XanaCIDD: A clinical study in which participants are randomly assigned to take either active drug or placebo (non active) to assess if the drug Xanamem is safe, tolerable and effective in helping adult patients with cognitive impairment due to depressive disorder

Submission date 04/03/2023	Recruitment status No longer recruiting	☐ Prospectively registered☐ Protocol
Registration date	Overall study status	Statistical analysis plan
24/08/2023	Completed	Results
Last Edited	Condition category	Individual participant data
30/05/2024	Mental and Behavioural Disorders	Record updated in last year

Plain English summary of protocol

Background and study aims

This study will test the safety and tolerability (how well the body tolerates) of Xanamem in adults with clinical depression, with ongoing symptoms of low mood and some difficulty with thinking or memory. The study will also test the effectiveness (how well it works) of Xanamem on symptoms that happen with depression, such as sadness and loss of pleasure, tiredness, loss of energy, and difficulty concentrating and thinking.

Who can participate?

The study will take place at up to 4 sites in the UK, as well as 11 sites in Australia. Approximately 160 participants aged 18 – 70 years with major depressive disorder will take part in the study.

What does the study involve?

Participants will be assigned by chance to 1 of 2 treatment groups of equal size - Xanamem or placebo. Neither the participants, the study doctor, or the sponsor of the study will know which group participants are in (called a randomised, double-blind study). Participants will take part in the trial for up to 14 weeks. This includes a screening period of up to 4 weeks, a treatment period of 6 weeks, and a follow-up period of 4 weeks. Participants will have several safety tests done at visits to the study site, such as checking blood pressure and heart rate, physical examination, and blood tests. They will also take several questionnaires and tests to measure their thinking and memory.

What are the possible benefits and risks of participating? Benefits:

Not provided at time of registration

Risks:

Potential risks of participation for subjects are identified as:

Very common (10% of people tested or more, or at least 10 in 100)

• Headache

Common (between 1% and 10% of people tested, or 1 in 100 to 10 in 100)

- Nausea (feeling unwell)
- Diarrhoea
- Fatigue (tiredness)
- Dizziness
- Tingling in hands or feet
- Joint stiffness
- Back pain
- Blood test indicating mild irritation to the liver (raised ALT)
- Reduced number of nerve fibres in a skin biopsy sample, analysed under a microscope.

Because the investigational product (Xanamem) is at an early stage of development, there may be as yet unknown side effects. However, Xanamem has been previously given to people as single and multiple daily doses up to 70 mg (7 times higher than the doses in this research project) in earlier studies and has been given to over 300 people, including healthy people and people with mild dementia due to Alzheimer's disease. There were no serious, severe, or life-threatening events due to Xanamem treatment. The majority of AEs reported to date were mild or moderate in severity. All AEs will be monitored to resolution and subjects will be encouraged to contact the site if any unexpected events occur between study visits.

In addition to their routine care, subjects choosing to participate in the study will be required to attend the required visits at the study centre. Efforts will be made to schedule the visits to minimise any inconvenience to subjects.

As part of their participation, subjects also will be required to complete the required questionnaires and other diagnostic instruments. Subjects will be able to take reasonable rest breaks, or assessments may be rescheduled to another day, if they become fatigued during the assessments. Subjects are also required to undergo additional study specific procedures as described in the protocol and made known to subjects in the informed consent document. This includes the risk of skin irritation from the ECG patches and bruising, swelling or bleeding from blood collection, for which a topical local anaesthetic cream will be offered if required.

Where is the study run from? Axiom Real-Time Metrics (UK)

When is the study starting and how long is it expected to run for? February 2023 to August 2024

Who is funding the study? Actinogen (Australia)

Who is the main contact?

Dr Stuart Ratcliffe, stuartratcliffe@stpancrasclinical.com

Contact information

Type(s)

Scientific

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Additional identifiers

EudraCT/CTIS number

2023-000030-15

IRAS number

ClinicalTrials.gov number

NCT05657691

Secondary identifying numbers

ACW0008, IRAS 1007376, CPMS 56832

Study information

Scientific Title

XanaCIDD: A double-blind, randomized, placebo-controlled, parallel-group trial to assess the safety, tolerability, and efficacy of Xanamem® in adults with cognitive impairment due to depressive disorder

Acronym

XanaCIDD

Study objectives

Primary objective:

To determine the effects of Xanamem on attention, including working memory.

Secondary objective:

To determine the effects of Xanamem on depressive symptoms. To determine the effects of Xanamem on executive function. To determine the effects of Xanamem on episodic memory.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 21/08/2023, Wales REC 1 (Health and Care Research Wales Support and Delivery Centre, Castlebridge 4, 15-19 Cowbridge Road East, Cardiff, CF11 9AB, United Kingdom; +44 1792 606334; Wales.REC1@wales.nhs.uk), ref: 23/WA/0069

Study design

Interventional double-blind randomized parallel-group placebo-controlled trial

Primary study design

Interventional

Secondary study design

Randomised parallel trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details to request a participant information sheet

Health condition(s) or problem(s) studied

Cognitive impairment due to depressive disorder

Interventions

ACW0008 is Phase 2, randomized, placebo-controlled, parallel-group, double-blind, proof-of-concept trial involving subjects with a confirmed diagnosis of MDD and who continue to experience cognitive impairment and depressive symptoms

Subjects are assigned at 1:1 ratio to receive either a single dose of 10mg Xanamem or Placebo orally each day.

