

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Aspirin plus Rivaroxaban Efficacy and Safety in Embolic Stroke of Undetermined Source: A Randomized, Placebo Controlled, Outcome Assessor Blind, Clinical Trial

#### Protocol summary

##### Study aim

Efficacy and safety of rivaroxaban plus aspirin in reduce stroke recurrence in a patient with Embolic Stroke of Undetermined Source

##### Design

This is a randomized, parallel, placebo-controlled study on recent (7-60 days) ischemic stroke of undermine source.

##### Settings and conduct

Present study will be conducted in Buali hospitals in Sari. After meeting inclusion and exclusion criteria patients will be randomized to Rivaroxaban 2.5 mg BID plus ASA 80 mg daily or ASA 80 mg plus placebo (1:1 ratio) and have visit every three months until 1 year. All adverse events, serious adverse events, outcome events will be recorded.

##### Participants/Inclusion and exclusion criteria

Adult patients with recent stroke and ESUS with one potential embolic risk but not high risk for bleeding events

##### Intervention groups

Patients in intervention group take ASA ( enteric coated tablet) 80 mg once daily plus Rivaroxaban (film coated tablet) 2.5 mg BID and patients in control group take ASA ( enteric coated tablet) 80 mg once daily plus tab Placebo BID

##### Main outcome variables

The primary outcome is the rate and time of stroke or systemic embolism and major bleeding events according to the criteria of the International Society of Thrombosis and Hemostasis.

#### General information

##### Reason for update

the study design changed to " outcome assessor blind" because of placebo size difference

#### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200112046094N1**  
Registration date: **2020-08-14, 1399/05/24**  
Registration timing: **prospective**

Last update: **2021-07-26, 1400/05/04**

Update count: **1**

##### Registration date

2020-08-14, 1399/05/24

##### Registrant information

###### Name

Athena Sharifi-Razavi

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 11 3334 3014

###### Email address

athena.sharifi@yahoo.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-08-22, 1399/06/01

##### Expected recruitment end date

2022-03-20, 1400/12/29

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Aspirin plus Rivaroxaban Efficacy and Safety in Embolic

Stroke of Undetermined Source: A Randomized, Placebo Controlled, Outcome Assessor Blind, Clinical Trial

#### Public title

Rivaroxaban in Embolic Stroke of Undetermined Source(ESUS)

#### Purpose

Prevention

#### Inclusion/Exclusion criteria

##### Inclusion criteria:

Signing the informed consent Recent ischemic stroke, with criteria of ESUS defined as: Stroke detected by CT or MRI that is not lacunar, Absence of extracranial or intracranial atherosclerosis causing  $\geq 50\%$  luminal stenosis in arteries supplying the area of ischemia, No major-risk cardioembolic source of embolism, No other specific cause of stroke identified only one risk factor of potential embolic source including: PTFV1 in standard ECG  $\geq 0.05$  mm.s or  $\geq 0.005$  mv.s, LVH in standard ECG ( Sokolow index  $\geq 35$  mm), Moderate or severe MR, AR or AS in echocardiography, LVH in echocardiography, left atrium hypertrophy in echocardiography, PFO not candidate for closure

##### Exclusion criteria:

History of hypersensitivity to the investigational medicinal product Indication for anticoagulation Indication for dual antiplatelet therapy Contraindication to investigational medications History of intracranial, intraocular, spinal, retroperitoneal or atraumatic intra-articular bleeding Gastrointestinal bleeding or major surgery within 3 months Planned or likely revascularization (any angioplasty or vascular surgery) within the next 3 months HAS-BLED score  $> 3$  Severe non-cardiovascular comorbidity with life expectancy  $< 3$  months Severe renal failure, defined as Glomerular Filtration Rate (GFR)  $< 15$  ml/min, Dialysis, transplant, Cr  $> 2.26$  mg/dL Severe hepatic insufficiency, Cirrhosis or Bilirubin  $> 2x$  Normal or AST/ALT/AP  $> 3x$  Normal Modified Rankin Scale of  $\geq 4$  Inability to swallow medications Hemorrhagic transformation of infarction

#### Age

From **18 years** old

#### Gender

Both

#### Phase

3

#### Groups that have been masked

- Outcome assessor
- Data analyser

#### Sample size

Target sample size: **40**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

Patients are randomized in a 1:1 fashion to intervention or comparator group. A list of random numbers generated then by using a block randomization method with 4 block size, anonymized patient list encoded. The codes are written on an envelope and the group type (intervention or comparison) is placed on paper inside the envelope. These envelopes are stacked in order. At

the time of enrollment of each patient who met the inclusion and exclusion criteria, the upper envelope is removed, and based on the code inside it, it is determined which group it belongs to.

