The Cannabinoid Use in Progressive Inflammatory brain Disease (CUPID) trial: a randomised double-blind placebo-controlled parallel-group multicentre trial and economic evaluation of cannabinoids to slow progression in multiple sclerosis

Susan Ball, 1* Jane Vickery, 2 Jeremy Hobart, 2 Dave Wright, 1 Colin Green, 3 James Shearer, 3,4 Andrew Nunn, 5 Mayam Gomez Cano, 1 David MacManus, 6 David Miller, 6 Shahrukh Mallik 6 and John Zajicek 2

- ¹Centre for Biostatistics, Bioinformatics and Biomarkers, Plymouth University Peninsula Schools of Medicine and Dentistry, Plymouth, UK
- ²Peninsula Clinical Trials Unit, Plymouth University Peninsula Schools of Medicine and Dentistry, Plymouth, UK
- ³Health Economics Group, University of Exeter Medical School, Exeter, UK
- ⁴Centre for the Economics of Mental and Physical Health, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK
- ⁵Medical Research Council Clinical Trials Unit, London, UK
- ⁶University College London's Institute of Neurology, London, UK

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^{*}Corresponding author

Plain English summary

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Plain English summary

The Cannabinoid Use in Progressive Inflammatory brain Disease study investigated the effectiveness and safety of the cannabinoid tetrahydrocannabinol (THC) in slowing progressive multiple sclerosis (MS) over 3 years.

Four hundred and ninety-three people with primary or secondary progressive MS were recruited to the study from 27 UK sites between May 2006 and July 2008. A requirement of study entry was that walking was affected by MS but that participants could still walk, with aids if necessary. Participants were randomly assigned to receive oral THC (329 people) or placebo (164 people) capsules in a 'double-blind' manner so that neither participants nor research staff were aware of treatment allocations. Dose was titrated on an individual basis according to body weight and side effects, before being gradually reduced to zero after 3 years.

The two primary measures of treatment effectiveness were scores on the Expanded Disability Status Scale (EDSS) and MS Impact Scale-29 version 2 (MSIS-29v2). The EDSS was assessed 6-monthly, with progression confirmed if sustained at two consecutive visits. Secondary measures included MS Functional Composite and various self-completion questionnaires. Participants at 13 sites underwent yearly magnetic resonance imaging brain scans.

The study found no evidence that THC has an effect on MS progression. EDSS and MSIS-29v2 scores showed little change over the study period and no difference was found between the THC and placebo groups. There was some evidence that THC might have a beneficial effect in participants at the lower end of the disability scale, but numbers were small and further studies will be needed. The study raised no major issues regarding safety of THC.

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