# Cognitive impairment following cardiac arrest and Target Temperature Management (A sub-study of the TTM Trial)

Published: 12-12-2012 Last updated: 26-04-2024

Understanding the cognitive disorders in patients who have woken up after a resuscitation and who were treated with a controlled temperature during the ICU treatment

**Ethical review** Approved WMO **Status** Recruitment stopped

**Health condition type** Mental impairment disorders **Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON36855

#### Source

ToetsingOnline

#### **Brief title**

Cognitive impairment following cardiac arrest

#### Condition

Mental impairment disorders

#### **Synonym**

cognitive disorders, memory and concentration disturbances

#### Research involving

Human

## **Sponsors and support**

Primary sponsor: Academisch Medisch Centrum

**Source(s) of monetary or material Support:** Hartstichting Zweden

1 - Cognitive impairment following cardiac arrest and Target Temperature Management ... 2-05-2025

#### Intervention

**Keyword:** Cardiac arrest, Cognitive impairment, Temperature Management

#### **Outcome measures**

#### **Primary outcome**

Comparing scores on cognitive test scales between patients after cardiac arrest

treated with 33 or 36 degrees and patients after myocardial infarction.

#### **Secondary outcome**

Comparing the intensity of care for the carers between patients after cardiac arrest and patients after myocardial infarction

# **Study description**

#### **Background summary**

During cardiac arrest, brain damage occurs. This condition is called a postanoxic encephalopathy. Clinically, this is reflected in a persistent coma, but the patient may also wake up and recover well. In recent years it has become clear that patients who made a "good" recovery suffer from cognitive disorders. Which disturbance this and how they interfere with the daily functioning of the patients is unknown.

#### Study objective

Understanding the cognitive disorders in patients who have woken up after a resuscitation and who were treated with a controlled temperature during the ICU treatment

#### Study design

international multicenter prospective study

#### Study burden and risks

There is no risk in this study. The entire cognitive test will take 2 hours which can be a burden for the patient. This will be explained to the patient

who can at any time indicate that he / she wants to stop.

## **Contacts**

#### **Public**

Academisch Medisch Centrum

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#### **Scientific**

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## **Trial sites**

#### **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

#### Inclusion criteria

- 1. TTM study patients who are alive at six-month follow-up and give consent to the cognitive sub-study
- 2. Informants (usually a relative or close friend/caregiver) of the patient above (1) who give consent to the cognitive sub-study
- 3. STEMI patients at the given centre, the sex-matched patient who best fits in age to the TMM patient above (1) with a similar date of infarct who gives consent to the cognitive substudy
- 4. Informants (usually a relative or close friend/caregiver) of 3 above who give consent to participate.
  - 3 Cognitive impairment following cardiac arrest and Target Temperature Management ... 2-05-2025

#### **Exclusion criteria**

The same exclusion criteria as for the main TTM study with the addition that control patients should not have a history of cardiac arrest.

Exclusion criteria TTM study: Conscious patients, pregnancy, out-of-hospital cardiac arrest of presumed non-cardiac cause, cardiac arrest after arrival in hospital, known bleeding diathesis, suspected or confirmed acute intracranial bleeding, suspected or confirmed acute stroke, temperature on admission <30°C, unwitnessed asystole, persistent cardiogenic shock, known limitations in therapy, known disease making 180 day survival unlikely, known pre-arrest cerebral performance category 3 or 4, >240 minutes from ROSC to randomisation, no informed consent.

# Study design

### Design

Study type: Observational non invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

**Primary purpose:** Treatment

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 12-03-2013

Enrollment: 85

Type: Actual

## **Ethics review**

Approved WMO

Date: 12-12-2012

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 12-02-2013

Application type: Amendment

Review commission: METC Amsterdam UMC

# **Study registrations**

## Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

CCMO NL40826.018.12