?
July 2005 to June 2011

Who is funding the study?
Medical Research Council (UK)

Who is the main contact?
Prof John Zajicek
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Contact information

Type(s)
Scientific

Contact name
Prof John Zajicek

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Additional identifiers

Protocol serial number
G0500290

Study information

Scientific Title
The Cannabinoid Use in Progressive Inflammatory brain Disease (CUPID) trial

Acronym
CUPID

Study objectives
To test whether cannabinoids show any neuroprotective action in progressive multiple sclerosis (MS).

Ethics approval required

Old ethics approval format

Ethics approval(s)

South West Devon Research Ethics Committee (now Cornwall and Plymouth Research Ethics Committee), 28/02/2006, ref: 06/Q2103/1

Primary study design

Interventional

Study design

Randomised controlled trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Multiple sclerosis

Interventions

Participants are randomly allocated to one of two groups in a 2:1 ratio (intervention:control)

Intervention group: Participants take a maximum of 28mg/day oral tetrahydrocannabinol (THC) for six months.

Control group: Participants take a placebo daily for six months.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Tetrahydrocannabinol

Primary outcome(s)

Added 17/07/09:

1. Physician-based EDSS: time to EDSS progression of at least one point from a baseline EDSS of 4.0, 4.5 or 5.0 or at least 0.5 points from a baseline EDSS ≥ 5.5 . Once identified, deterioration must be confirmed at the next scheduled six monthly visit.

2. Change in Multiple Sclerosis Impact Scale-29 version 2 (MSIS-29v2) 20-point physical subscale (MSIS-29phys) score

Key secondary outcome(s)

Not provided at time of registration

Completion date

30/06/2011

Eligibility

Key inclusion criteria

1. Primary/secondary progressive multiple sclerosis
2. Worsening disability
3. Age 18-65
4. EDSS score 4 to 6.5

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

All

Key exclusion criteria

1. Immunodulation or immunosuppressive therapy
2. Steroids or cannabinoids recently
3. Psychotic illness
4. Cognitive impairment
5. Pregnancy

Date of first enrolment

01/07/2005

Date of final enrolment

30/06/2011

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

Peninsula Medical School
Plymouth
United Kingdom
PL6 8BX

Sponsor information

Organisation

Plymouth Hospitals NHS Trust (UK)

ROR

<https://ror.org/05x3jck08>

Funder(s)

Funder type

Research council

Funder Name

Medical Research Council (MRC) (UK) - G0500290

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?
Results article	results	01/09/2013		Yes	No
Results article	results	01/02/2015		Yes	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes