

Copeptin a marker for diagnosis and prognosis in heart attack

Submission date 29/07/2015	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 09/08/2015	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 05/09/2023	Condition category Circulatory System	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Chest pain can be caused by a variety of conditions, some of them dangerous (such as a heart attack), others harmless (such as a muscle pain). The aim of the study is to show if a new marker (a protein measured in the blood) Copeptin, may be helpful in quickly identifying patients at higher risk for having a heart attack, thus enabling quick introduction of adequate treatment.

Who can participate?

Adult experiencing chest pain lasting five minutes or more within the last 6 hours.

What does the study involve?

Copeptin is measured for all participants via a blood test on admission to hospital. They then undergo routine treatment according to current guidelines and standards of care. Participants' follow-up data are collected and analyzed in regard to Copeptin concentrations.

What are the possible benefits and risks of participating?

The marker is measured from a blood sample which is taken at the same time as a standard blood test, so does not need additional puncture if the vein. Thus, the risk for participation in the study is minimal.

Where is the study run from?

2nd Department of Cardiology, Medical University of Silesia (Poland)

When is the study starting and how long is it expected to run for?

December 2011 to December 2018

Who is funding the study?

Silesian Medical University (Poland)

Who is the main contact?

Miss Beata Morawiec

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Study information

Scientific Title

COPeptin for diagnosis and prediction in acute coronary syndrome (COPACS) study: design and objectives

Acronym

COPACS - COPeptin for Acute Coronary Syndrome

Study objectives

Copeptin, the C-terminal part of prohormone for vasopressin, is a marker of acute endogenous stress. An immediate increase in concentration after a few minutes from the onset of chest pain and rapid peak of concentration (1-2h) have practical implications for chest pain patients. Together with cardiac troponin, which is a specific marker for myocardial injury, it could be effective in quickly identifying patients at higher risk for having a heart attack, thus enabling quick introduction of adequate treatment. The aim of this study is to see whether this is the case.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethical Committee of Medical University of Silesia, 06/12/2011, ref: KNW/0022/KB1/187/11

Study design

Prospective, observational single-center study

Primary study design

Observational

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Chest pain

Interventions

Copeptin is measured in patients with chest pain lasting up to 6h at admission and remains double-blinded throughout the enrollment. Further all patients undergo routine management for the condition being the cause of admission, according to current guidelines and standards of care. Patients' follow-up data are collected and analyzed in regard to copeptin concentrations.

Intervention Type

Other

Primary outcome(s)

1. Primary diagnostic endpoint is the final diagnosis of NSTEMI
2. Primary prognostic endpoint is death of cardiovascular origin

Key secondary outcome(s)

1. Secondary diagnostic endpoint is the diagnosis of ACS (NSTEMI+UA)
2. Secondary prognostic endpoints is as Major Adverse Cardiac and Cerebrovascular Events (MACCE) and included death of cardiovascular origin, non-fatal AMI, UA, repeated cardiac revascularization, stroke

Completion date

31/12/2018

Eligibility**Key inclusion criteria**

1. Chest pain lasting five minutes or more
2. Beginning of symptoms in last six hours before admission

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

154

Key exclusion criteria

1. ST-segment elevation myocardial infarction (STEMI)
2. End-stage renal insufficiency (defined as GFR <15 ml/min/1.73m² and/or dialysis)
3. Anemia (defined as level of hemoglobin <10 g/dl for men; <8 g/dl for women)
4. Hyponatremia (defined as level of Na⁺ <125mmol/l)
5. Injury or big surgery in last four weeks
6. Cancer with predicted life duration < six months
7. Pregnancy
8. Age < 18 years
9. Lack of informed consent

Date of first enrolment

15/12/2011

Date of final enrolment

31/12/2016

Locations

Countries of recruitment

Poland

Study participating centre

2nd Department of Cardiology, Medical University of Silesia

M. Skłodowskiej-Curie Str. 10

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41-800

Sponsor information

Organisation

Silesian Medical University

ROR

<https://ror.org/005k7hp45>

Funder(s)

Funder type

University/education

Funder Name

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	24/01/2018	11/12/2020	Yes	No
Results article		12/11/2018	05/09/2023	Yes	No
Other publications	Study design	17/11/2016	05/09/2023	Yes	No