Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of the Efficacy of Lacosamide versus Valproate in the Treatment of Acute Mania in Bipolar Disorder

Protocol summary

Study aim

Comparison of the Efficacy of Lacosamide versus Sodium Valproate in Patients with Bipolar I Disorder in the Acute Manic Phase

Design

A Phase 3, randomized, double-blind, placebo-controlled, parallel-group clinical trial in 80 patients with bipolar I disorder in the acute manic phase. Randomization will be performed using balanced blocks with block sizes of 4 and 6. A total of 8 blocks of size 4 and 8 blocks of size 6 are planned for patient allocation.

Settings and conduct

The study will be conducted at Ibn Sina Psychiatric Hospital. Assessments will be performed at baseline (Day 0), as well as on Days 3, 7, and 14. Both patients and clinical raters will remain blinded to treatment allocation.

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Definitive diagnosis of bipolar I disorder in the acute manic phase (according to DSM-5 criteria) Age 18–75 years (both sexes) YMRS score ≥ 20 at baseline evaluation Ability to undergo clinical assessments Provision of informed consent for participation Non-entry criteria: Pregnancy or lactation Intellectual disability or severe cognitive/functional impairment Predominant comorbid psychiatric disorder Hepatic impairment (ALT/AST > 3× ULN) Thrombocytopenia (platelet count < 100,000/μL) Use of amphetamine-type substances Second- or third-degree heart block History of hypersensitivity to lacosamide or valproate

Intervention groups

Lacosamide Group: Treatment is initiated at a starting dose of 50 mg/day and gradually titrated up to 200–300 mg/day. Valproate Group: Treatment is initiated at a dose of 200 mg three times daily (i.e., 600 mg/day) and titrated over 2 weeks to reach a target dose of 20 mg/kg/day. Both groups will receive standard-of-care treatment for the acute manic phase.

Main outcome variables

Clinical response rate will be assessed using the CGI and YMRS scales after two weeks of treatment.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20251208068253N4**
Registration date: **2026-07-01, 1405/04/10**
Registration timing: **prospective**

Last update: **2026-07-01, 1405/04/10**
Update count: **0**

Registration date

2026-07-01, 1405/04/10

Registrant information

Name

Farshad Abedi

Name of organization / entity

Country

Iran (Islamic Republic of)

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+98 51 3180 1589

Email address

abeditf@mums.ac.ir

Recruitment status

recruiting

Funding source

Expected recruitment start date

2026-07-23, 1405/05/01

Expected recruitment end date

2027-10-22, 1406/07/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
Comparison of the Efficacy of Lacosamide versus Valproate in the Treatment of Acute Mania in Bipolar Disorder

Public title
Evaluation of the Efficacy of Lacosamide in Mania

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Definitive diagnosis of bipolar 1 disorder in the acute manic phase (Based on DSM-5) Age 18 to 75 (both sexes included) YMRS total score 20 or greater at baseline Ability to participate in clinical evaluations Ability to provide written informed consent prior to any study-related procedures

Exclusion criteria:
Pregnancy or lactation Presence of intellectual disability or severe cognitive impairment A predominant comorbid psychiatric disorder that may confound the primary diagnosis Hepatic failure (ALT/AST > 3xULN) Thrombocytopenia (PLT< 100000) Use of amphetamine-type substances Second or third- degree heart block History of hypersensitivity reaction to Lacosamide or Valproate

Age
From **18 years** old to **75 years** old

Gender
Both

Phase
3

Groups that have been masked

- Participant
- Care provider
- Outcome assessor

Sample size
Target sample size: **80**

Randomization (investigator's opinion)
Randomized

Randomization description
The randomization method is designed using balanced blocks with block sizes of 4 and 6. A total of 8 blocks of size 4 and 8 blocks of size 6 are planned for patient allocation. Randomization will be performed using a block design with variable block sizes to assign participants to the intervention and control groups. To ensure allocation concealment, the randomization process will be conducted using Random Allocation Software, version 2.0. Accordingly, after obtaining informed consent and confirming eligibility criteria, the researcher will enter the patient's initial identification data into the software, and the treatment group will be assigned instantly and automatically. This method eliminates any possibility of predicting group assignment and provides the highest level of blinding for the study.

Blinding (investigator's opinion)
Double blinded

Blinding description
This study is designed as a double-blind trial, meaning that both the participants and the study personnel responsible for drug allocation will be unaware of the treatment assignments. To maintain blinding, the study medications will be prepared and dispensed to patients by nurses independent of the study team, using identical, coded packaging (designated as A/B).

