# IMPROVING OUTCOME IN SUBARACHNOID HEMORRHAGE WITH NADROPARINE

Published: 04-06-2021 Last updated: 21-09-2024

This study has been transitioned to CTIS with ID 2024-511679-14-00 check the CTIS register for the current data. Our primary objective is to evaluate whether aSAH patients treated with therapeutic dose nadroparine have a lower 30-days mortality rate...

**Ethical review** Approved WMO **Status** Recruiting

**Health condition type** Central nervous system vascular disorders

Study type Interventional

## **Summary**

#### ID

**NL-OMON54629** 

#### Source

**ToetsingOnline** 

**Brief title**ISCHEMIA

#### **Condition**

- Central nervous system vascular disorders
- Vascular haemorrhagic disorders

#### **Synonym**

Stroke, subarachnoïd hemorrhage

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Academisch Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

**Keyword:** Delayed ischemia, Intracranial aneurysm, Nadroparine, Subarachnoidal hemorrhage

#### **Outcome measures**

#### **Primary outcome**

30-days mortality

#### **Secondary outcome**

To evaluate whether there is a difference in:

- patients with a favourable outcome (score 0-3 on the mRS) after six months
- quality of life after three and six months
- cognitive functioning at three and six months after hemorrhage
- the presence and severity of delayed cerebral is-chemia
- the presence of cerebral (micro)infarctions on MR-imaging six months after hemorrhage
- the rate of a major and non-major bleeding
- the presence of major or clinically relevant non-major hemorrhagic complications after EVD/ELD placement or LP
- the occurrence of venous thrombo-embolic events
- the hemostatic balance and markers of activation of coagulation
- markers of inflammation and coagulation
- discharge destination
- shunt-dependent hydrocephalus
- other SAH-related complications (such as severe hyponatriaemia, delayed cerebral ischemia, postprocedural aneurysm rupture, rebleed, delirium,

epilepsy, diffuse parenchymal swelling or nosocomial infections) during admission

# **Study description**

#### **Background summary**

Mortality and morbidity after aSAH is high and are, for a large part, caused by delayed cerebral ischemia (DCI). For long, DCI after aneurysmal subarachnoid hemorrhage (aSAH) was thought to be caused by vasospasm, induced by blood in the subarachnoïd space. Growing experimental and clinical evidence now suggest activation of several (intravascular) pathophysiological pathways, affecting the cerebral microcirculation. Recently, in a retrospective analysis of our Academic Medical Center (AMC) aSAH patient registry, we observed lower in-hospital mortality and less non-home discharge in patients treated with therapeutic low-molecular weight heparin (LMWH), compared to patients treated with standard, prophylactic LMWH. This points towards a potential benefit of higher doses of LMWH in the acute course after an aSAH. We therefore hypothesize that treatment with therapeutic LMWH will improve clinical outcome in endovascularly treated aSAH patients.

#### Study objective

This study has been transitioned to CTIS with ID 2024-511679-14-00 check the CTIS register for the current data.

Our primary objective is to evaluate whether aSAH patients treated with therapeutic dose nadroparine have a lower 30-days mortality rate compared to aSAH patients treated with prophylactic dose nadroparine.

#### Study design

A single-center, prospective, phase II randomized clinical trial.

#### Intervention

Therapeutic dose of nadroparine (5700IE twice daily), continued until 21 days after initial SAH or untill discharge, compared to a standard profylactic dose (2850IE once daily).

#### Study burden and risks

An aneurysmal subarachnoid hemorrhage is a life-threatening form of stroke. Mortality in aSAH amounts to 32%-39% and 50% of the survivors experience a permanent disability, in which DCI is a leading cause. In a recent retrospective analysis of the same cohort of patients, a benefit has been shown for treatment with therapeutic dosages of LMWH compared to standard prophylactic dosages. The biggest risk related to LMWH is the theoretically higher chance of hemorrhages; spontaneous and after surgery. In contrast, there was no increase in (hemorrhagic) complications in patients treated with a therapeutic dose of LMWH, investigated in a retrospectively cohort in our own centre. The expected benefit is large, as half of the patients is younger than 55-years-old. Reduction in death or disability, leading to improved clinical outcome, could significantly decrease the loss of productive life years, with enormous economic and social impact.

## **Contacts**

#### **Public**

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## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

#### Inclusion criteria

Adult patients suffering from an aneurysmal subarachnoid hemorrhage treated with coiling.

#### **Exclusion criteria**

Stent-assisted coiling Contra-indications low-molecular weight heparin Proven and active COVID-19

# Study design

### **Design**

Study phase: 2

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

#### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 03-02-2022

Enrollment: 100

Type: Actual

## Medical products/devices used

Product type: Medicine

Brand name: Fraxiparine/Fraxodi

Generic name: Nadroparin

Registration: Yes - NL intended use

# **Ethics review**

Approved WMO

Date: 04-06-2021

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 09-08-2021

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 28-10-2021

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 02-11-2021

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 05-04-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 07-04-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 09-09-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 22-09-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 02-08-2023
Application type: Amendment

Review commission: MEC Academisch Medisch Centrum (Amsterdam)

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Approved WMO

Date: 03-08-2023

Application type: Amendment

Review commission: MEC Academisch Medisch Centrum (Amsterdam)

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# **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
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EU-CTR CTIS2024-511679-14-00 EudraCT EUCTR2018-000790-79-NL

CCMO NL65235.018.18