Subjects will take part in the trial for up to 14 weeks. The trial consists of a Screening period (maximum 4 weeks), treatment period (6 weeks), and follow-up period (4 weeks). During the treatment period, participants and all personnel involved with the conduct and interpretation of the trial will be blinded to treatment codes. To conceal the blind, Investigational product and Placebo are identical in appearance and dispensing of trial drug will be coordinated by a Randomization and Trial Supply Management system (RTSM). The system will assign a bottle number corresponding to the randomization arm.

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Xanamem

Primary outcome measure

Attention and working memory is measured using digital tests from a cognitive test battery (CTB) (Detection, Identification, and One Back tests) at Screening, Baseline, Week 2, Week 4, Week6, Week10

Secondary outcome measures

Measured at Screening, Baseline, Week 2, Week 4, Week 6, Week10, unless otherwise noted:

- 1. Depression measured using the Montgomery-Asberg Depression Rating Scale (MADRS)
- 2. Executive Function is measured using a digital and paper and pencil cognitive tests (One Back Test, Category Fluency Test [CFT], Letter Fluency Test [LFT], and International Digit Symbol Substitution Test Symbols [IDSST-S])
- 3. Episodic Memory is measured using a digital and paper and pencil cognitive tests (One Card Learning and Hopkins Verbal Learning Test Revised [HVLT-R], Immediate Recall only)
- 4. Individual tests of the CTB including Cogstate tests and other cognitive tests (HVLT-R, CFT, and LFT)
- 5. The responder rate will be measured by the percentage of participants achieving a 50% or greater reduction in MADRS score and Percentage of participants achieving a MADRS score of < 10 points at Week 6 (EOT)
- 6. Durability of cognitive and anti-depressive Xanamem effects will be measured by comparing scores 4 weeks after receiving last dose of trial drug (Week 6 vs Week 10)
- 7. Subjective clinical significance will be measured by the Patient's Global Impression of Severity scale (PGI-S)

- 8. Subjective clinical improvement will be measured by the Patient's Global Impression of Improvement scale (PGI-I) at week 6
- 9. Safety and tolerability will be measured by:
- 9.1. Incidence and severity of treatment emergent adverse events (TEAEs)
- 9.2. Incidence of SAEs and suspected unexpected serious adverse reactions (SUSARs)
- 9.3. Clinically significant changes from Baseline in:
- 9.3.1. Clinical safety laboratory evaluations
- 9.3.2. Vital signs
- 9.3.3. Physical examinations
- 9.3.4. Columbia-Suicide Severity Rating Scale (C-SSRS)
- 10. Sparse pharmacokinetic sampling for use in PPK analysis at weeks 2, 4, 6
- 11. Visual Attention and Executive Function will be measured by the Trail Making A and B Tests at screening, baseline, week 6
- 12. Sleep quality measured using the Pittsburgh Sleep Quality Index (PSQI) at baseline, week 6
- 13. Assess the effect of Xanamem on trial participant perception of pain using the Brief Pain Inventory at baseline, week 6

Overall study start date

27/02/2023

Completion date

01/08/2024

Eligibility

Key inclusion criteria

- 1. Male or female aged 18 to 70 years, inclusive at the time of Screening.
- 2. Positive MDD primary diagnosis confirmed by MINI at Screening.
- 3. Persistent depressive symptoms as determined by a HAM-D \geq 17 at Screening.
- 4. Self-reported subjective cognitive dysfunction, as determined by an affirmative response to any aspect of a single-question test about perceived problems with their thinking.
- 5. On a stable dose of a first- or second-line antidepressant that is approved for the treatment of depression (but not a tricyclic antidepressant, monoamine oxidase inhibitor, or vortioxetine) drug for at least 6 weeks.
- 6. Exhibit a 0.5 SD impairment on the BASIC Boxfiller subtest relative to age, education, and gender relevant norms at Screening.
- 7. Body mass index (BMI) 17.5 to 38 kg/m2 inclusive at the time of Screening.
- 8. Must provide written informed consent to participate in the trial and be willing and able to comply with the requirements of the protocol and complete all trial visits.
- 9. Smokers of \leq 5 cigarettes a day or equivalent nicotine (includes vaping) / tobacco products are eligible if they are willing to abstain from nicotine / tobacco products on the cognitive testing days.

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Upper age limit

70 Years

Sex

Both

Target number of participants

160

Total final enrolment

167

Key exclusion criteria

- 1. Active suicidal ideation ("yes" to any of questions 3, 4, or 5 on the C-SSRS and/or per Investigator assessment).
- 2. On a tricyclic antidepressant, monoamine oxidase inhibitor, esketamine, or vortioxetine.
- 3. Other comorbid psychiatric disorder of clinical concern, as determined by medical history and Screening assessments.
- 4. A history of clinically diagnosed dementia of any type.
- 5. A history of severe depression treated with electroconvulsive therapy.
- 6. Treatment with transcranial magnetic stimulation within the previous 3 months.

Date of first enrolment

15/12/2022

Date of final enrolment

19/04/2024

Locations

Countries of recruitment

Australia

England

United Kingdom

Study participating centre

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United Kingdom

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Sponsor information

Organisation

Axiom Real-Time Metrics

Sponsor details

59, St. Martin's Lane Unit #218 London England United Kingdom WC2N 4JS +44 1224 4334689 raeg@axiom.cc

Sponsor type

Industry

Funder(s)

Funder type

Industry

Funder Name

Actinogen

Results and Publications

Publication and dissemination plan

Peer reviewed scientific journals
Internal report
Conference presentation
Publication on website
Submission to regulatory authorities
All study data that is shared will be anonymised.

Intention to publish date

31/08/2025

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to commercial considerations, and due to the proof-of-concept nature of the trial.

IPD sharing plan summary

Not expected to be made available