

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Effect of preoperative erythropoetin and Ferinject injection on transfusion rate after adult cardiac surgery and comparing it with patients without erythropoetin and erythropoetin injection.

Protocol summary

Study aim

Effect of preoperative erythropoetin and Ferinject injection on transfusion rate after cardiac surgery

Design

Clinical trial with a control group, with parallel groups, double-blind, randomized, phase 2 on 100 patients. The Excel software was used for randomization.

Settings and conduct

In Modarres Hospital in tehran These patients are divided into two groups of 100 men and women. Anemia is considered to be less than 12 in women and less than 13 in men. and erythropoetin 5_7 days before surgery, in hemoglobin less than 12 It is prescribed for female patients and less than 13 for men. And they are compared with 100 patients without erythropoetin injection and fringect in terms of the amount of blood injection.

Participants/Inclusion and exclusion criteria

Not allergic to iron tablets. liver disease .pediatric. iron overload

Intervention groups

Adults who undergo open heart surgery and receive intravenous iron, and control patients only receive blood transfusions in case of anemia.

Main outcome variables

Less blood consumption in heart surgery patients.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20221021056256N1**

Registration date: **2022-11-26, 1401/09/05**

Registration timing: **registered_while_recruiting**

Last update: **2022-11-26, 1401/09/05**

Update count: **0**

Registration date

2022-11-26, 1401/09/05

Registrant information

Name

Alireza Omid farzin

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 912 549 9128

Email address

alirezaomidi661818@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-11-22, 1401/09/01

Expected recruitment end date

2023-03-21, 1402/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of preoperative erythropoetin and Ferinject injection on transfusion rate after adult cardiac surgery and comparing it with patients without erythropoetin and erythropoetin injection.

Public title

Effect of erythropoetin and Ferinject on transfusion

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

These patients are divided into two groups, male and female. In the female group, hemoglobin is less than 12 and in the male group, hemoglobin is less than 13 is considered anemia.

Exclusion criteria:

History of allergy to iron. liver disease evidence of iron overload pediatrics

Age

From 20 years old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: 100

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization

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 shahid Beheshti university of medical science

Street address

Modarres Hospital, Sadat abad Ave, Tehran

City

Tehran

Province

Tehran

Postal code

1393845861

Approval date

2022-06-05, 1401/03/15

Ethics committee reference number

IR.SBMU.RETECH.REC.1401.459

Health conditions studied

1

Description of health condition studied

Blood transfusion in heart surgery.

ICD-10 code

D50

ICD-10 code description

Iron deficiency anemia

Primary outcomes

1

Description

Frequency of blood transfusions.

Timepoint

5_7 day before surgery

Method of measurement

pack cell

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: injection of erythropoetin and ferinject

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Modarres Hospital

Full name of responsible person

Dr Ramin Baghaei Tehrani

Street address

Modarres Hospital, Sadat abad Ave, Tehran

City

Tehran

Province

Tehran

Postal code

13938458587

Phone

+98 21 2207 4090

Email

alirezaomidi661818@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The Shahid Beheshti University

Full name of responsible person

Dr Ramin Baghaei Tehrani

Street address

Modarres Hospital, Saadat abad Ave, Tehran

City

Tehran

Province

Tehran

Postal code

1393845861

Phone

+98 21 2207 4090

Email

alirezaomidi661818@gmail.com

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

The Shahid Beheshti University

Proportion provided by this source

10

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**

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Dr Ramin Baghaei Tehrani

Position

Associate professor

Latest degree

Subspecialist

Other areas of specialty/work

Cardiology

Street address

Modarres hospital, Sadat abad Ave , Tehran

City

Tehran

Province

Tehran

Postal code

1393845861

Phone

+98 21 2207 4090

Email

alirezaomidi661818@gmail.com

Person responsible for scientific**inquiries****Contact****Name of organization / entity**

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Dr Ramin Baghaei Tehrani

Position

associate professor

Latest degree

Subspecialist

Other areas of specialty/work

Cardiology

Street address

Modarres hospital, Sadat abad Ave, Tehran

City

Tehran

Province

Tehran

Postal code

1393845861

Phone

+98 21 2207 4090

Email

alirezaomidi661818@gmail.com

Person responsible for updating data**Contact****Name of organization / entity**

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Dr Ramin Baghaei Tehrani

Position

Associate professor

Latest degree

Subspecialist

Other areas of specialty/work

Cardiology

Street address

Modarres hospital, Sadat abad Ave, Tehran

City

Tehran

Province

Tehran

Postal code

1393845861

Phone

+98 21 2207 4090

Email

alirezaomidi661818@gmail.com

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

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

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

Part of the data, such as the main result, can be published.

When the data will become available and for how long

6 month after publish

To whom data/document is available

for all

Under which criteria data/document could be used

for all is available

From where data/document is obtainable

journal of published

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

1 month from the time of application

Comments