

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

27 Jun 2026

### Comparison of the Hemodynamic parameters of two regimens propofol-ketamin & etomidate during anesthesia induction in low EF CABG patients

#### Protocol summary

##### Summary

The aim of this randomized double-blind clinical trial is to evaluate and comparison the hemodynamic changes of propofol + ketamine and etomidate during anesthesia induction. A total of 80 patients, meeting eligibility criteria, were randomly allocated into two equal groups. Inclusion criteria are First time elective CABG surgery; Age between 40 and 70 years; EF<40%. Exclusion criteria are 70 >MAP>110 mmHg; CABG with valve operation; Received etomidate or propofol or thiopental in one week ago; Egg and soy allergy; Sensitivity to etomidate or propofol or ketamine; Adrenal insufficiency. After establishing arterial line and routine monitors, blood pressure (systole, diastole and mean arterial pressure) and heart rate are measured and serve as baseline values. At first, all patients will receive 0.02 mg/kg midazolam and 2 µg/kg fentanyl. One minute later in control group Normal saline + 0.2 mg/kg Etomidate and in intervention group 1 mg/kg Ketamine + 1.5 mg/kg Propofol will be infused. Immediately after the prescribed hypnotic drug, 0.2 mg/kg cisatracurium for muscle relaxation and ease of intubation will be used. 1 min after administration of hypnotic drugs just before laryngoscopy as well as 1, 2 and 3 min after laryngoscopy and tracheal intubation, blood pressure and heart rate will be measured and compared in two groups.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201207184365N14**  
Registration date: **2012-11-07, 1391/08/17**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2012-11-07, 1391/08/17

##### Registrant information

###### Name

Afshin Gholipour Baradari

###### Name of organization / entity

Mazandaran University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 11 3326 1245

###### Email address

gholipourafshin@mazums.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Vice chancellor for research of Mazandaran University of Medical Sciences

##### Expected recruitment start date

2012-09-22, 1391/07/01

##### Expected recruitment end date

2013-02-19, 1391/12/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of the Hemodynamic parameters of two regimens propofol-ketamin & etomidate during anesthesia induction in low EF CABG patients

##### Public title

Comparison of the Hemodynamic parameters of two regimens propofol-ketamin & etomidate during anesthesia induction in low EF CABG patients

##### Purpose

Treatment

### Inclusion/Exclusion criteria

Inclusion criteria: First time elective CABG surgery; Age between 40 and 70 years; EF<40% Exclusion criteria:70 >MAP>110 mmHg; CABG with valve operation; Received etomidate or propofol or thiopental in one week ago; Egg and soy allergy; Sensitivity to etomidate or propofol or ketamine; Adrenal insufficiency

### Age

From **40 years** old to **70 years** old

### Gender

Both

### Phase

2-3

### Groups that have been masked

*No information*

### Sample size

Target sample size: **80**

### 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

Ethic committee of Mazandaran University of Medical Sciences

##### Street address

Mazandaran University of Medical Sciences, Moallem Square

##### City

Sari

##### Postal code

46175866

#### Approval date

2012-09-15, 1391/06/25

#### Ethics committee reference number

91-105

## Health conditions studied

### 1

#### Description of health condition studied

Hemodynamic Change

#### ICD-10 code

197.9

#### ICD-10 code description

Postprocedural disorder of circulatory system, unspecified

## Primary outcomes

### 1

#### Description

Mean arterial pressure

#### Timepoint

Before laryngoscopy as well as immediately, 1, 2 and 3 min after tracheal intubation

#### Method of measurement

Invasive Blood Pressure

### 2

#### Description

Systolic blood pressure

#### Timepoint

Before laryngoscopy as well as immediately, 1, 2 and 3 min after tracheal intubation

#### Method of measurement

Invasive Blood Pressure

### 3

#### Description

Diastolic blood pressure

#### Timepoint

Before laryngoscopy as well as immediately, 1, 2 and 3 min after tracheal intubation

#### Method of measurement

Invasive Blood Pressure

### 4

#### Description

Heart rate

#### Timepoint

Before laryngoscopy as well as immediately, 1, 2 and 3 min after tracheal intubation

#### Method of measurement

Heart monitoring

## Secondary outcomes

### 1

#### Description

Muscle twitching

#### Timepoint

After anesthetic infusion

#### Method of measurement

Inspection

### 2

#### Description

pain on injection

**Timepoint**

After anesthetic infusion

**Method of measurement**

Inspection

**Intervention groups****1****Description**

Control group: Normal saline + 0.2 mg/kg Etomidate

**Category**

Treatment - Drugs

**2****Description**

Intervention group: 1 mg/kg Ketamine + 1.5 mg/kg Propofol

**Category**

Treatment - Drugs

**Recruitment centers****1****Recruitment center****Name of recruitment center**

Mazandran Heart Center

**Full name of responsible person**

afshin gholipour baradari, MD, CCMF, associate professor

**Street address**

Mazandaran Heart center, Artesh Blvd

**City**

Sari

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Vice chancellor for research of Mazandaran University of Medical Sciences

**Full name of responsible person**

Ahmad Ali Enayati, MD

**Street address**

Mazandaran university of medical sciences, Moallem Square, Sari, Iran

**City**

Sari

**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 of Mazandaran 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**

Mazandaran University Of Medical Sciences

**Full name of responsible person**

Afshin Gholipour Baradari, MD

**Position**

CCMF, Associate Professor, Chief of ICU

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Assistant Professor, Cardiac anesthesia fellowship

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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*