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Mashhad University of Medical Sciences

Street address
School of Medicine, East Gate of the University Campus, Azadi Square, Mashhad, Iran

City
Mashhad

Province
Razavi Khorasan

Postal code
۹۱۷۷۹۴۸۵۴۴

Approval date
2026-04-25, 1405/02/05

Ethics committee reference number
IR.MUMS.REC.1405.048

Health conditions studied

1

Description of health condition studied
Bipolar mood disorder

ICD-10 code
F30

ICD-10 code description
Manic episode

Primary outcomes

1

Description
Change in Young Mania Rating Scale (YMRS) Score

Timepoint
Baseline (study entry) and on Days 3, 7, and 14

Method of measurement
Structured clinical interview

2

Description
Change in CGI-S (Clinical Global Impression – Severity) Score
Timepoint
Baseline (study entry) and on Days 3, 7, and 14
Method of measurement
Structured clinical interview

Secondary outcomes

1

Description
Adverse Events: Assessment method: Adverse event checklist and laboratory monitoring of renal function, hepatic function, and blood cell counts.
Timepoint
Baseline and on study day 14
Method of measurement
Based on the drug monograph of UptoDate, administered by trained personnel (clinical pharmacist/nurse).

Intervention groups

1

Description
Control group: Treatment with valproate is initiated at a dose of 200 mg three times daily and titrated over 2 weeks to reach a target dose of 20 mg/kg/day. Patients will be assessed at baseline (admission), and on Day 3, Week 1, and Week 2 using the YMRS and CGI, administered by a resident physician through patient interview. In addition, all patients will receive standard-of-care treatment with risperidone.
Category
Treatment - Drugs

2

Description
Intervention group: Treatment is initiated at a starting dose of 50 mg/day and gradually titrated up to 200–300 mg/day. Patients will be assessed at baseline (admission), and on Day 3, Week 1, and Week 2 using the YMRS and CGI scales, administered by a resident physician through patient interview. In addition, all patients will receive standard-of-care treatment with risperidone.
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Ibn-Sina Psychiatric Hospital
Full name of responsible person
Ali Akhondpour Manteghi
Street address
Horr Ameli Boulevard
City
Mashhad
Province
Razavi Khorasan
Postal code
919583134
Phone
+98 51 3712 7017
Email
Sina@mums.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Mohsen Tafaghodi
Street address
University of Medical Sciences, 3rd floor, Vice-Chancellor for Research and Technology, University of Medical Sciences, next to Hoveizeh Cinema, Daneshgah Street
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9138813944
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TafaghodiM@mums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Mashhad University of Medical Sciences
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Mashhad University of Medical Sciences

Full name of responsible person
Farshad Abedi Torbati
Position
Assistant Professor
Latest degree
Subspecialist
Other areas of specialty/work
Medical Pharmacy
Street address
School of Pharmacy, Mashhad university of medical science, Azadi square, Mashhad
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Person responsible for scientific inquiries

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Person responsible for updating data

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Farshad Abedi
Position
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Latest degree
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Abeditf@mums.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
No - There is not a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Undecided - It is not yet known if there will be a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
A de-identified individual participant dataset including demographic information, cognitive performance scores, behavioral and neuropsychiatric symptom scores, and recorded adverse events collected during the trial. All personal identifiers will be removed to ensure full anonymization. The dataset includes only variables used for analysis of primary and secondary outcomes. The data file will be provided in an encrypted format and structured in a standardized manner.
When the data will become available and for how long
Access to the de-identified dataset will begin six months after publication of the main study results and will remain available for at least five years following the publication date.
To whom data/document is available
Researchers affiliated with universities, medical research centers, or recognized scientific institutions who have an approved research proposal related to the study topic may request access. Applicants must demonstrate relevant research experience.
Under which criteria data/document could be used
The data may be used exclusively for research purposes, secondary scientific analyses, or replication of study findings. Use of the data for commercial purposes or any

attempt to re-identify participants is prohibited. Applicants must provide a detailed research proposal, a confidentiality agreement, and a formal commitment not to attempt participant re-identification. Any secondary publication must cite the original dataset source.

From where data/document is obtainable

Requesters can send their application along with a brief proposal in Persian or English to the official email address of the Principal Investigator at [ManteghiA@mums.ac.ir]. The requester's name and institutional affiliation must be clearly stated.

What processes are involved for a request to access data/document

Upon receiving a request, an initial review will be completed within five working days. If the research topic is appropriate, the applicant will be asked to submit a research proposal, a data confidentiality agreement, and a commitment not to attempt participant re-identification. After verification of all documents, the encrypted dataset will be shared within 10 to 15 working days. The entire process typically takes between two to four weeks

Comments