

Psilocybin for depression

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| Submission date 30/03/2015 | Recruitment status No longer recruiting | <input type="checkbox"/> Prospectively registered |
| Registration date 07/07/2015 | Overall study status Completed | <input type="checkbox"/> Protocol |
| Last Edited 12/01/2021 | Condition category Mental and Behavioural Disorders | <input type="checkbox"/> Statistical analysis plan |
| | | <input checked="" type="checkbox"/> Results |
| | | <input type="checkbox"/> Individual participant data |

Plain English summary of protocol

Background and study aims

Depression affects people in different ways and can cause a wide variety of symptoms. They range from lasting feelings of sadness and hopelessness (low mood), to feeling very tearful at unexpected moments (emotional lability). Many people with depression also have symptoms of anxiety. Treatment for depression involves either medication or talking treatments, but these do not work for everybody because some people have depression that is treatment-resistant. Psilocybin is a hallucinogenic drug that comes from what is often called 'magic mushrooms'. The drug can put some people in a euphoric mood for a number of hours and reduce anxiety. Psilocybin has been given to healthy volunteers and to patients suffering from Obsessive Compulsive Disorder (OCD) and anxiety before with positive results, but it has not been tested in depression. The aim of this initial study is to investigate how this drug works on patients with treatment-resistant depression. We also want to find out which dose gives predictable results in improving peoples' mood.

Who can participate?

Patients referred from local London psychiatric teams.

What does the study involve?

The potential psychological effects of psilocybin are fully described to all patients before they sign up for the study. Participants are made to feel very prepared for their experience before taking the drug and are taught ways to relax to reduce anxiety and promote a positive drug experience. Patients receive a low dose in the first session so that they have a first impression of the drug experience before moving on to a higher dose. People can respond to the drug very differently from one another and some may not want to take the higher dose. A positive environment is created during the study so that participants feel relaxed and don't feel worried. The study team has a psychiatrist and psychotherapist and all dosing sessions are supervised by a medical doctor. Follow-up meetings take place after each dosing session and any bad feelings experienced by participants will be managed by the study psychiatrist, GPs and/or community mental health professionals.

What are the possible benefits and risks of participating?

Bad side effects are rare when psilocybin is taken by healthy volunteers but they may be more likely in vulnerable patients such as those with depression. Risks include anxiety, 'bad trips' (dysphoria) and rarer psychotic responses. We will minimise risks by excluding patients

experiencing psychotic symptoms at the time of the study, or those who have a personal/family history of psychosis. The occurrence of negative feelings experienced by people taking psilocybin depends on the dose amount so the maximum dose we give is considered moderate in healthy volunteers.

Where is the study run from?

Imperial Clinical Research Facility, Hammersmith Hospital (UK)

When is the study starting and how long is it expected to run for?

April 2015 to December 2015

Who is funding the study?

Medical Research Council (UK)

Who is the main contact?

Dr R Carhart-Harris (UK)

Contact information

Type(s)

Scientific

Contact name

Dr Robin Carhart-Harris

Contact details

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W10 5NA

Additional identifiers

Clinical Trials Information System (CTIS)

2013-003196-35

Protocol serial number

Version 7

Study information

Scientific Title

Assessing the subjective intensity of oral PSILOcybin in patients with treatment-resistant DEPression: a PILOT study

Acronym

PSILODEP-PILOT

Study objectives

Psilocybin will reduce symptoms of depression in patients diagnosed with treatment-resistant depression.

Ethics approval required

Old ethics approval format

Ethics approval(s)

NRES London West London, 03/09/2014, ref: 13/LO/1224

Study design

Open label design

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Major depression

Interventions

Two doses of psilocybin 10mg and 25mg per so, separated by one week

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Psilocybin

Primary outcome(s)

Quick Inventory of Depressive Symptoms (QIDS) questionnaire at start of trial, then one day and one week post-psilocybin. QIDS is a self-report measure of depressive symptoms

Key secondary outcome(s)

1. Beck Depression Inventory (BDI) questionnaire
2. Hamilton Depression Rating Scale (HAM-D) questionnaire
3. Montgomery-Åsberg Depression Rating Scale (MADRS) questionnaire

Completion date

01/12/2015

Eligibility

Key inclusion criteria

1. Major depression of a moderate to severe degree (17+ on the 21-item HAM-D)
2. No improvement despite two courses of antidepressant treatment for adequate duration (6 weeks minimum) within current episode
3. No magnetic resonance imaging (MRI) contraindications

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Current or previously diagnosed psychotic disorder
2. Immediate family member with a diagnosed psychotic disorder
3. Medically significant condition rendering unsuitability for the study (e.g., diabetes, epilepsy, severe cardiovascular disease, hepatic or renal failure etc)
4. History of suicide attempts
5. History of mania
6. Blood or needle phobia
7. Positive pregnancy test at screening or during the study
8. Current drug or alcohol dependence
9. Allergy to gelatine or lactose
10. Lack of appropriate use of contraception
11. Breastfeeding

Date of first enrolment

21/04/2015

Date of final enrolment

01/12/2015

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

Imperial Clinical Research Facility

Hammersmith Hospital

London

United Kingdom
W10 5NA

Sponsor information

Organisation

Imperial College London

ROR

<https://ror.org/041kmwe10>

Funder(s)

Funder type

Research council

Funder Name

Medical Research Council

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Stored in repository

Study outputs

Output type

Details
results

Date created Date added Peer reviewed? Patient-facing?

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|---|-------------------------------|------------|----------------|-----|
| Results article | | 01/07/2016 | Yes | No |
| Results article | results | 17/01/2018 | Yes | No |
| Results article | results | 01/11/2018 | Yes | No |
| Results article | results | 01/02/2020 | 12/01/2021 Yes | No |
| HRA research summary | | | 28/06/2023 No | No |
| Participant information sheet | Participant information sheet | 11/11/2025 | 11/11/2025 No | Yes |