Clinical Trial Protocol
Iranian Registry of Clinical Trials

13 Nov 2026

Plasmapheresis in the treatment of patients with COVID-19

Protocol summary

Study aim
Determining the effectiveness of plasmapheresis treatment in the treatment of patients with Coronavirus disease (COVID-19)
Design
Clinical trial, no control group, no randomization, phase 2 design of 100 patients
Settings and conduct
The study will be performed in critically ill patients with a diagnosis of Covid-19 disease admitted to the intensive care unit of Hazrat Rasoul Akram Hospital in Tehran in 1399. Symptoms will be monitored before and after plasmapheresis.
Participants/Inclusion and exclusion criteria
Coronavirus disease (COVID-19) admitted in the intensive care unit (ICU)
Intervention groups
Plasmaphereses at a dose of 60 mg per kg daily up to four doses
Main outcome variables
The status of fever, cough, dyspnea, oxygen saturation, lactate dehydrogenase, sedimentation and C-reactive protein in patients before and after plasmapheresis will be assessed.

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20180316039112N3**
Registration date: **2021-02-01, 1399/11/13**
Registration timing: **retrospective**

Last update: **2021-02-01, 1399/11/13**
Update count: **0**
Registration date
2021-02-01, 1399/11/13

Registrant information

Name
Tayeb Ramim
Name of organization / entity
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Iran (Islamic Republic of)
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2020-06-21, 1399/04/01
Expected recruitment end date
2020-12-21, 1399/10/01
Actual recruitment start date
2020-06-21, 1399/04/01
Actual recruitment end date
2020-12-21, 1399/10/01
Trial completion date
2020-12-21, 1399/10/01

Scientific title
Plasmapheresis in the treatment of patients with COVID-19

Public title
Plasmapheresis in the treatment of patients with COVID-19
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
COVID-19
Exclusion criteria:
Patient dissatisfaction with inclusion in the study
Age
From **18 years** old
Gender
Both

Phase
2
Groups that have been masked
No information
Sample size
Target sample size: **100**
Actual sample size reached: **120**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Single
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Iran University of Medical Sciences
Street address
Rasool Akram Hospital, Mazyar Mansori Ave, Satar Khan Ave.
City
Tehran
Province
Tehran
Postal code
1445613131
Approval date
2020-09-16, 1399/06/26
Ethics committee reference number
IR.IUMS.REC.1399.550

Health conditions studied

1

Description of health condition studied
coronavirus disease (covid-19)
ICD-10 code
B97.2
ICD-10 code description
Coronavirus as the cause of diseases classified elsewhere

Primary outcomes

1

Description
Percentage of blood oxygen saturation
Timepoint
Before and after the intervention
Method of measurement
Pulse oximetry

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Plasmapheresis with a dose of 40 cc per kilogram daily up to four doses
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Rasool Akram hospital
Full name of responsible person
Tayeb Ramim
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Rasoul-e-Akram Hospital, Mazar-i-Mansouri St., Sattarkhan Street
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Sponsors / Funding sources

1

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https://iums.ac.ir/

Grant name

Grant code / Reference number

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

Title of funding source
Iran 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
Iran University of Medical Sciences

Full name of responsible person
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Position
Deputy of Research and Education

Latest degree
Medical doctor

Other areas of specialty/work
Epidemiology

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD
There is no more information

Study Protocol
No - There is not a plan to make this available

Statistical Analysis Plan
No - There is not a plan to make this available

Informed Consent Form
No - There is not a plan to make this available

Clinical Study Report
No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available