

# Intraventricular infusion of rt-PA in severe intraventricular haemorrhage after aneurysmal subarachnoid haemorrhage. A randomised clinical trial.

<b>Submission date</b> 27/01/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 27/01/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 14/08/2009	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<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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## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

## Secondary identifying numbers

NTR455

# Study information

## Scientific Title

(Added 14/08/09) Recombinant tissue plasminogen activator (rt-PA) and external ventricular drain (EVD) in subarachnoid haemorrhage (SAH) with obstructive hydrocephalus for lysis of ventricular blood. A randomised clinical trial.

## Acronym

RESOLVE

## Study objectives

Intraventricular infusion of rt-PA reduces the frequency of poor outcome (death or dependency) in patients with a severe intraventricular haemorrhage after aneurysmal subarachnoid hemorrhage.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Received from local medical ethics committee

## Study design

Single centre prospective randomised double blind placebo controlled parallel group trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Hospital

## Study type(s)

Treatment

## Participant information sheet

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

Aneurysmal subarachnoid haemorrhage, Hydrocephalus, Intraventricular haemorrhage

## Interventions

1. Placement of external ventricular drain (standard procedure)
2. Clipping/Coiling of ruptured aneurysm (standard procedure)
3. Infusion of rt-PA or placebo through external ventricular drain

## Intervention Type

Other

## **Phase**

Not Specified

## **Primary outcome measure**

Death or dependency 6 months after subarachnoid haemorrhage

## **Secondary outcome measures**

1. Recurrent haemorrhage
2. Secondary ischaemia
3. Hydrocephalus
4. Bleeding complications from fibrinolysis
5. Death within 6 months
6. Rankin 0 versus Rankin 1-5 and death

## **Overall study start date**

01/09/2005

## **Completion date**

01/09/2009

# **Eligibility**

## **Key inclusion criteria**

1. First or recurrent aneurysmal subarachnoid haemorrhage with intraventricular extension of the haemorrhage
2. The ventricles must be enlarged and the intraventricular haemorrhage must be severe (Graeb-score more than 6)
3. Patients must be in a poor neurological condition, WFNS <7 or WFNS <6 in intubated patients

## **Participant type(s)**

Patient

## **Age group**

Not Specified

## **Sex**

Not Specified

## **Target number of participants**

16

## **Key exclusion criteria**

1. Other cause for intraventricular haemorrhage than a subarachnoid haemorrhage from a ruptured intracranial aneurysm
2. Absence of both pupillary light reflexes
3. Use of oral anticoagulants
4. Treating physicians propose a palliative instead of curative treatment strategy
5. Absence of informed consent

**Date of first enrolment**

01/09/2005

**Date of final enrolment**

01/09/2009

## **Locations**

**Countries of recruitment**

Netherlands

**Study participating centre**

University Medical Center Utrecht

Utrecht

Netherlands

3584 CX

## **Sponsor information**

**Organisation**

University Medical Center Utrecht, Department of Neurology (The Netherlands)

**Sponsor details**

Heidelberglaan 100

Utrecht

Netherlands

3584 CX

**Sponsor type**

Not defined

**ROR**

<https://ror.org/0575yy874>

## **Funder(s)**

**Funder type**

Hospital/treatment centre

**Funder Name**

University Medical Centre Utrecht (UMCU) (Netherlands)

# Results and Publications

## Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration