

Ivabradine versus metoprolol for heart rate reduction before coronary computed tomography angiography: a randomised trial

Submission date 21/09/2009	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 01/10/2009	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 07/09/2011	Condition category Circulatory System	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

Waehringer Guertel 18-20
Vienna
Austria
1090

Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Oral premedication with ivabradine versus metoprolol for heart rate reduction before coronary computed tomography angiography: a randomised trial

Study objectives

1. Oral premedication with either ivabradine or metoprolol provides sufficient heart rate control in patients before coronary computed tomography angiography
2. Ivabradine leads to less blood pressure drop compared to metoprolol

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics Committee of the Privatklinik Josefstadt approved on the 18th January 2007 (ref: 002 /2007)

Study design

Interventional single centre single-blind randomised study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Coronary artery disease

Interventions

Oral medication with 15 mg ivabradine versus 50 mg metoprolol before coronary computed tomography angiography. Drugs were administered once with a one-time follow-up 1 - 3 hours after intervention.

Intervention Type

Drug

Phase

Phase IV

Drug/device/biological/vaccine name(s)

Ivabradine, metoprolol

Primary outcome(s)

Heart rate reduction 60 - 180 minutes after medication

Key secondary outcome(s))

Systolic blood pressure before versus after medication

Completion date

31/05/2008

Eligibility**Key inclusion criteria**

1. Sinus rhythm
2. Heart rate greater than or equal to 60 bpm
3. Systolic blood pressure greater than or equal to 100 mmHg
4. Aged greater than or equal to 19 years irrespective of gender

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Known allergy to iodinated contrast media
2. Impaired renal function (creatinine serum level greater than 1.5 mg/dl)
3. Thyroid disorder
4. Unstable clinical condition
5. Frequent premature heartbeats
6. Sick-sinus-syndrome
7. Sinoatrial block
8. Second or third degree AV-block
9. Previous pacemaker implantation

Date of first enrolment

01/03/2007

Date of final enrolment

31/05/2008

Locations**Countries of recruitment**

Austria

Study participating centre

Waehringer Guertel 18-20

Vienna

Austria

1090

Sponsor information

Organisation

Medical University of Vienna (Austria)

ROR

<https://ror.org/05n3x4p02>

Funder(s)**Funder type**

University/education

Funder Name

Medical University of Vienna (Austria)

Results and Publications**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes