

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

24 Sep 2021

### Evaluation the effect of aqueous extract of licorice on coronavirus outpatients: A randomized, double-blind, placebo-controlled clinical trial

#### Protocol summary

##### Study aim

Effect of aqueous extract of licorice in coronavirus outpatients

##### Design

Randomized, blinded, placebo controlled clinical trial. Effect of licorice capsules in 20 patients which have inclusion criteria will be evaluated. Simultaneously, 20 patients will take placebo. Medicine and placebo in the same form and package with the alphabets A and B will be delivered to physicians and patients. Patients must take the capsules three times a day for 14 days

##### Settings and conduct

Randomized, blinded, placebo controlled clinical trial will be in Mashhad. Effect of licorice capsules in 20 patients with coronavirus disease which have inclusion criteria will be evaluated. Simultaneously 20 patients will take placebo. Medicine and placebo in the same form and package with the alphabets A and B will be delivered to physician and patients. The patients must take the capsules three times a day for 14 days

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: The outpatients in quarantine, take medicine, diagnosed for coronavirus disease according to clinic (fever, cough, myalgia) and paraclinical parameters (lymphopenia, increase CRP). Exclusion criteria: Sensitivity to licorice and its derivatives; below 18 and above 65 years old; hepato, renal or respiratory disorders; take cytotoxic, corticosteroid drugs; nursing or pregnant women

##### Intervention groups

Effect of licorice capsules in 20 patients which have inclusion criteria will be evaluated. Simultaneously 20 patients which have inclusion criteria will take placebo.

##### Main outcome variables

Time interval until lymphopenia improves Time interval until CRP normalizes Time interval until clinical symptoms improve (fever, cough and myalgia)

#### General information

##### Reason for update

##### Acronym

LCS

##### IRCT registration information

IRCT registration number: **IRCT20200404046933N1**

Registration date: **2020-04-12, 1399/01/24**

Registration timing: **prospective**

Last update: **2020-04-12, 1399/01/24**

Update count: **0**

##### Registration date

2020-04-12, 1399/01/24

##### Registrant information

##### Name

Gholamreza Karimi

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 51 3180 1191

##### Email address

karimig@mums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-04-20, 1399/02/01

##### Expected recruitment end date

2020-07-22, 1399/05/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

## Scientific title

Evaluation the effect of aqueous extract of licorice on coronavirus outpatients: A randomized, double-blind, placebo-controlled clinical trial

## Public title

Evaluation the effect of licorice for treatment of coronavirus

## Purpose

Treatment

## Inclusion/Exclusion criteria

### Inclusion criteria:

Patients diagnosed for coronavirus according to clinic such as fever, cough and myalgia Patients diagnosed for coronavirus according to paraclinic such as lymphopenia and increase of CRP Patients in the range of 18-65 years old

### Exclusion criteria:

Sensitivity to licorice and it derivatives Patients with hepato, renal or respiratory disorders Patients who take cytotoxic or corticosteroid drugs Nursing or pregnant women

## Age

From **18 years** old to **65 years** old

## Gender

Both

## Phase

2

## Groups that have been masked

- Participant
- Care provider

## Sample size

Target sample size: **40**

## Randomization (investigator's opinion)

Randomized

## Randomization description

Randomization in three stages: 1- Generation simple or limited randomization will be done based on a table of random numbers 2- Allocation concealment: which is done in the form of coded boxes (numbered drug containers) with a random sequence. In this method, a number of boxes with the same shape and size are numbered based on random sequences and contain drugs or placebo that have a completely similar appearance. 3- Execution of random allocation process: A: Identify the person who creates the random sequence B: A person who evaluates and registers researchers in terms of inclusion and exclusion criteria C: The person who assigned the participants to the groups: infectious diseases specialist The main researcher of the project, who creates a random sequence, does not interfere in other stages of randomization, including registration and allocation of participants, and the person involved in creating a random program is separate from other researchers.

## Blinding (investigator's opinion)

Double blinded

## Blinding description

the medicine in the form of similar capsule but with the alphabetic A or B will be delivered to physician and patients

## Placebo

Used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Medical Ethics Committee of Mashhad University of Medical Sciences

##### Street address

Blv.Vakilabad 2- School of Pharmacy-1365-91775

##### City

Mashhad

##### Province

Razavi Khorasan

##### Postal code

9177948954

#### Approval date

2020-04-05, 1399/01/17

#### Ethics committee reference number

IR.MUMS.REC.1399.047

## Health conditions studied

### 1

#### Description of health condition studied

Covid-19

#### ICD-10 code

U07.1

#### ICD-10 code description

Covid-19 disease

## Primary outcomes

### 1

#### Description

Time interval until clinical symptoms improve

#### Timepoint

3 days, 1 week and 2 weeks after treatment

#### Method of measurement

Time of recovery

### 2

#### Description

Lymphopenia

#### Timepoint

3 days, 1 week and 2 weeks after treatment

#### Method of measurement

Cell counter device

### 3

#### Description

CRP level

#### Timepoint

3 days, 1 week and 2 weeks after treatment

#### Method of measurement

CRP kit

### Secondary outcomes

empty

### Intervention groups

#### 1

#### Description

Intervention group: In addition to the standard treatment regimen for covid-19, capsules which have aqueous licorice extract containing 80 mg of the active ingredient glycyrrhizin will be given three times a day for 2 weeks. Licorice capsules are formulated at the Mashhad School of Pharmacy with the ineffective ingredients of Ovisil and Arozil

#### Category

Treatment - Drugs

#### 2

#### Description

Control group: In addition to general drugs for treatment of corona, the patients take placebo capsule 3 times a day for 14 days

#### Category

Placebo

### Recruitment centers

#### 1

#### Recruitment center

##### Name of recruitment center

Imam reza hospital

##### Full name of responsible person

Dr. Dehghan Nayeri

##### Street address

Imam reza square

##### City

Mashhad

##### Province

Razavi Khorasan

##### Postal code

9137913316

##### Phone

+98 51 3854 3031

##### Email

DehghanMJ@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

Daneshgah avenue

##### City

Mashhad

##### Province

Razavi Khorasan

##### Postal code

9138813944

##### Phone

+98 51 3854 1538

##### Email

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

Gholamreza Karimi

##### Position

Professor

##### Latest degree

Ph.D.

##### Other areas of specialty/work

Medical Pharmacy

##### Street address

Vakil abad Blvd

##### City

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##### Province

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##### Phone

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karimig@mums.ac.ir

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Mashhad University of Medical Sciences

**Full name of responsible person**

Gholamreza Karimi

**Position**

Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Medical Pharmacy

**Street address**

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## Person responsible for updating data

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**Postal code**

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**Phone**

0098513801191

**Email**

karimig@mums.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**

Not applicable