

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

26 Oct 2021

### The efficacy and safety of Ivermectin in patients with COVID-19: a randomized clinical trial

#### Protocol summary

##### Study aim

The efficacy and safety of Ivermectin in patients with COVID-19

##### Design

Controlled clinical trial with parallel groups, open-label, phase 3, 120 patients, simple randomized method

##### Settings and conduct

This study will be conducted at the Shahid Mohammadi Hospital, Hormozgan University of Medical Sciences, Bandar Abbas. The study population is 60 patients with COVID-19 (30 patients in control group and 30 in study group).

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: age  $\geq 20$  years old (weight  $\geq 35$  kg); positive polymerase chain reaction (PCR) test for COVID-19; non-hospitalized with mild clinical symptoms, and signed informed consent voluntarily and knowingly. Exclusion criteria: underlying diseases (AIDS, asthma, severe liver and kidney disease); history of Loiasis; history of drug allergy to Ivermectin; use of anticoagulants (e.g. warfarin) and ACE inhibitors (e.g. captopril), and pregnancy or breastfeeding.

##### Intervention groups

Group A will be mild patients receiving standard treatment of COVID-19 according to the Iran Ministry of Health's protocol. Group B will be mild patients receiving, in addition to the standard treatment, a single dose of oral Ivermectin. Group C will be moderate patients receiving standard treatment of COVID-19 according to the Iran Ministry of Health's protocol. Group D will be moderate patients receiving, in addition to the standard treatment, a single dose of oral Ivermectin.

##### Main outcome variables

For mild patients: clinical symptom improvement; need for hospitalization, and incidence of adverse drug reactions. For moderate patients: length of hospital stay; need for ICU; need for mechanical ventilation, and incidence of adverse drug reactions.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200506047323N6**

Registration date: **2020-11-17, 1399/08/27**

Registration timing: **registered\_while\_recruiting**

Last update: **2020-11-17, 1399/08/27**

Update count: **0**

##### Registration date

2020-11-17, 1399/08/27

##### Registrant information

##### Name

Mohammad Fathalipour

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 76 3371 0406

##### Email address

m.fathalipour@hums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-11-15, 1399/08/25

##### Expected recruitment end date

2021-02-15, 1399/11/27

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The efficacy and safety of Ivermectin in patients with COVID-19: a randomized clinical trial

## Public title

Effect of Ivermectin in treatment of COVID-19

## Purpose

Treatment

## Inclusion/Exclusion criteria

### Inclusion criteria:

Age  $\geq 20$  years old Weight  $\geq 35$  kg Positive polymerase chain reaction (PCR) test for COVID-19 Non-hospitalized mild as well as hospitalized moderate patients Signed informed consent voluntarily and knowingly

### Exclusion criteria:

Underlying diseases (AIDS, asthma, severe liver and kidney disease) History of Loiasis History of drug allergy to Ivermectin Use of anticoagulants (e.g. warfarin) and ACE inhibitors (e.g. captopril) Pregnancy or breastfeeding

## Age

From **20 years** old

## Gender

Both

## Phase

3

## Groups that have been masked

No information

## Sample size

Target sample size: **120**

## Randomization (investigator's opinion)

Randomized

## Randomization description

Patients in both hospitalized (moderate) and outpatient (mild) groups will be randomized into the treatment and control groups based on the following method. Simple randomization method and table of random numbers will be used. If selected number is even, the patient is allocated to treatment group, and if it is odd, the patient is allocated to control group.

## Blinding (investigator's opinion)

Not blinded

## Blinding description

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of Hormozgan University of Medical Sciences

##### Street address

Jomhuri Eslami Blvd

##### City

Hormozgan

## Province

Hormozgan

## Postal code

7919915519

## Approval date

2020-11-15, 1399/08/25

## Ethics committee reference number

IR.HUMS.REC.1399.410

## Health conditions studied

### 1

#### Description of health condition studied

COVID-19 disease

#### ICD-10 code

U07.2

#### ICD-10 code description

COVID-19, virus not identified

## Primary outcomes

### 1

#### Description

Length of hospital stay

#### Timepoint

Until discharge date

#### Method of measurement

Questionnaire

### 2

#### Description

Need for ICU

#### Timepoint

Until discharge date

#### Method of measurement

Questionnaire

### 3

#### Description

Need for mechanical ventilation

#### Timepoint

Until discharge date

#### Method of measurement

Questionnaire

## Secondary outcomes

### 1

#### Description

Incidence of serious adverse reactions

#### Timepoint

Before intervention and daily during the study

#### Method of measurement

Questionnaire

## Intervention groups

### 1

#### Description

Intervention group: will be mild patients receiving hydroxychloroquine sulfate (Amin Pharmaceutical company, Iran) at a dose of 400 mg twice a day for the first day and 200 mg twice a day for six following days, along with oral Ivermectin (MSD company, France) at a single dose of 0.2 mg/kg.

