# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

07 Jul 2026

## The comparison of metoprolol and carvedilol in prevention of AF after CABGS

### Protocol summary

**Study aim**
Comparison of the effect of cartidilol and metoprolol on the incidence of AF after cardiac surgery in patients undergoing open heart surgery in Imam Ali Hospital in 1997

**Design**
To assign people to two groups, randomization is done by blocking method, which each intervention patient receives. As such, 6 blocks of 4 are provided as follows.1) AABB 2) ABAB 3) ABBA 4) BBAA 5) BABA 6) BAAB Block selection is based on the random number table. Group A patients receiving metoprolol and B patient receiving cartidilol.

**Settings and conduct**
In this study, double blind blindness is used so that the patient and the investigator who applies the interventions are not aware of the interventions. . After transferring patients to the department, monitoring of the 24-hourly electrocardiogram will be performed for five days

**Participants/Inclusion and exclusion criteria**
. The criteria for entering the study will be all patients who undergo cardiac surgery due to coronary artery disease or valvular abnormalities, preoperative beta-blocker therapy (propranol, metoprolol, cartidilol for heart rate of 60 to 70 Minutes) and obtaining written consent, patients with prior history of atrial fibrillation, receive class I, II antiarrhythmic drugs, digoxin, permanent or temporary pacemakers, each grade from the heart block, bradycardia with heart rate less than 50, end-stage renal disease (ESRD) ), Severe pulmonary disease (pneumonia, COPD) and severe liver disease (cirrhosis or hepatitis folinitis) They will not be included in the study.

**Intervention groups**
In this randomized clinical trial, patients undergoing non-emergency open heart surgery candidates admitted to Ali ibn Abitaleb Zahedan Hospital will be divided into two groups of metoprolol, cartidilol to prevent the onset of AF.

**Main outcome variables**
AF incidence in patients after open heart surgery

### General information

**Reason for update**

**Acronym**
AFCABG

**IRCT registration information**
IRCT registration number: **IRCT20181110041604N1**
Registration date: **2019-04-13, 1398/01/24**
Registration timing: **registered_while_recruiting**

Last update: **2019-04-13, 1398/01/24**
Update count: **0**

**Registration date**
2019-04-13, 1398/01/24

**Registrant information**

**Name**
aylar ghavanjzade
**Name of organization / entity**
**Country**
Iran (Islamic Republic of)
**Phone**
+98 17 3329 4209
**Email address**
rasoul.ftoomach@gmail.com

**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2019-01-21, 1397/11/01

**Expected recruitment end date**
2019-09-23, 1398/07/01

**Actual recruitment start date**
empty

**Actual recruitment end date**
empty
**Trial completion date**
empty

**Scientific title**
The comparison of metoprolol and carvedilol in prevention of AF after CABGS

**Public title**
The comparison of metoprolol and carvedilol in prevention of AF after CABGS
**Purpose**
Treatment
**Inclusion/Exclusion criteria**
**Inclusion criteria:**
The criteria for entry into the study will be all patients who undergo cardiac surgery due to coronary artery disease or valvular disorders
**Exclusion criteria:**
Previous history of atrial fibrillation Receiving class I, II antiarrhythmic drugs Digoxin Permanent or temporary pacemaker Each grade of the heart block - Bradycardia with heart rate less than 50 Dialysis patients Severe pulmonary disease Heavy liver disease
**Age**
No age limit
**Gender**
Both

