

# Cannabinoids in progressive inflammatory brain disease (CUPID)

<b>Submission date</b> 03/05/2005	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 21/06/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 13/04/2016	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> 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  
John.zajicek@pcmd.ac.uk

## 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

## **Study design**

Randomised controlled trial

## **Primary study design**

Interventional

## **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  $\geq$ 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?
<a href="#">Results article</a>	results	01/09/2013		Yes	No
<a href="#">Results article</a>	results	01/02/2015		Yes	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes