Thrombus Aspiration in ST- Elevation myocardial infarction in Scandinavia (TASTE trial) trial hypothesis

“Aspiration of the blood clot or ‘thrombus’ that causes a heart attack, before balloon dilatation and stenting, improves survival”

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Methods

- 29 Swedish, 1 Danish and 1 Icelandic hospital
- Multicenter, prospective, randomized, controlled open-label trial enrolling 7244 patients who had a diagnosis of ST-elevation myocardial infarction (STEMI)
- Novel Registry-Based Randomized Clinical Trial concept: national heart registries served as platforms for randomization, case reports and follow-up
  - no patients lost to follow-up
  - powerful tool to capture outcome data with a high degree of fidelity
  - inexpensive
- Half of the patients were assigned to balloon treatment only (known as percutaneous coronary intervention, or PCI) and the other half had their blood clot aspirated before PCI
TASTE and previous studies on thrombus aspiration

Number of patients

- TASTE
- TAPAS
- JETSTENT
- AIMI
- INFUSE-AMI
- VAMPIRE
- PREPARE
- Chevalier
- Kaltoft
- MUSTELA
- X AMINE ST
- PIHRATE
- EXPIRA
- DEAR-MI
- Liistro
All-cause mortality at 30 days

HR 0.94 (0.72 - 1.22), P=0.63
Results

- No difference between the two groups for secondary endpoints including risk of new heart attack, stent thrombosis, stroke and complications related to the treatment.
- Even high risk groups such as smokers, patients with diabetes or patients with large clots had similar mortality with either approach.
- Our results do not support a role for clot aspiration as a routine future treatment.
- The study’s unique Registry-Based Randomized Clinical Trial concept is a new, efficient and inexpensive way to assess treatments in large patient populations.