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Phase I psilocybin safety trial

Submission date
10/04/2023

Recruitment status
No longer recruiting

Registration date
12/04/2023

Overall study status
Completed

Last Edited
12/04/2023

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[X] Individual participant data
[_] Record updated in last year

Plain English summary of protocol

Background and study aims
Psilocybin is a psychedelic drug and the active ingredient in “magic mushrooms". Psilocybin is currently being studied in clinical trials and has no current medical use in Canada. While a number of studies have shown that a dose of psilocybin may improve depression and anxiety in people with cancer, as well as improve the overall mental health of people suffering from post-traumatic stress disorder (PTSD), substance use disorders, and work-related stress, more baseline physiological data (i.e. heart rate, blood pressure, body temperature) is required from healthy individuals after consuming psilocybin to demonstrate it can be safely administered in a clinical setting. This study aims to assess physiological data and adverse events to help develop clinical screening protocols for psilocybin-assisted therapy. This study also aims to further assess the subjective effects of psilocybin at a dose of 25 mg.

Who can participate?
Healthy adults (aged 18-65 years) who are licensed healthcare professionals and who have taken a psychedelic-assisted therapy training course

What does the study involve?
Over the course of the study, participants will engage in symptom assessments (vital signs including heart rate, blood pressure, temperature, and ECG will be monitored). Participants will also be required to complete self-assessments before and after treatment. The first visit to the ATMA clinic (Visit 1) will consist of a preparatory session where vital signs will be assessed and the nature of the experimental session (Visit 2) will be discussed. The preparatory session will last about 1 hour. The experimental session where psilocybin is ingested (Visit 2) will last 4-8 hours, in which 25 mg of psilocybin extract will be ingested. Trained facilitators will be available as resources/support for the duration of the psilocybin dosing session and vital signs will be monitored. 2 and 7 days after the experimental session, participants will be contacted by a study coordinator to 'check in on their well-being, as well as obtain the results of their self-assessments. Eight weeks after the experimental session, participants will be required to have a follow-up appointment with their physician for a final assessment of vital signs, and follow-up with the Primary Investigator for a final adverse event assessment, as well as to provide their final self-assessments. After this final appointment, involvement in the study will end.

What are the possible benefits and risks of participating?
As there may be side effects after consuming psilocybin, the study staff will monitor participants

closely. Side effects may be mild or very serious. Many side effects from psilocybin go away soon after the psilocybin is eliminated from the body. Though uncommon, in some cases, side effects can be serious, long-lasting, or may never go away.
Medical risks and side effects related to taking psilocybin include those which are:
Likely (i.e. 1% - 50%)
1. Temporary elevations in heart rate and/or blood pressure during the psilocybin session
2. Temporary anxiety or confusion during the psilocybin session
3. Headache soon after the psilocybin session
4. Nausea and/or vomiting during the psilocybin session
Less likely (i.e. 1% - 5%):
1. Temporary slower movements or difficulty coordinating movements during the psilocybin session
2. Temporary fatigue or difficulty sleeping the night after the psilocybin session
Rare but serious (i.e. less than 1%):
1. Elevated blood pressure during the psilocybin session that requires medications to bring back to normal
2. Elevated body temperature, muscle stiffness, and confusion during the psilocybin
3. Anxiety, mania, or psychotic symptoms (such as hallucinations or paranoia) soon after the psilocybin session that lasts for over 24 hours after the drug wears off
4. Anxiety, mania, or psychotic symptoms during or after the psilocybin session that are severe and require medications to maintain the participant's safety and/or the safety of study staff.
It is important to note that psilocybin may have side effects that no one knows about yet. For example, the effects of psilocybin on symptoms of Parkinson’s disease are not known.
Participants who are pregnant are not permitted to enroll in the study. Additionally, participants are required to use contraception during their involvement in the trial. They will be asked to complete a pregnancy test (if of child-bearing potential) at enrollment and the day of the experimental session, as well as use adequate birth control from the time of enrollment through 10 days after the experimental session. Adequate forms of birth control include double barrier methods, such as a male condom with a diaphragm or a male condom with a cervical cap.
If possible, highly effective forms of birth control may be used, including oral contraceptives, patch, vaginal ring, injectables, implants, and intrauterine device.
Although participation in this study may be of no benefit to the participants, it is hoped that the data collected will be of future benefit to others.

