

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

31 May 2026

### Clinical trial of the effect of "Rheum palmatum root" on quality of life in patients with systolic heart failure

#### Protocol summary

##### Study aim

The Rheum palmatum effect on patients with systolic heart failure. Recuperate patients with systolic heart failure after taking Rheum palmatum.

##### Design

By using random numbers table, patients are divided in two person case-control groups All participants and researchers are blind in this study, coding of medicine and placebo are under the responsibility of a statistical adviser who is not blind.

##### Settings and conduct

Intervention group: Dry extract of Rheum palmatum root with a concentration of 10% relative to 100 of roots of the plant, has been standardized 250mg per capsule. the drug is given one capsule every 12 hours for 60 days to volunteer patients with heart failure who have ejection fraction equal to or less than 40% (the patients refer to special clinic Zanjan university of Medical science)  
Control group: Placebo in the control group contains starch corn which is provided in capsules and boxes of the same intervention group. the placebo is given one capsule every 12 hours for 60 days to volunteer patients with heart failure who have ejection fraction equal to or less than 40% (the patients refer to special clinic Zanjan university of Medical science) All participations and researchers are blind in this study, coding of medicine and placebo are under the responsibility of a statistical adviser who is not blind.

##### Participants/Inclusion and exclusion criteria

Informed study participation, age 40 to 75, systolic heart failure with ejection fraction equal or lesser than 40 percent, continuing heart medications, prescribed by cardiologist Pregnancy, Breast feeding, malignancy, Allergy to Rheum palmatum root extract, unwillingness of the patient to continue cooperation, chronic inflammatory disease, severe liver disease, Acute infectious disease, Decompensation heart failure

##### Intervention groups

60 Patients have systolic heart failure at 40 to 75 years

that conditions have in plan. 30 person take placebo and 30 person take drug

##### Main outcome variables

1-Quality of life score in the Minnie so ta Questionnaire before and after intervention  
2-The distance traveled in six minute walk test before and after intervention  
3-Left ventricular ejection fraction before and after intervention  
4-Complete blood count, Ast-Alt, Bun-Cr, CRP

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20180206038645N1**

Registration date: **2018-03-05, 1396/12/14**

Registration timing: **prospective**

Last update: **2018-03-05, 1396/12/14**

Update count: **0**

##### Registration date

2018-03-05, 1396/12/14

##### Registrant information

##### Name

Zohre Gholami

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 24 3377 0801

##### Email address

gholami1393@zums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-04-04, 1397/01/15

**Expected recruitment end date**

2018-06-05, 1397/03/15

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Clinical trial of the effect of "Rheum palmatum root" on quality of life in patients with systolic heart failure

**Public title**

Rheum palmatum root in systolic heart failure

**Purpose**

Treatment

**Inclusion/Exclusion criteria****Inclusion criteria:**

Informed study participation Age 40 to 75 Systolic heart failure with ejection fraction equal or lesser than 40 percent Continuing heart medications prescribed by cardiologist

**Exclusion criteria:**

Pregnancy Breast feeding Malignancy Hypersensitivity to rheum palmatum root Unwillingness of the patient to continue cooperation Chronic Inflammatory diseases Severe Renal failure Collagen vascular disease Sever liver disease Acute infectious disease De compensated heart failure

**Age**

From **40 years** old to **75 years** old

**Gender**

Both

**Phase**

3

**Groups that have been masked**

- Participant
- Care provider
- Investigator
- Outcome assessor

**Sample size**

Target sample size: **60**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

By using random numbers table patients are divided in two 30 person case\_control groups

**Blinding (investigator's opinion)**

Triple blinded

**Blinding description**

All participations and researchers are blind in this study, coding of medicine and placebo are under the responsibility of a statistical adviser who is not blind

**Placebo**

Used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethics committee of Zanjan University of Medical Sciences

**Street address**

Ethics committee San Jan University of Medical Sciences, A said Sq, Josh our Islamic Ave

**City**

Zanjan

**Province**

Zanjan

**Postal code**

4515777978

**Approval date**

2018-01-23, 1396/11/03

**Ethics committee reference number**

IR.Zums.REC.1396.271

**Health conditions studied****1****Description of health condition studied**

Systolic heart failure

**ICD-10 code**

I50.2

**ICD-10 code description**

Systolic (congestive) heart failure

**Primary outcomes****1****Description**

Quality of Life Score in the Minnesota Questionnaire

**Timepoint**

Measure the quality of life score at the beginning of study(before intervention)and one week after taking the Rheum Palmatum Root Extract