#### Category

Treatment - Drugs

### 2

#### Description

Control group: will be mild patients receiving hydroxychloroquine sulfate (Amin Pharmaceutical company, Iran) at a dose of 400 mg twice a day for the first day and 200 mg twice a day for six following days.

#### Category

Treatment - Drugs

### 3

#### Description

Intervention group: will be moderate patients receive 200/50 mg Lopinavir/Ritonavir (Heterd company, India) twice a day for the seven days, plus five doses of 44 mcg Interferon beta-1a (CinnaGen, Iran) every other day, plus oral Ivermectin (MSD company, France) at a single dose of 0.2 mg/kg.

#### Category

Treatment - Drugs

### 4

#### Description

Control group: will be moderate patients receive 200/50 mg Lopinavir/Ritonavir (Heterd company, India) twice a day for the seven days, plus five doses of 44 mcg Interferon beta-1a (CinnaGen, Iran) every other day.

#### Category

Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Shahid Mohammadi Hospital

##### Full name of responsible person

Mahdi Hasani Azad

##### Street address

Jomhuri Eslami Blvd

##### City

Bandar Abbas

##### Province

Hormozgan

##### Postal code

7919915519

##### Phone

+98 76 3334 7000

##### Fax

+98 76 3334 5003

##### Email

shmh@hums.ac.ir

##### Web page address

<http://shmh.hums.ac.ir/>

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Bandare-abbas University of Medical Sciences

##### Full name of responsible person

Teamur Aghamolaei

##### Street address

Jomhuri Eslami Blvd

##### City

Bandar Abbas

##### Province

Hormozgan

##### Postal code

7919915519

##### Phone

+98 76 3333 3280

##### Fax

+98 76 3334 6994

##### Email

mail@hums.ac.ir

##### Web page address

<http://hums.ac.ir/>

#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

Bandare-abbas 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

Bandare-abbas University of Medical Sciences

##### Full name of responsible person

Mohammad Fathalipour

##### Position

Consultant  
**Latest degree**  
Ph.D.  
**Other areas of specialty/work**  
Medical Pharmacy  
**Street address**  
Emam Hossein Blvd  
**City**  
Bandar Abbas  
**Province**  
Hormozgan  
**Postal code**  
7919691982  
**Phone**  
+98 76 3371 0406  
**Fax**  
+98 76 3371 0389  
**Email**  
m.fathalipour@hums.ac.ir  
**Web page address**

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**  
Bandare-abbas University of Medical Sciences  
**Full name of responsible person**  
Mohammad Fathalipour  
**Position**  
Assistant professor  
**Latest degree**  
Ph.D.  
**Other areas of specialty/work**  
Medical Pharmacy  
**Street address**  
Emam Hossein Blvd  
**City**  
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7919691982  
**Phone**  
+98 76 3371 0406  
**Fax**  
+98 76 3371 0389  
**Email**  
m.fathalipour@hums.ac.ir

## Person responsible for updating data

### Contact

**Name of organization / entity**  
Bandare-abbas University of Medical Sciences  
**Full name of responsible person**  
Mohammad Fathalipour  
**Position**  
Assistant professor

**Latest degree**  
Ph.D.  
**Other areas of specialty/work**  
Medical Pharmacy  
**Street address**  
Emam Hossein Blvd  
**City**  
Bandar Abbas  
**Province**  
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**Email**  
m.fathalipour@hums.ac.ir

## 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

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

No - There is not 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

Information regarding the study outcomes will be shared.

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

Data will become available after publication of obtained results

### To whom data/document is available

Only academic institutions

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

The study protocol or proposal should be approved by Ethics committee of institutions. The rights of authors and sponsors should be respected.

### From where data/document is obtainable

M.fathalipour@yahoo.com

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

A request should be addressed to the Technology and Research Vice-chancellery of Hormozgan University of Medical Sciences and the project executor should be informed.

### Comments