

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

07 Jul 2026

### Investigating the effects of dexmedetomidine infusion during surgery on renal function parameters in patients receiving kidney transplantation

#### Protocol summary

Vice-chancellor for Research, Iran University of Medical Sciences

#### Summary

50 patients will be randomly assigned into treatment and placebo control group. They will receive standard care and intervention for kidney transplantation in our setting. Treatment group will receive 1 mcg/kg/hr of the dexmedetomidine infusion and the placebo group will receive the same volume of normal saline. Demographic information, clinical examination, patients's history and blood chemistry parameters will be recorded and analyzed.

#### Expected recruitment start date

2017-11-06, 1396/08/15

#### Expected recruitment end date

2018-03-21, 1397/01/01

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2017101331487N5**

Registration date: **2017-10-24, 1396/08/02**

Registration timing: **prospective**

Last update:

Update count: **0**

##### Registration date

2017-10-24, 1396/08/02

##### Registrant information

###### Name

مهرداد Mesbah kiaei

###### Name of organization / entity

Iran University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 912 346 5866

###### Email address

dr.mmesbah@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

#### Scientific title

Investigating the effects of dexmedetomidine infusion during surgery on renal function parameters in patients receiving kidney transplantation

#### Public title

Drug therapy for improving the renal function after kidney transplantation

#### Purpose

Prevention

#### Inclusion/Exclusion criteria

Inclusion criteria: - end stage renal disease (ESRD) patients - candidate for renal transplant - graft from living donor - age from 18 to 70 years old Exclusion criteria: - bradycardia (HR<50) - hypotension (SBP<100) - ejection fraction below 30% (EF<30%) - transplant from cadaver - simultaneous transplantation of kidney and pancreas - having contraindication for kidney transplantation

#### Age

From **18 years** old to **70 years** old

#### Gender

Both

#### Phase

1-2

#### Groups that have been masked

*No information*

## Sample size

Target sample size: 50

## Randomization (investigator's opinion)

Randomized

## Randomization description

## Blinding (investigator's opinion)

Double blinded

## Blinding description

## Placebo

Used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Research Ethics Committee of the Iran University of Medical Sciences

##### Street address

Next to Milad Tower, Hemmat highway

##### City

Tehran

##### Postal code

15459-13487

##### Approval date

2017-09-23, 1396/07/01

##### Ethics committee reference number

IR.IUMS.FMD.REC1396.9311174023

## Health conditions studied

### 1

#### Description of health condition studied

End-stage renal disease

#### ICD-10 code

N18.5

#### ICD-10 code description

Chronic kidney disease, stage 5

## Primary outcomes

### 1

#### Description

Glomerular filtration rate

#### Timepoint

After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge

#### Method of measurement

Biochemistry analyzer

### 2

#### Description

Creatinine

#### Timepoint

After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge

#### Method of measurement

Biochemistry analyzer

### 3

#### Description

Urea

#### Timepoint

After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge

#### Method of measurement

Biochemistry analyzer

### 4

#### Description

Sodium

#### Timepoint

After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge

#### Method of measurement

Biochemistry analyzer

### 5

#### Description

Hemoglobin

#### Timepoint

After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge

#### Method of measurement

Hematology analyzer

### 6

#### Description

Hematocrit

#### Timepoint

After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge

#### Method of measurement

Hematology analyzer

## Secondary outcomes

empty

## Intervention groups

1

### Description

Control

### Category

Placebo

2

### Description

Dexmedetomidine infusion with dose of 1 mcg/kg/hour

### Category

Treatment - Drugs

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

Hashemi Nejad Urology Hospital

#### Full name of responsible person

Dr Mehrdad Mesbah Kiaee

#### Street address

Valinejad Alley, Valiasr St

#### City

Tehran

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

Vice-chancellor for Research, Iran University of Medical Sciences

#### Full name of responsible person

Dr Seyed Kazem Malakouti

#### Street address

Office of Vice-chancellor for Research, Iran University of Medical Sciences

#### City

Tehran

### Grant name

### Grant code / Reference number

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

Yes

### Title of funding source

Vice-chancellor for Research, Iran University of Medical Sciences

### Proportion provided by this source

100

### Public or private sector

*empty*

### Domestic or foreign origin

*empty*

### Category of foreign source of funding

*empty*

### Country of origin

## Type of organization providing the funding

*empty*

## Person responsible for general inquiries

### Contact

#### Name of organization / entity

Iran University of Medical Sciences

#### Full name of responsible person

Dr Mehrdad Mesbah Kiaee

#### Position

Faculty member

#### Other areas of specialty/work

#### Street address

Next to Milad Tower, Hemmat highway

#### City

Tehran

#### Postal code

1593748711

#### Phone

+98 21 8670 2503

#### Fax

#### Email

dr.mmesbah@gmail.com

#### Web page address

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

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Iran University of Medical Sciences

#### Full name of responsible person

Dr Mehrdad Mesbah Kiaee

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## Person responsible for updating data

### Contact

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**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*