

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

21 Jun 2026

### Comparative Study of Brain-Derived Neurotrophic Factor in Depressive patients in treatment with Electro Convulsive Therapy and antidepressant

#### Protocol summary

##### Summary

This was a double-blind clinical trial as a comparative study to evaluate the serum level of brain-derived neurotrophic factor in patients with unipolar major depressive disorder treated with electroconvulsive and antidepressants who have been admitted in one of the psychiatric wards of Farshchian Hospital, Hamadan. In this study, there are 40 admitted patients at the age of 18-40 years who have no systemic disease and no illegal substance abuse; they will be enrolled in the study with informed consent and will be divided into two groups based on randomized blocks. The case study will undergo electroconvulsive treatment and the other group will be treated with antidepressants. Before the treatment and fourth week after it, Beck's Depression Inventory (BDI) will be completed by all the patients and patients' blood samples will also be collected in a similar method to measure the serum level of brain-derived neurotrophic factor. Their factor rate and depression intensity will be monitored too.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201207041743N8**  
Registration date: **2012-07-15, 1391/04/25**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2012-07-15, 1391/04/25

##### Registrant information

###### Name

Mohammad Haghighi

###### Name of organization / entity

Research Center for Behavioral Disorders and Substance Abuse, Hamadan University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 81 1827 4184

##### Email address

haghighi@umsha.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Hamadan University of Medical Sciences

##### Expected recruitment start date

2012-07-05, 1391/04/15

##### Expected recruitment end date

2012-09-21, 1391/06/31

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparative Study of Brain-Derived Neurotrophic Factor in Depressive patients in treatment with Electro Convulsive Therapy and antidepressant

##### Public title

Brain-Derived Neurotrophic Factor in Depressive patients

##### Purpose

Health service research

##### Inclusion/Exclusion criteria

Inclusive Criteria 1. Patients with unipolar major depressive disorder admitted in one of the psychiatric wards of Farshchian Hospital 2. Aged of 18-40 years 3. No systemic diseases such as diabetes, hypertension, epilepsy and etc 4. No history of alcohol abuse or other illegal substances 5. Patient's informed consent

Exclusive Criteria 1. Incidence of uncontrollable somatic condition 2. Patient's unwillingness to continue participation

#### Age

From **18 years** old to **40 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **40**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

#### Blinding (investigator's opinion)

Double blinded

#### Blinding description

#### Placebo

Not used

#### Assignment

Parallel

#### Other design features

### Secondary Ids

empty

### Ethics committees

#### 1

##### Ethics committee

###### Name of ethics committee

Hamadan University of Medical Sciences

###### Street address

Fahmideh str.Hamadan

###### City

Hamadan

###### Postal code

##### Approval date

2012-07-03, 1391/04/13

##### Ethics committee reference number

1215/9/35/16/د/پ

### Health conditions studied

#### 1

##### Description of health condition studied

Major Depressive Disorder

##### ICD-10 code

F32

##### ICD-10 code description

Depressive episode

### Primary outcomes

#### 1

##### Description

Severity of symptoms of Depression

##### Timepoint

Baseline and 4 weeks after treatment

##### Method of measurement

Beck Depression scale

#### 2

##### Description

level of Brain-derived neurotrophic factor in serum

##### Timepoint

Baseline and 4 weeks after treatment

##### Method of measurement

ELISA

### Secondary outcomes

empty

### Intervention groups

#### 1

##### Description

Electero Convulsive Therapy

##### Category

Treatment - Other

#### 2

##### Description

Antidepressant drugs

##### Category

Treatment - Drugs

### Recruitment centers

#### 1

##### Recruitment center

###### Name of recruitment center

Farshchian Hospital

###### Full name of responsible person

Mohammad Haghghi

###### Street address

Farshchian Hospital

###### City

Hamadan

### Sponsors / Funding sources

#### 1

##### Sponsor

###### Name of organization / entity

Research center for behavioral disorders and substance abuse, Hamadan university of medical sciences

###### Full name of responsible person

Dr.Mohammad Ahmadpanah

**Street address**

honarestan Str.

**City**

Hamadan

**Grant name**

**Grant code / Reference number**

**Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

Research center for behavioral disorders and substance abuse, Hamadan university of medical sciences

**Proportion provided by this source**

100

**Public or private sector**

*empty*

**Domestic or foreign origin**

*empty*

**Category of foreign source of funding**

*empty*

**Country of origin**

**Type of organization providing the funding**

*empty*

**Person responsible for general inquiries**

**Contact**

**Name of organization / entity**

Hamadan University of Medical Sciences

**Full name of responsible person**

Mohammad Haghighi

**Position**

Assistant

**Other areas of specialty/work**

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**Position**

Assistant Professor of Psychiatry

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**Person responsible for updating data**

**Contact**

**Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*