Supplemental Digital Content 1. Table. Basic characteristics of each six studies.

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|  | Juvela (cohort study) | Juvela (enoxaparin trial) | CONSCIOUS-1 | NEWTON-1 | IHAST | SHOP |
| Study years | 1985-1986 | 1998-2001 | 2005-2006 | 2013-2016 | 2000-2003 | 1996-2001 |
| Country | Finland | Finland | Multiple\* | Multiple\* | Multiple\* | USA |
| Main objective | To evaluate the impact of premorbid risk factors (e.g., smoking and alcohol consumption) on the outcome after aSAH  | To evaluate whether enoxaparin, a low-molecular-weight heparin, impacts the outcome after aSAH | To evaluate the effect of clazosentan in preventing vasospasm after aSAH | To evaluate the safety, tolerability and clinical effect of intraventricular sustained-release nimodipine (EG-1962) | To evaluate whether mild intraoperative hypothermia impacts the outcome after aSAH | To evaluate the impact of different pathophysiological processes on cognitive outcome after SAH |
| aSAH diagnosis | SAH verified by CT, lumbar puncture, necropsy,or operation. Aneurysm verified by angiography | SAH verified by CT and ruptured aneurysm verified by CTA/DSA | SAH confirmed by CT and ruptured aneurysm confirmed by DSA | SAH detected with CT and ruptured aneurysm confirmed with angiography (CTA or catheter) | SAH and intracranial aneurysm confirmed radiologically | SAH confirmed by CT or lumbar puncture and aneurysm confirmed by angiography |
| Aneurysm treatment | Neurosurgical clipping or no operation | Neurosurgical clipping, endovascular coiling, proximal clip occlusion or trapping of the parent artery | Neurosurgical clipping or endovascular coiling | Neurosurgical clipping or endovascular coiling | Craniotomy and neurosurgical clipping | Neurosurgical clipping, endovascular coiling or no treatment |
| Treatment delay | Median time from aSAH to aneurysm operation was seven days | Study drug started within 72 hours after aSAH. Aneurysm secured 12-24 hours before the start of study drug administration | Admitted within 48 hours after onset of clinical symptoms. Drug infusion started within 56 hours after aneurysm rupture and aneurysm secure performed within 12 hours after drug infusion or before it | EG-1962 administration within 60 hours after the onset of aSAH (first symptoms) | Aneurysm clipping within 14 days after documented aSAH | Admission < 14 days after onset of aSAH |
| Criteria for clinical condition | No | No | WFNS I-IV or V if the grade improved to grades I-IV after ventriculostomy | WFNS II-IV after aneurysm treatment but prior to EG-1962 administration | WFNS I-III at the time of enrollment, Rankin score 0 or 1 before hemorrhage | No |
| Age groups | 15-65 years | ≤ 75 years | 18-70 years | 18-75 years | > 18 years | ≥ 18 years |
| Weight/BMI restrictions | No | No | No | Weight > 45kg | BMI < 35 | No |
| Additional exclusion criteria | No | Severe comorbidities or contraindications for enoxaparin | Vasospasm on screening angiogram, severe or unstable comorbidity, Previous major cerebral damage (e.g., stroke) | Angiographic vasospasm prior aneurysm treatment, severe or unstable comorbidity, major complication in aneurysm repair procedure | Contraindication to cooling | Severe comorbidities |
| Study design | Prospective cohort study | Prospective, randomized and placebo-controlled clinical trial | Prospective, randomized and placebo-controlled clinical trial | Prospective, randomized and placebo-controlled clinical trial | Prospective, randomized and placebo-controlled clinical trial | Prospective cohort study |
| N of included (and total) aSAH cases | 184 (291) | 131 (170) | 151 (413) | 15 (73) | 1000 (1000) | 211 (433) |
| Determination of smoking | Current smoker at the time of aSAH | Current smoker at the time of aSAH | Current smoker at the time of aSAH | Current smoker at the time of aSAH | Current smoker (or stopped ≤ 6 months ago) | Current smoker and smoked more than 100 cigarettes |
| Determination of hypertension | High blood pressure values (repeatedly over 160/95) or antihypertensive medication prior to aSAH | High blood pressure values (repeatedly over 160/95) or antihypertensive medication prior to aSAH | Hypertension diagnosis prior to aSAH | Hypertension diagnosis prior to aSAH | Hypertension diagnosis or antihypertensive medication prior to aSAH | Hypertension diagnosis prior to aSAH |
| BMI measurement | kg/m2 at the time of hospital admission | kg/m2 at the time of hospital admission | kg/m2 at the time of hospital admission | kg/m2 at the time of hospital admission | kg/m2 at the time of hospital admission | kg/m2 based on the questionnaire at the time of hospital admission |
| Evaluation of baseline condition | Glasgow Coma Scale at hospital admission | Glasgow Coma Scale at hospital admission | Glasgow Coma Scale at hospital admission | Glasgow Coma Scale at hospital admission | Glasgow Coma Scale at hospital admission | Glasgow Coma Scale at hospital admission |
| Determination of thick aSAH | > 1mm thick layer in vertical layers of CT scan(Fisher grade 3) | > 1mm thick layer in vertical layers of CT scan(Fisher grade 3) | > 4mm thick diffuse or local layer (modified Fisher grade 3-4) | > 4mm thick diffuse or local layer (modified Fisher grade 3-4) | > 1mm layer in vertical layers orlocalized subarachnoid clot (Fisher grade 3) | Thick clot aSAH (Fisher grade 3) |
| Main finding | Heavy alcohol consumption impairs the outcome after aSAH | Enoxaparin had no effect on the outcome after aSAH | Clazosentan decreased moderate and severe vasospasm but had no significant effect on morbidity and mortality | EG-1962 associated with reduced delayed cerebral ischemia and more favorable clinical outcome | Mild intraoperative hypothermia did not improve the outcome after aSAH | Global cerebral edema and left-sided infarction associated with cognitive dysfunctions after SAH |
| ClinicalTrials.gov (or Pubmed) identifiers for more detailed descriptions | (PMID: 1633519) | (PMID: 14705720) | NCT00111085(PMID: 18688013) | NCT01893190 (PMID: 25678453) | NCT00029133(PMID: 15647576) | (PMID: 11779911 and 19461029) |

\*CONSCIOUS-1 cohort included SAH patients from 11 countries: Austria, Canada, Finland, France, Germany, Israel, Italy, Sweden, Switzerland, the United Kingdom, and the United States. NEWTON-1 cohort included SAH patients from 4 countries: Canada, Czech Republic, Finland, and the United States. IHAST cohort included SAH patients from 7 countries: Australia, Austria, Canada, Germany, New Zealand, the United Kingdom, and the United States.

aSAH = aneurysmal subarachnoid hemorrhage; CT = computed tomography; CTA = computed tomography angiography; DSA = digital subtraction angiography; WFNS = World Federation of Neurological Surgeons score; BMI = body mass index