#### Blinding (investigator's opinion)

Single blinded

#### Blinding description

Patient list concealed by statistics. Neurologist give drugs or placebo according to randomized code, neurology resident who assess patients outcome so is blind.

#### Placebo

Used

#### Assignment

Parallel

#### Other design features

## Secondary Ids

### 1

#### Registry name

clinicaltrial.gov

#### Secondary trial Id

NCT04273516

#### Registration date

2020-02-18, 1398/11/29

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of Mazandaran University of Medical Sciences

##### Street address

Bou-Ali Sina Hospital, Pasdaran Blvd, Sari

##### City

Sari

##### Province

Mazandaran

##### Postal code

4815838477

#### Approval date

2020-07-08, 1399/04/18

#### Ethics committee reference number

IR.MAZUMS.REC.1399.454

## Health conditions studied

### 1

#### Description of health condition studied

Ischemic Stroke

#### ICD-10 code

I63

#### ICD-10 code description

Cerebral infarction

## Primary outcomes

### 1

#### Description

Rate of stroke or systemic embolism recur

#### Timepoint

12 months after drug administration

#### Method of measurement

recording in case report form

### 2

#### Description

Major bleeding events

#### Timepoint

12 month after drug administration

#### Method of measurement

recording in case report form based on International Society on Thrombosis and Haemostasis bleeding scale

## Secondary outcomes

### 1

#### Description

all-cause mortality rate

#### Timepoint

at the end of 1 year

#### Method of measurement

recording in case report form

### 2

#### Description

non-major bleeding

#### Timepoint

at the end of 1 year

#### Method of measurement

recording in case report form

### 3

#### Description

fatal bleeding

#### Timepoint

at the end of 1 year

#### Method of measurement

record in case study form

## Intervention groups

### 1

#### Description

Intervention group: ASA ( enteric coated tablet) 80 mg once daily plus Rivaroxaban (film coated tablet)2.5 mg BID for 1 year

#### Category

Treatment - Drugs

### 2

#### Description

Control group: ASA ( enteric-coated tablet) 80 mg once daily plus placebo BID for 1 year. Placebo will be made in mazandarn university pharmacy school , similar to rivaroxaban.

#### Category

Placebo

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Bou-Ali Sina Hospital

##### Full name of responsible person

Athena Sharifi-Razvi

##### Street address

Pasdarán Blvd,Sari

##### City

Sari

##### Province

Mazandaran

##### Postal code

4815838477

##### Phone

+98 11 3334 3014

##### Email

athena.sharifi@yahoo.com

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Mazandaran University of Medical Sciences

##### Full name of responsible person

Athena Sharifi-Razavi

##### Street address

Bou-Ali Sina Hospital, Pasdarán Blvd, Sari

##### City

ساری

##### Province

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##### Postal code

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##### Phone

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#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

Mazandaran 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**

Mazandaran University of Medical Sciences

**Full name of responsible person**

Fatemeh Ramezanzpour

**Position**

Neurology Resident

**Latest degree**

Specialist

**Other areas of specialty/work**

Neurology

**Street address**

Bou-Ali Sina Hospital, Pasdaran Blvd, Sari

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**Province**

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**Postal code**

4815838477

**Phone**

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**Email**

fatemeh\_ramzanzpour@yahoo.com

**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Mazandaran University of Medical Sciences

**Full name of responsible person**

Athena Sharifi-Razavi

**Position**

Assistant Professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Neurology

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**Person responsible for updating data****Contact****Name of organization / entity**

Mazandaran University of Medical Sciences

**Full name of responsible person**

Athena Sharifi-Razavi

**Position**

Assistant professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Neurology

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

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Undecided - It is not yet known if there will be a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Undecided - It is not yet known if there will be 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**

Undecided - It is not yet known if there will be a plan to make this available

**Title and more details about the data/document**

all unrecognizable data would be sharing

**When the data will become available and for how long**

6 month after result publication

**To whom data/document is available**

Data will be available for researchers and scientific persons.

**Under which criteria data/document could be used**

If there is a similar published or documented proposal

**From where data/document is obtainable**

via email address athena.sharifi@yahoo.com

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

after request and review the proposal .It takes about 1 month.

## Comments