

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

19 Oct 2020

### Evaluation of Atazanavir/Ritonavir effect on COVID-19 patients treatment in comparison with Lopinavir / Ritonavir

#### Protocol summary

##### Study aim

access to a novel and acceptable treatment. elimination of ineffective treatments. decreasing drug-induced complications. comparison of effect of Atazanavir/Ritonavir and Lopinavir/Ritonavir on inflammatory biomarkers including ESR and CRP. comparison of effect of Atazanavir/Ritonavir and Lopinavir/Ritonavir on respiratory involvement including Pneumonia and COVID-19 induced ARDS comparison of effect of Atazanavir/Ritonavir and Lopinavir/Ritonavir on hospitalization duration. comparison of effect of Atazanavir/Ritonavir and Lopinavir/Ritonavir on drug-induced GI complications. comparison of effect of Atazanavir/Ritonavir and Lopinavir/Ritonavir on mortality/morbidity rate decrease.

##### Design

This clinical trial is a double-blinded case-control randomized study on 100 patients. Permuted block randomization technique was used for patients randomization.

##### Settings and conduct

This study will be performed in Bahonar hospital at the first 6 months of the year. Statistical analyses will be accomplished using STATA software. This study is designed double-blinded (patients and physicians). Patients of each group (case or control) will be hospitalized in a specific place and do not have any contact with patients of the opposite group.

##### Participants/Inclusion and exclusion criteria

Patients between 20-80 years admitted to the hospital whose diseases were confirmed by CT, RT-PCR.

##### Intervention groups

Atazanavir/Ritonavir treatment group receives novel treatment and Lopinavir/Ritonavir treatment group receives standard treatment. adverse effects and desired effects will be assessed.

##### Main outcome variables

Clinic and Para clinic findings in COVID-19 patients. Mortality and morbidity rate in COVID-19 patients.

Duration of hospitalization.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200504047298N1**

Registration date: **2020-06-14, 1399/03/25**

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

Last update: **2020-06-14, 1399/03/25**

Update count: **0**

##### Registration date

2020-06-14, 1399/03/25

##### Registrant information

##### Name

Zeinab Siami

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 4602 2136

##### Email address

z.siami@abzums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-06-14, 1399/03/25

##### Expected recruitment end date

2020-06-30, 1399/04/10

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

### Scientific title

Evaluation of Atazanavir/Ritonavir effect on COVID-19 patients treatment in comparison with Lopinavir / Ritonavir

### Public title

Effect of Atazanavir/Ritonavirin treatment of COVID-19

### Purpose

Treatment

### Inclusion/Exclusion criteria

#### Inclusion criteria:

all COVID-19 patients aged between 20-80

#### Exclusion criteria:

low blood pressure Nausea Vomiting Dysuria Paleness  
Low mental status poor collaboration

### Age

From **20 years** old to **80 years** old

### Gender

Both

### Phase

3

### Groups that have been masked

- Participant
- Care provider
- Investigator

### Sample size

Target sample size: **100**

### Randomization (investigator's opinion)

Randomized

### Randomization description

Patients randomized classification into standard treatment group and case group was performed using permuted block randomization. in this study, four-unit blocks were used. Using R software, a chain of randomized numbers comprising one to six are created to reach the desired sample size.

### Blinding (investigator's opinion)

Double blinded

### Blinding description

In this study, patients, researchers, and health workers were blind. This study is designed double-blinded. Patients of each group (case or control) will be hospitalized in a specific place and do not have any contact with patients of the opposite group. Besides, a member of the research team and a doctor of infectious diseases will prescribe according to assigned treatment codes.

### Placebo

Not used

### Assignment

Parallel

### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of Alborz University Of Medical Sciences

##### Street address

Research Department, Safarian Alley, Golshahr Avenue

##### City

Karaj

##### Province

Alborz

##### Postal code

3198764153

#### Approval date

2020-05-30, 1399/03/10

#### Ethics committee reference number

IR.ABZUMS.REC.1399.065

## Health conditions studied

### 1

#### Description of health condition studied

COVID-19

#### ICD-10 code

U07.1

#### ICD-10 code description

Use this code when COVID-19 has been confirmed by laboratory testing irrespective of severity of clinical signs or symptoms. Use additional code, if desired, to identify pneumonia or other manifestations.

