Clinical Trial Protocol
Iranian Registry of Clinical Trials

28 May 2026

Investigating the effect of Deferiprone on the improvement of symptoms of Coronavirus 2019 (COVID 19)

Protocol summary

Study aim
To determine the effect of Deferiprone on the severity of symptoms and mortality of patients with covid 19

Design
This trial (Phase 3) is performed on 80 patients using a parallel design (40 patients in each group): Intervention group: In addition to the main drugs recommended by the National Committee for Coronavirus, the group will receive the oral drug Deferiprone as an adjutant treatment. Control group: The group that will receive only the main drugs recommended by the National Committee for Coronavirus. The randomization method is based on the formation of Permuted Blocked randomization (each block will consists 4 patients).

Settings and conduct
The study is being conducted at Tohid Hospital in Sanandaj (the provincial treatment center for patients with Qovid 19). Patients, physicians, and nurses who evaluate the outcomes will be blind to the groups studied.

Participants/Inclusion and exclusion criteria
Patients with covid 19 with 18 to 80 years of age will enter to the study. Patients who had a history of liver or kidney disease, as well as patients with anemia and also patients who have gastroenteritis will be excluded from this trial.

Intervention groups
Deferiprone

Main outcome variables
Improving the symptoms of Covid 19; duration of hospital stay; SPO2 to FiO2 ratio; duration required for RT-PCR test to be negative; mortality; adverse side effects

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20180114038350N3**
Registration date: **2020-05-01, 1399/02/12**
Registration timing: **prospective**

Last update: **2020-05-01, 1399/02/12**
Update count: **0**

Registration date
2020-05-01, 1399/02/12

Registrant information

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Khaled Rahmani

Name of organization / entity
Kurdistan University of Medical Sciences

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Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-05-04, 1399/02/15

Expected recruitment end date
2020-06-04, 1399/03/15

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Investigating the effect of Deferiprone on the improvement of symptoms of Coronavirus 2019 (COVID 19)

Public title
Effect of Deferiprone on the improvement of symptoms of Coronavirus 2019 (COVID 19)
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Covid 19 patients without needing ventilator Age between 18 to 80
Exclusion criteria:
Patients with anemia Patients with gastroenteritis Patients who had history of liver diseases Patients who had history of renal diseases
Age
From **18 years** old to **80 years** old
Gender
Both

Phase
3
Groups that have been masked

- Participant
- Outcome assessor

Sample size
Target sample size: **80**
Randomization (investigator's opinion)
Randomized
Randomization description
We will use permuted block randomization (each block consists 4 patients) method to allocate the patients into two study groups (control and intervention)
Blinding (investigator's opinion)
Double blinded
Blinding description
Study participants, physicians and nurses who evaluate the outcomes will be blind to the intervention and studied groups.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Kurdistan University of Medical Sciences
Street address
Kurdistan University of Medical Sciences , Pasdaran Blvd.
City
Sanandaj
Province
Kurdistan
Postal code
6617713446
Approval date
2020-04-20, 1399/02/01
Ethics committee reference number
IR.MUK.REC.1399.012

Health conditions studied

1

Description of health condition studied
Patients with Covid 19
ICD-10 code
U07.01
ICD-10 code description
Covid 19

Primary outcomes

1

Description
Improvement in disease symptoms (Fever and breathing)
Timepoint
This primary outcome is measured for patients before and during 5 days after treatment initiation
Method of measurement
Fever is calculated using mercury thermometers and respiration is calculated using the number of breaths per minute.

Secondary outcomes

1

Description
Duration of hospital stay
Timepoint
Based on the number of days a person is hospitalized
Method of measurement
Medical records

2

Description
Improvement in SPO2 to FiO2 ratio
Timepoint
Percent of SPO2
Method of measurement
Based on Oximeter pulse

3

Description
Death
Timepoint
Number of death in each group
Method of measurement
Medical Records

Intervention groups

1

Description
Intervention group: Oral Deferiprone is added to drugs used to treat Covid 19 (approved by the National Committee).
Category
Treatment - Drugs

2

Description
Control group: Patients receive only the drugs used to treat Quaid 19 (approved by the National Committee).
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Tohid Hospital, a teaching hospital in Sanandaj
Full name of responsible person
Karim Naseri
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Sanandaj University of Medical Sciences
Full name of responsible person
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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
Sanandaj 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
Sanandaj University of Medical Sciences
Full name of responsible person
Khaled Rahmani
Position
Assistant professor
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Epidemiology
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is 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
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is 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
Not applicable

Title and more details about the data/document
In case of publisher journal request, data would be sent to the journal.

When the data will become available and for how long
During the publication of paper and 6 months after publish

To whom data/document is available
Editor of the journal that publish the paper and academic researchers with permission of correspondence author

Under which criteria data/document could be used
Data can only used to meta analysis with permission of correspondence author

From where data/document is obtainable
The correspondence author of the study

What processes are involved for a request to access data/document
By sending the mail to the correspondence author

Comments