Media Release

Milan, 22 May 2019

5th annual European Stroke Organisation Conference (ESOC) facilitates scientific exchange and advancements in clinical practice

- **RESCUE BRAIN**: A neutral trial of remote ischaemic conditioning within 6 hours of stroke; however, ongoing trials will determine if the method is efficient in a different setting
- **PASTA**: No increase in the rate or speed of thrombolysis, but may represent better informed treatment decisions with subsequently reduced care costs
- **TAKE CHARGE (TaCAS)**: Statistically significant improvements in quality of life, independence and activities of daily living with this low-cost self-management approach
- **THAWS**: Early termination precludes definitive conclusions about effectiveness of lower dose thrombolysis in patients who wake up with stroke selected by mismatch

Additional information, including video interviews with principle investigators and summary slides are available on the ESOC 2019 Media Portal. Email your request for access to this password-protected resource to: ESCO@ESO-stroke.org.

The opening plenary of the 5th annual European Stroke Organisation Conference (ESOC) set the tone for another energising meeting of experts in stroke care from around the world. Acknowledging the conference’s increasing footprint, European Stroke Organisation (ESO) President, Bart van der Worp, said: “We are delighted to see the number of delegates and countries grow from year to year. However, we also appreciate the impact this has on the environment, so I am pleased to announce that 5000 trees have been planted in Uganda’s Kibale National Park to off-set this impact in a small way.”

Danilo Toni, Chairman of the Local Organising Committee, welcomed delegates to Milan and commented on the value of meeting colleagues in person: “It is wonderful to host so many of you and I hope you will make the most of the new ‘PI Live’ session.” He added that this session – another first for ESOC 2019 – is designed to provide delegates with an opportunity for greater interaction with investigators.

The opening plenary included presentations on the studies and results outlined below.
RESCUE BRAIN:
French Multicenter Randomized Trial on Neuroprotection with Lower Limb Ischemic Per-Conditioning in the Acute Phase of Cerebral Infarction

This prospective randomised open, blinded end-point trial (PROBE) of patients who had experienced an acute ischaemic stroke in the preceding 6 hours assessed whether or not applying transient ischaemia remote from the brain (i.e. remote per-conditioning) reduces ischaemic lesion size (visible on MRI) over time compared to no intervention. This elegant non-invasive therapeutic strategy uses brief cycles of blood pressure cuff inflation and deflation at a lower extremity to protect the brain against ischaemia–reperfusion injury has shown to be successful in several animal models as well as in patients with myocardial ischaemia.

200 patients were randomized 1:1 to receive either 4 cycles of blood pressure cuff inflation 110 mm Hg above systolic blood pressure for 5 minutes followed by 4 cycles of deflation versus no intervention. The primary endpoint was change in lesion volume from baseline to day one after the infarction, assessed by a core lab using a validated software blinded to clinical data.

RESCUE BRAIN demonstrated no significant change in lesion volume within 24 hours of acute stroke in patients with remote ischaemic conditioning compared to patients without, although the intervention was safe. Three ongoing trials will help answer the question if the method is efficient when applied earlier or when using multiple cycles.

Principal investigator, Professor Fernando Pico, commented: “RESCUE brain is a neutral trial of remote ischaemic conditioning within 6 hours of ischaemic stroke. However, ongoing trials will determine if the method is efficient in a different setting.”

----

PASTA:
Paramedic Acute Stroke Treatment Assessment

Thrombolysis is a highly effective treatment for acute ischaemic strokes within 4.5 hours of onset, but optimising a service to provide rapid and cost-effective delivery can be challenging. This trial tested whether a dedicated assessment delivered by attending paramedics improved the rate thrombolysis and its cost-effectiveness in the UK health service.

Of 1214 patients enrolled across 3 ambulance services and 15 hospitals in the UK, 500 were assessed by trained ‘PASTA’ paramedics, whilst 714 were assessed by standard care paramedics.

The PASTA intervention did not increase the number of patients receiving thrombolysis, and there was actually a non-significant trend for fewer patients to receive thrombolysis. However, there was a non-significant
Improvement in outcome at 3 months. This resulted in an improvement in cost-effectiveness through shorter stays in hospital and less need for rehabilitation.

Presenting the results, Dr Christopher Price commented: “There was cost-saving with the intervention, specifically lower rehabilitation costs and length of stay in hospital, despite lower rates of thrombolysis.” Co-presenter, Prof Gary Ford added: “This is a complex intervention which has put a lot of information into the decision-making, providing better overall care.”

----

**Taking Charge After Stroke (TaCAS): A randomised controlled trial of a person-centred, self-directed, rehabilitation intervention in community stroke survivors**

‘Take Charge’ is a community-based, self-management rehabilitation program that aims to enable people to take charge of their own recovery after stroke, thereby improving their health-related quality of life. A ‘Take Charge’ session is delivered as talking therapy in the patient’s home by a trained clinician to facilitate self-directed rehabilitation in an inquiring but non-directional way.

400 people from 7 centres, living in the community within 16 weeks of their stroke, were randomly allocated to one of three groups: i) A single ‘Take Charge’ session, ii) two ‘Take Charge’ sessions 6 weeks apart, or iii) control (Stroke Foundation pamphlets).

The ‘Take Charge’ program, whether delivered as a single session or two, resulted in improvement in patient-reported health-related quality of life after stroke. The results suggest that ‘Take Charge’ could potentially be a low cost, self-management intervention.

Principal investigator, Dr Vivian Fu, commented, “Take Charge was superior to control for quality of life, independence, and activities of daily living. Our combined meta-analysis showed that for every eight patients treated with ‘Take Charge’ (at ~60 euros/session), one of them becomes independent at 12 months.”

----
THAWS:
MRI-guided thrombolysis with alteplase at 0.6mg/kg for stroke with unknown time of onset

Clot-busting thrombolysis is an effective treatment for acute strokes within 4.5 hours of onset, but there remains uncertainty as how to treat patients who wake up with symptoms, or for whom the time of symptom onset is unknown. This Phase III clinical trial aimed to test whether a lower dose of thrombolysis was effective and safe in this group of patients, when ‘mismatch’ on MRI imaging suggested the stroke was not well-established.

131 of the enrolment target of 300 patients were recruited until the trial was stopped early following the publication of the similarly designed ‘WAKE-UP’ trial. THAWS showed no difference in the proportion of patients with no symptoms or mild non-disabling symptoms (mRS 0-1) at 3 months, risk of bleeding in the brain or death.

Principal Investigator, Professor Koga, commented: “There was no difference in favourable outcome between the groups ... and the safety was comparable to that of standard treatment. Early study termination precludes any definitive conclusions and additional research may be warranted.”

---

Issued by the ESOC 2019 PR Committee

For more information or to schedule interviews, please send your request to: ESOC@ESO-stroke.org.