**Phase**
2
**Groups that have been masked**

- Participant
- Care provider
- Investigator

**Sample size**
Target sample size: **170**
**Randomization (investigator's opinion)**
Randomized
**Randomization description**
To assign people to two groups, randomization is done by blocking method, which each intervention patient receives. As such, 6 blocks of 4 are provided as follows. 1) AABB 2) ABAB 3) ABBA 4) BBAA 5) BABA 6) BAAB Block selection is based on the random number table. Group A patients receiving metoprolol and B patient receiving cartidilol.
**Blinding (investigator's opinion)**
Double blinded
**Blinding description**
To assign people to two groups, randomization is done by blocking method, which each intervention is receiving. Patients and physicians are not aware of blind blindness. Block selection is based on the random number table. Group A patients receiving metoprolol and B patient receiving carveidilol.
**Placebo**
Not used
**Assignment**
Parallel
**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**
**Name of ethics committee**
Ethics committee of Zahedan University of Medical Sciences
**Street address**
Imam Ali Hospital ,Khalij Fars Blvd
**City**
Zahedan
**Province**
Sistan-va-Balouchestan
**Postal code**
9817959515
**Approval date**
2019-01-30, 1397/11/10
**Ethics committee reference number**
IR.ZAUMS.REC.1397.250

## Health conditions studied

### 1

**Description of health condition studied**
AF
**ICD-10 code**
I48.0
**ICD-10 code description**
Paroxysmal atrial fibrillation

## Primary outcomes

### 1

**Description**
AF after surgery
**Timepoint**
5 days after surgery
**Method of measurement**
ECG

## Secondary outcomes

empty

## Intervention groups

### 1

**Description**
Intervention group: Patients who receive metoral
**Category**
Treatment - Drugs

**2**

**Description**
Intervention group: Patients receiving carvedilol
**Category**
Treatment - Drugs

## Recruitment centers

**1**

**Recruitment center**
**Name of recruitment center**
Imam Ali hospital Zahedan
**Full name of responsible person**
Aylar Ghavanjzade
**Street address**
Khalije Fars Blvd.
**City**
Zahedan
**Province**
Sistan-va-Balouchestan
**Postal code**
9817959515
**Phone**
+98 54 3329 5634
**Email**
Rasoul.ftoomach@gmil.com

## Sponsors / Funding sources

**1**

**Sponsor**
**Name of organization / entity**
Zahedan University of Medical Sciences
**Full name of responsible person**
Deputy of Research of Zahedan University of Medical Sciences-Dr Shahraki
**Street address**
Khalij Fars Blvd.
**City**
Zahedan
**Province**
Sistan-va-Balouchestan
**Postal code**
9817959515
**Phone**
+98 54 3329 5634
**Email**
Rasoul.Ftoomach@gmail.com
**Web page address**
http://Zaums.ac.ir/default.page
**Grant name**
**Grant code / Reference number**
**Is the source of funding the same sponsor organization/entity?**
Yes
**Title of funding source**
Zahedan University of Medical Sciences
**Proportion provided by this source**
20
**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**
Zahedan University of Medical Sciences
**Full name of responsible person**
Aylar.Ghavanjzade
**Position**
Resident
**Latest degree**
Medical doctor
**Other areas of specialty/work**
Cardiology
**Street address**
Khalij Fars Blvd
**City**
Zahedan
**Province**
Sistan-va-Balouchestan
**Postal code**
9817959515
**Phone**
+98 911 523 5760
**Email**
Rasoul.ftoomach@gmail.com

## Person responsible for scientific inquiries

**Contact**
**Name of organization / entity**
Zahedan University of Medical Sciences
**Full name of responsible person**
Aylar Ghavanjzade
**Position**
Resident
**Latest degree**
Medical doctor
**Other areas of specialty/work**
Cardiology
**Street address**
Persian Gulf Blvd.
**City**
Zahedan
**Province**
Sistan-va-Balouchestan
**Postal code**
9817959515
**Phone**
+98 54 3329 5637
**Email**
Rasoul.ftoomach@gmail.com

## Person responsible for updating data

**Contact**

**Name of organization / entity**
Zahedan University of Medical Sciences

**Full name of responsible person**
Aylar Ghavanjzade

**Position**
Consultant

**Latest degree**
Medical doctor

**Other areas of specialty/work**
Cardiology

**Street address**
Khalije Fars blvd

**City**
Zahedan

**Province**
Sistan-va-Balouchestan

**Postal code**
9817959515

**Phone**
+98 54 3329 5637

**Email**
Rasoul.ftoomach@gmail.com

## 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**
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