ESOC 2024: Second Announcement of Large Clinical Trials

The European Stroke Organisation (ESO) is delighted to announce the second set of large clinical trials to be presented at the 10th edition of the ESO Conference (ESOC) on 15 – 17 May 2024 in Basel, Switzerland.

View the full Scientific Programme

Ischemic stroke

Acute treatment – thrombolysis

This year, there will be a prominent place for the Tenecteplase versus Alteplase equipoise on the stroke thrombolysis stage. With five new Tenecteplase trials (**TASTE, TEMPO-2, TRACE III, ORIGINAL, and ATTENTION IA**) coming out, we are curious to discover if this new evidence can further strengthen and/or expand guideline recommendations towards Tenecteplase. In addition, we hope to hear the '**TRUTH**' about an active versus conservative blood-pressure lowering strategy prior to intravenous thrombolysis.

- The **TASTE** trial (Tenecteplase versus Alteplase for Stroke Thrombolysis Evaluation) assessed whether Tenecteplase 0.25 mg/kg increased the proportion of patients with mRS 0-1 at 90 days following acute ischemic stroke compared to Alteplase. Patients were included if they presented within 4.5 hours of symptom onset and had favorable baseline imaging characteristics (CT perfusion mismatch with ischemic core <70 mL).

- **TEMPO-2** (TNK-tissue-type plasminogen activator Evaluation for Minor ischemic stroke with Proven Occlusion) is a thrombolysis trial with low dose (0.25 mg/kg) Tenecteplase versus non-thrombolytic standard of care in patients who presented with minor stroke or TIA (NIHSS 0-5) with visible intracranial occlusion or perfusion deficit within 12-hour from onset. The primary outcome is return to baseline neurological functioning (sliding dichotomy based on pre-stroke mRS) at 90 days.

- In the **TRACE III** trial (Tenecteplase Reperfusion therapy in Acute ischemic Cerebrovascular Events) patients with ischemic stroke due to anterior circulation large vessel occlusion who presented within 4.5-24 hours from last known well and had salvageable tissue on CT/MRI perfusion imaging were randomised to Tenecteplase 0.25 mg/kg or standard medical therapy. The primary outcome is a score of 0-1 on the mRS at 90 days.

- The **ORIGINAL** trial included Chinese patients with acute ischemic stroke who were admitted within 4.5 hours of symptom onset and were eligible for thrombolysis. Patients were randomized between Tenecteplase 0.25 mg/kg and Alteplase 0.9 mg/kg. At 90 days, the proportion of patients with a favourable outcome (mRS 0-1) was assessed.

- The **ATTENTION IA** trial (Intra-arterial Tenecteplase After Endovascular Thrombectomy in Acute Posterior Circulation Arterial Occlusion) compared intra-arterial Tenecteplase versus standard of care following successful recanalization of an acute occlusion of the vertebral, basilar, or posterior cerebral artery. As their primary outcome the trial assessed the proportion of patients with a score of 0-1 on the mRS at 90 days.

- In the **TRUTH** (ThRombolysis in UnconTrolled Hypertension) study, which had a prospective, observational, cluster-based parallel group follow-up design, an active blood-pressure lowering strategy (<185/110 mmHg) prior intravenous thrombolysis was compared to a conservative strategy. Outcomes of patients admitted to centres with an active strategy were compared to those admitted to centres with a conservative strategy. The primary outcome is functional outcome (ordinal analysis of the mRS) at three months.