**Method of measurement**

Minnesota Living With Heart Failure Questionnaire

**2****Description**

The distance traveled in six minute walk test

**Timepoint**

Measure the distance traveled in six minute walk test at the beginning of study(before intervention)and one week after taking the Rheum Palmatum Root Extract

**Method of measurement**

Six minute walk test

## Secondary outcomes

### 1

#### Description

Left ventricular ejection fraction

#### Timepoint

Measurement of left ventricular ejection fraction at the beginning of study (before intervention)

#### Method of measurement

Ecocardiography

### 2

#### Description

Complete blood count

#### Timepoint

Measurement of complete blood count at the beginning of study (before intervention) and one week after taking Rheum Palmatum Root Extract

#### Method of measurement

Blood test

### 3

#### Description

Cr

#### Timepoint

Measurement of creatinine at the beginning of study (before intervention) and one week after taking Rheum palmatum root extract

#### Method of measurement

Blood test

### 4

#### Description

ALT

#### Timepoint

Measurement of Alanin Aminotransfers at the beginning of first study (before intervention) and one week after taking Rheum palmatum root extract

#### Method of measurement

Blood test

### 5

#### Description

AST

#### Timepoint

Measurement of Aspartat Aminotransferas at the beginning first study (before intervention) and one week after taking Rheum palmatum root extract.

#### Method of measurement

Blood test

### 6

#### Description

CRP

#### Timepoint

Measurement of C\_Reactive Protein at the beginning of first study (before intervention) and one week after

taking Rheum palmatum extract

#### Method of measurement

Blood test

### 7

#### Description

ALKP

#### Timepoint

Measurement of Alkaline phosphatas at the beginning of study (before intervention) and one week after taking Rheum palmatum extract.

#### Method of measurement

Blood test

## Intervention groups

### 1

#### Description

Intervention group: Dry extract of Rheum palmatum root with a concentration of 10% relative to 100 gr of roots of the plant, has been standardized 250mg per capsule at the school of pharmacy of Shahid Behest university of Medical Sciences. The drug is given one capsule every 12 hours for 60 days to volunteer patients with heart failure who have ejection fraction equal to or less than 40%

#### Category

Treatment - Drugs

### 2

#### Description

Control group: Placebo in the control group contains starch corn which is provided in capsules and boxes of the same intervention group at the school of Pharmacy of Shahid Behest university of Medical Sciences. The placebo is given one capsule every 12 hours for 60 days to volunteer patients with heart failure who have ejection fraction equal to or less than 40%

#### Category

Placebo

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Special Clinic in Zanjan University of Medical Sciences

##### Full name of responsible person

Zohre Gholami

##### Street address

7 Tired St.

##### City

Zanjan

##### Province

Zanjan

##### Postal code

4515777978

##### Phone

+98 24 3356 5333

**Email**  
ahanghar@zums.ac.ir

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**  
Zanjan University of Medical Sciences

**Full name of responsible person**  
Alireza Shoghli

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Deputy of Research and Technology, San Jan  
University of Medical Sciences, Azadi Sq, Jomhour  
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shoghli@zums.ac.ir

#### Grant name

**Grant code / Reference number**

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

**Title of funding source**  
Zanjan 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**  
Zanjan University of Medical Sciences

**Full name of responsible person**  
Zohre Gholami

**Position**  
Ph.D student of Iranian Medicin

**Latest degree**  
Medical doctor

**Other areas of specialty/work**  
Traditional Medicine

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## Person responsible for scientific inquiries

#### Contact

**Name of organization / entity**  
Zanjan University of Medical Sciences

**Full name of responsible person**  
Hassan Ahangar

**Position**  
Associate professor

**Latest degree**  
Subspecialist

**Other areas of specialty/work**  
Cardiology

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## Person responsible for updating data

#### Contact

**Name of organization / entity**  
Zanjan University of Medical Sciences

**Full name of responsible person**  
Zohre Gholami

**Position**  
Ph.D student Iranian medicin

**Latest degree**  
Medical doctor

**Other areas of specialty/work**  
Traditional Medicine

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**Email**

gholami1393@zums.ac.ir

## Sharing plan

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

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

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

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