Where is the study run from?
The Newly Institute (Canada)

When is the study starting and how long is it expected to run for?
August 2021 to August 2022

Who is funding the study?
ATMA Journey Centers Inc. (Canada)

Who is the main contact?
1. Michael D. Blough,
2. Jennifer Bennett, jennifer@atmajourney.com

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
ATMA0001

Study information

Scientific Title
A Phase I study to assess the safety of psilocybin when administered to healthy participants enrolled in a psychedelic-assisted therapy training program

Study objectives
Based on published clinical studies it is hypothesized that psilocybin will be well tolerated in healthy individuals enrolled in a psychedelic-assisted therapy training program

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 25/03/2022, Health Research Ethics Board of Alberta, Clinical Trials Committee (1500, 10104 - 103 Avenue NW Edmonton, Alberta, T5J 0H8, Canada; +1 (0)780 423 5727; clinicaltrials@hreba.ca), ref: HREBA.CTC-22-0008

Primary study design
Interventional

Study design
Phase I open-label single-arm psilocybin safety trial

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Documenting psilocybin safety in healthy participants

Interventions
25 mg of oral psilocybin, with a duration of effects lasting 4-6 hours.

Intervention Type
Drug

Phase
Phase I

Drug/device/biological/vaccine name(s)
Psilocybin, PEX010

Primary outcome(s)
1. Safety was assessed via blood pressure, heart rate, temperature, and ECG measurements at baseline, during the psilocybin session at 1-h intervals or as deemed necessary by the Primary Investigator, and at 8 weeks following the psilocybin session
2. Adverse events recorded at 2 days, 7 days, and 8 weeks following the psilocybin session

Key secondary outcome(s)
1. Mood evaluated via the Quick Inventory of Depressive Symptomatology Self-Report 16-Item Questionnaire (QIDS-SR16) at baseline, 2 days, 7 days, and 8 weeks following the psilocybin session
2. Mystical experience evaluated via the Revised Mystical Experience Questionnaire 30-Item (MEQ-30) at 2 days and 7 days after the psilocybin session

Completion date
31/10/2022

Eligibility

Key inclusion criteria
1. 18 - 65 years old and healthy as determined by a physician
2. Must be a practicing mental healthcare provider with professional accreditation including but not limited to a psychiatrist, psychologist, registered psychiatric nurse, social worker, physician, licensed practical nurse, counsellor, and therapist
3. Signed the Research Informed Consent Form
4. Are learning to conduct psilocybin-assisted psychotherapy or psilocybin research
5. Are willing to commit to medication dosing (including swallowing pills), study session attendance, and evaluation instruments
6. Agree that, for approximately 1 week preceding the Experimental Session will refrain from:
6.1. Taking any herbal or dietary supplement (except with prior approval of the research team)
6.2. Taking any non-prescription medications (with the exception of non-steroidal anti-inflammatory drugs or acetaminophen) unless with prior approval of the research team
6.3. Taking any prescription medications (with the exception of prescribed contraception, thyroid hormones, or other medications approved by the research team)
7. Agree to take nothing by mouth except alcohol-free liquids and approved medications after 12:00 A.M. (midnight) the evening before the Experimental Session
8. Agree not to use caffeine or nicotine for 2 hours before and 6 hours after initial drug administration
9. Agree to not operate a vehicle for at least 24 hours after initial drug administration. Participants must have transportation available after the Experimental Session and through the following day, for traveling back for the Integrative Session.
10. Are willing to be contacted via telephone for all necessary telephone contacts

