

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

29 Jun 2026

### Comparative effect of propofol and dexmedetomidine on fertility rate in patients candidate for IVF

#### Protocol summary

##### Study aim

Determination and Comparison of the Effect of Propofol and Dexmedetomidine on Fertility Rate in IVF Candidates

##### Design

In this randomized clinical trial, 78 infertile patients undergoing IVF treatment will be available and will be examined. The code of ethics will be obtained from the Ethics Committee of Shahid Beheshti University before starting the study. Inclusion criteria are infertility and being a candidate for IVF treatment, and exclusion criteria include cases where patient data are incomplete or cannot be followed up. Subjects were randomly assigned to one of the two groups receiving propofol or dexmedetomidine at standard recording doses and fertility rates were compared between the two groups using chi-square and Fisher tests and the significance level was 0.05.

##### Settings and conduct

Patients with Infertility Candidate in Laboratory Referred to Taleghani Hospital in Tehran

##### Participants/Inclusion and exclusion criteria

Inclusion criteria are infertility and being a candidate for IVF treatment, and exclusion criteria include cases where patient data are incomplete or cannot be followed up.

##### Intervention groups

Infertility patients undergoing IVF treatment

##### Main outcome variables

This study addresses the question of whether the effect of propofol and doxmedetomidine on fertility rates in IVF candidates is different, in order to determine the best drug with appropriate outcomes in women undergoing IVF treatment.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20190121042444N2**

Registration date: **2020-05-13, 1399/02/24**

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

Last update: **2020-05-13, 1399/02/24**

Update count: **0**

##### Registration date

2020-05-13, 1399/02/24

##### Registrant information

###### Name

faranak behnaz

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 2274 1174

###### Email address

faranak.behnaz@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-03-20, 1399/01/01

##### Expected recruitment end date

2021-03-21, 1400/01/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparative effect of propofol and dexmedetomidine on fertility rate in patients candidate for IVF

##### Public title

Comparative effect of propofol and dexmedetomidine on fertility rate in patients candidate for IVF

## Purpose

Treatment

## Inclusion/Exclusion criteria

### Inclusion criteria:

Infertility patients undergoing IVF treatment

### Exclusion criteria:

Patients who need general anesthesia due to decreased oxygen saturation

## Age

From **18 years** old to **48 years** old

## Gender

Female

## Phase

3

## Groups that have been masked

- Participant
- Investigator

## Sample size

Target sample size: **78**

## Randomization (investigator's opinion)

Randomized

## Randomization description

Random number table method, based on the table of random numbers, first the number of samples is entered using a computer and each double-digit code is assigned. The researcher randomly selects a point in the Weston line. Work continues until the sample size is complete

## Blinding (investigator's opinion)

Double blinded

## Blinding description

The researcher, the researcher who prescribes the drug, is blind. In this study, Drugs 1 and Drugs 2 are anesthetized by Nurses. Here Nurses know type 1 and 2 and is placed at the discretion of the researcher, who is an anesthesiologist and unaware of type 1 or 2, so the researcher is blind here and the participants in the study are blind because type 1 and they don't know 2

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary IDs

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

کمیته ملی اخلاق در پژوهش های زیست پزشکی

##### Street address

Quds Town between South Flamak Vazravshan Iran Street, Saha Central Headquarters Ministry of Health and Medical Education Tayyee 13

##### City

Tehran

## Province

Tehran

## Postal code

1467664961

## Approval date

2020-03-15, 1398/12/25

## Ethics committee reference number

IR.SBMU.MSP.REC.1398.995

## Health conditions studied

### 1

#### Description of health condition studied

infertility

#### ICD-10 code

N97. 9

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

BMI

#### Timepoint

Before the intervention and one week after the intervention at the same time as the laboratory test for pregnancy

#### Method of measurement

Based on checklist and measurement

### 2

#### Description

Fertility

#### Timepoint

Before the intervention and One week after the intervention

#### Method of measurement

Positive / negative based on intravenous blood test for pregnancy test

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: In this study, they were randomly assigned to a group under the intervention of propofol with a dose of 10-20 micrograms based on weight per minute. Then the success of the pregnancy is checked by fertility blood test one week after .

#### Category

Treatment - Drugs

**2**

**Description**

Intervention group: Another group under the dose of dexmedetomidine with a dose of 0.4-0.2 microgram based on weight per minute. Then the success of the pregnancy is checked by fertility blood test one week after. The two intervention groups are then compared in terms of the success of the pregnancy by artificial insemination

**Category**

Treatment - Drugs

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Taleghani Hospital - Tehran

**Full name of responsible person**

atiyeh tizghadam

**Street address**

Yemen Street/Velenjak

**City**

Tehran

**Province**

Tehran

**Postal code**

1985711151

**Phone**

+98 21 2274 1174

**Email**

atiyeh.tizghadam@yahoo.com

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Nahid Asadi

**Street address**

Yaman/Velenjak

**City**

Tehran

**Province**

Tehran

**Postal code**

1985711151

**Phone**

+98 21 2243 2572

**Email**

nahidasadi25@yahoo.com

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Shahid Beheshti University of Medical Sciences

**Proportion provided by this source**

25

**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**

Faranak Behnaz

**Position**

Asistant professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Anesthesiology

**Street address**

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**Postal code**

1989934148

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**Email**

fraranak.behnaz@gmail.com

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Faranak Behnaz

**Position**

Asistant professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Anesthesiology

**Street address**

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**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Atiyeh Tizghadam

**Position**

Rezident

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Anesthesiology

**Street address**

Yaman/Velenjak

**City**

Tehran

**Province**

Tehran

**Postal code**

1985711151

**Phone**

+98 21 2274 1174

**Email**

atiyeh.tizghadam@yahoo.com

**Sharing plan**

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

Undecided - It is not yet known if there will be 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**

Undecided - It is not yet known if there will be a plan to make this available

**Informed Consent Form**

Undecided - It is not yet known if there will be a plan to make this available

**Clinical Study Report**

Undecided - It is not yet known if there will be a plan to make this available

**Analytic Code**

Undecided - It is not yet known if there will be a plan to make this available

**Data Dictionary**

Undecided - It is not yet known if there will be a plan to make this available