## Primary outcomes

### 1

#### Description

COVID-19 patients clinical progression

#### Timepoint

frequently in hospitalization time

#### Method of measurement

need to be intubated, body temperature, heart rate, respiratory rate, cough, dyspnea, ICU admission.

### 2

#### Description

COVID-19 patients para-clinical progression

#### Timepoint

frequently in hospitalization time

#### Method of measurement

O2 saturation, CBC, inflammatory biomarkers (ESR, CRP)

## Secondary outcomes

## 1

### **Description**

O2 saturation

### **Timepoint**

all along the hospitalization

### **Method of measurement**

Pulse oxymeter

## 2

### **Description**

Temperature

### **Timepoint**

All along the hospitalization

### **Method of measurement**

Thermometer

## 3

### **Description**

Heart rate

### **Timepoint**

All along the hospitalization

### **Method of measurement**

clinical examination

## 4

### **Description**

Respiratory rate

### **Timepoint**

All along the hospitalization

### **Method of measurement**

Clinical examination

## 5

### **Description**

Chest Imaging

### **Timepoint**

Along the hospitalization

### **Method of measurement**

Chest X-ray, CT scan

## 6

### **Description**

ECG

### **Timepoint**

Along the hospitalization

### **Method of measurement**

12-Lead ECG tool

## 7

### **Description**

Coughing

### **Timepoint**

along the hospitalization

### **Method of measurement**

inspection and examination

## 8

### **Description**

ICU admission

### **Timepoint**

Along the hospitalization

### **Method of measurement**

Documents

## 9

### **Description**

Hospitalization duration

### **Timepoint**

daily

### **Method of measurement**

documents

## 10

### **Description**

Blood Pressure

### **Timepoint**

Along the hospitalization

### **Method of measurement**

Barometer

## **Intervention groups**

### 1

#### **Description**

Intervention group: Atazanavir/ritonavir treatment group will receive 300/100 mg of each drug for 14 days once a day. It will be prescribed as tablets.

#### **Category**

Treatment - Drugs

### 2

#### **Description**

Control group: Lopinavir/ritonavir treatment group will receive 200/50 mg of each drug for 14 days twice a day. It will be prescribed as tablets.

#### **Category**

Treatment - Drugs

## **Recruitment centers**

### 1

#### **Recruitment center**

##### **Name of recruitment center**

Shahid Bahonar Hospital

##### **Full name of responsible person**

Zeinab Siami

##### **Street address**

Bahonar Hospital, Shoura Boulivard, Karaj+

##### **City**

Karaj

##### **Province**

Alborz

##### **Postal code**

3154686695

**Phone**

+98 26 3252 7575

**Email**

siami\_z@yahoo.com

## Sponsors / Funding sources

### 1

**Sponsor**

**Name of organization / entity**

Alborz University of Medical Sciences

**Full name of responsible person**

Mohamad Noorisepehr

**Street address**

Research Office, Safarian Alley, Golshahr Avenue

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**Postal code**

3198764653

**Phone**

+98 26 3464 3705

**Email**

Research@abzums.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Alborz 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**

Alborz University of Medical Sciences

**Full name of responsible person**

Zeinab Siami

**Position**

Associate Professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Infectious diseases

**Street address**

Shoura Boulevard, Shahid Bahonar Hospital

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## Person responsible for scientific inquiries

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Alborz University of Medical Sciences

**Full name of responsible person**

Zeinab Siami

**Position**

Associate Professor

**Latest degree**

Specialist

**Other areas of specialty/work**

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## Person responsible for updating data

**Contact**

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Alborz University of Medical Sciences

**Full name of responsible person**

Zeinab Siami

**Position**

Associate Professor

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Specialist

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**Postal code**

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**Email**

z.siami@abzums.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

Not applicable

### Informed Consent Form

No - There is not a plan to make this available

### Clinical Study Report

Yes - There is 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

All related data except the consent form and analysis-

used codes, would be accessible after final group agreement.

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

for two years after publication

### To whom data/document is available

All related data and materials would be accessible for all those who are eager for further information.

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

All kinds of analyses would be allowed in case arrangement is made with corresponding author.

### From where data/document is obtainable

For further documents access contact with Dr. Siami via email address: z.siami@abzums.ac.ir

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

After arrangement with Dr. Siami, in case of agreement, information and data would be accessible.

### Comments