11. If of childbearing potential, must have a negative pregnancy test at study entry and prior to the Experiential Session and must agree to use adequate birth control from the time of enrollment through 10 days after the Experimental Session. Adequate forms of birth control include double barrier methods, such as:
11.1. Male condom with diaphragm
11.2. Male condom with cervical cap
If possible, highly effective forms of birth control may be used, including:
11.3. Oral contraceptives
11.4. Patch
11.5. Vaginal ring
11.6. Injectables
11.7. Implants
12. Must provide a contact (relative, spouse, close friend, or other caregiver) who is willing and able to be reached by the investigator in the event of an emergency or if the participant is unreachable
13. Must agree to inform the investigator within 48 hours if any medical conditions occur or medical procedures are planned
14. Are proficient in speaking and reading the predominately used or recognized language of the study site
15. Agree to not participate in any other interventional clinical trials for the duration of this study
16. Participants must be enrolled in the ATMA 8-week psychedelic-assisted therapy training program
17. Have approval from family physician before enrollment to ensure they are physically and psychologically fit to proceed in the trial
18. Participants must agree to be delivered to the care of a responsible individual who can observe the participant for the remainder of the 24 hours post-dose administration

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Total final enrolment
14

Key exclusion criteria
1. Presence or history of active psychotic symptoms or diagnosis of bipolar disorder or first- or second-degree relative with a history of same
2. Are on any psychotropic medications including SSRIs, SNRIs, or lithium
3. Diagnosis of dementia/delirium, high risk for coronary artery disease, uncontrolled cardiopulmonary disease/ cardiovascular disease/hypertension, aneurysm, history of

intracerebral hemorrhage, hepatic cirrhosis, hepatorenal disease
4. Deemed not suitable for the treatment program by the qualified investigator
5. Are not able to give adequate informed consent
6. Are pregnant, nursing, or are of childbearing potential and not willing to practice an effective means of birth control
7. Present with suicide risk, as determined through clinical interview and responses to C-SSRS will be excluded
8. Have uncontrolled hypertension using the standard criteria of the American Heart Association (values of 140/90 mmHg or higher assessed on three separate occasions). Have a history of ventricular arrhythmia at any time, other than occasional premature ventricular contractions (PVCs) in the absence of ischemic heart disease.
9. Have Wolff-Parkinson-White syndrome or any other accessory pathway that has not been successfully eliminated by ablation
10. Have previous experience with psilocybin demonstrating it is not well tolerated, or otherwise experienced a significant adverse event after prior hallucinogen use
11. A history of schizophrenia, or first-degree relatives with schizophrenia
12. Have a known sensitivity to psilocybin and/or its metabolites
13. Have any clinically significant medical condition or disease
14. Have QT prolongation, or a history of QT prolongation, and those who are on concomitant medications that carry a risk of QT prolongation

Prohibited medications:
1. Known uridine diphosphate glucuronosyltransferase enzyme modulators. Inhibitors of UGT1A9 and 1A10 must be discontinued at least 5 half-lives prior to psilocybin administration
2. Monoamine oxidase inhibitors. Monoamine oxidase and aldehyde or alcohol dehydrogenase inhibitors must be discontinued at least 5 half-lives prior to psilocybin administration
3. Selective serotonin reuptake inhibitor/serotonin-norepinephrine reuptake inhibitors (SSRI /SNRI)

Date of first enrolment
01/06/2022

Date of final enrolment
01/08/2022

Locations

Countries of recruitment
Canada

Study participating centre
The Newly Institute
2303 4 St SW
Calgary
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Sponsor information

Organisation
ATMA Journey Centers Inc.

Funder(s)

Funder type
Industry

Funder Name
ATMA Journey Centers Inc.

Results and Publications

Individual participant data (IPD) sharing plan
The original datasets presented in the study are available in a publicly accessible repository. This data can be found here: https://doi.org/10.6084/m9.figshare.22329433.v1
The type of data stored: vital signs data, and QIDS-SR16 and MEQ-30 scores
Dates of availability: currently available
Whether consent from participants was required and obtained: As part of the informed consent form, participants agree that “If information from this study is published or presented, your name and other personal information will not be used.”
Comments on data anonymization: A participant ID has been assigned to each participant

IPD sharing plan summary
Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Dataset		27/03/2023	12/04/2023	No	No