

# Magnesium in Aneurysmal Subarachnoid Haemorrhage

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|--|---|---|
| <b>Submission date</b><br>04/08/2005   | <b>Recruitment status</b><br>No longer recruiting | <input checked="" type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol |
| <b>Registration date</b><br>04/08/2005 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>01/08/2016       | <b>Condition category</b><br>Circulatory System   | <input type="checkbox"/> Individual participant data  |

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**Clinical Trials Information System (CTIS)**  
2006-003523-36

**Protocol serial number**  
NTR50

## Study information

**Scientific Title**  
Magnesium in Aneurysmal Subarachnoid Haemorrhage (MASH): a phase III clinical trial

**Acronym**

MASH

**Study objectives**

The MASH study is a prospective randomised, placebo-controlled, international multi-centre trial to determine whether magnesium reduces the frequency of poor outcome (death or dependence) in patients admitted within four days after aneurysmal subarachnoid haemorrhage.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Ethics approval received from local ethics committee

**Study design**

Multi-centre randomised double-blind placebo-controlled parallel-group trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

**Health condition(s) or problem(s) studied**

Aneurysmal subarachnoid haemorrhage

**Interventions**

Magnesium sulphate 64 mmol/day (or placebo) is started intravenously as soon as possible after informed consent and continued until 20 days after the haemorrhage.

**Intervention Type**

Drug

**Phase**

Phase III

**Drug/device/biological/vaccine name(s)**

Magnesium sulphate

**Primary outcome(s)**

Poor outcome (dependence or death) 3 months after the subarachnoid haemorrhage (Rankin 0 - 3 versus Rankin 4 - 5, or death) as assessed with the modified Rankin scale during a telephone interview. Dependence will be defined as a Rankin score greater than 3.

**Key secondary outcome(s)**

1. No symptoms 3 months after the subarachnoid haemorrhage (Rankin 0 versus Rankin 1 - 5 or death)
2. Global change in Rankin score

**Completion date**

01/01/2011

## Eligibility

### Key inclusion criteria

Aneurysmal subarachnoid haemorrhage

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Adult

### Sex

All

### Key exclusion criteria

1. Renal failure (creatinine greater than 150)
2. Age less than 18 years
3. Weight less than 50 kg
4. No informed consent
5. Death is imminent

### Date of first enrolment

01/01/2006

### Date of final enrolment

01/01/2011

## Locations

### Countries of recruitment

Netherlands

### Study participating centre

University Medical Centre Utrecht

Utrecht

Netherlands

3508 GA

## Sponsor information

## Organisation

University Medical Centre Utrecht (UMCU) (The Netherlands)

## ROR

<https://ror.org/04pp8hn57>

## Funder(s)

### Funder type

University/education

### Funder Name

University Medical Centre Utrecht (UMCU) (The Netherlands)

## 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? |
|---|-------------------------------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a>               | results                       | 07/07/2012   |            | Yes            | No              |
| <a href="#">Results article</a>               | substudy results              | 01/10/2015   |            | Yes            | No              |
| <a href="#">Other publications</a>            | meta-analysis                 | 01/09/2011   |            | Yes            | No              |
| <a href="#">Participant information sheet</a> | Participant information sheet | 11/11/2025   | 11/11/2025 | No             | Yes             |