Media Release

Milan, 23 May 2019

Studies at the 5th annual European Stroke Organisation Conference highlight diversity and commonality across geography and gender

- **RESILIENT:** A randomised trial demonstrating efficacy and feasibility of endovascular treatment in resource limited healthcare systems
- **VIST, VAST and SAMMPRIS (pooled analysis):** Opening up extracranial stenotic vessels of posterior circulation arteries outside of the brain may be beneficial, and larger clinical trials are needed
- **Gender differences:** Although commonly presenting with similar, non-specific symptoms at the time of a TIA or stroke, women were more likely to be given an alternative diagnosis

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 global footprint of the 5th annual European Stroke Organisation Conference is reflected in the many submissions on national studies from around the world. In some instances, there are clear cultural nuances, while others offer insights that are broadly applicable to the field of stroke worldwide. Two studies of this kind (from Brazil and Canada) are highlighted in this release, alongside a pooled analysis of data from three studies conducted in three different countries (The Netherlands, UK and US).

RESILIENT:
Randomization of Endovascular Treatment with Stent-Retriever and/or Thromboaspiration vs Best Medical Therapy in Acute Ischemic Stroke due to Large Vessel Occlusion Trial – Final Results

There are many reasons why the health services in some low and middle-income countries do not routinely provide endovascular treatment (EVT) to patients with Large Vessel Occlusion (LVO). This trial in Brazil sought to provide local validation of findings from landmark clinical trials conducted in high-income countries, which demonstrate the benefit of this approach. RESILIENT is a Brazilian Stroke Network/Ministry of Health collaboration.

This multicentre, randomised, controlled trial compared mechanical thrombectomy to medical management in patients with LVO ≤8hours from ischaemic stroke onset (NIHSS ≥8 and ASPECTS ≥6). The trial's Data Safety Monitory Board recommended early termination due to "clear crossing of the boundary for efficacy at the first interim analysis". At this time, 221 patients had been enrolled and 174 patients had completed 90-day-follow-up.

Despite the acknowledged limitations of the healthcare system, including reduced availability of experienced endovascular centres and outpatient rehabilitation; RESILIENT showed that EVT was clearly superior to medical management in this setting. Principal investigator Dr Sheila Martins presented the trial's results on behalf of the RESILIENT collaborative: "We hope these results will encourage more low and middle-income countries to increase the use of EVT to improve outcomes for more LVO patients." She received clamorous applause from the audience.

VIST, VAST and SAMMPRIS:
Stenting for Symptomatic Vertebral Artery Stenosis: Pooled Individual Patient Data Analysis

Although symptomatic vertebral artery stenosis has been associated with a high risk of recurrent stroke, particularly in the first few weeks after symptoms, there is still controversy whether or not it should be the preferred therapeutic approach in patients with this condition.

Considering this, the authors performed an individual patient pooled analysis of the 354 participants included in three previous large randomised controlled clinical trials – VIST, VAST AND SAMMPRIS – that compared vertebral stenting with medical treatment for symptomatic vertebral stenosis.

There was no evidence of significant benefit of vertebral stenting over medical treatment, although there was a trend towards lower recurrence rates in patients receiving stenting for extracranial vertebral stenosis. Further larger trials are required to ascertain whether there is benefit in this subgroup.

Principal investigator Prof Hugh Markus commented: "Stenting for intracranial stenosis did not show benefit from either strategy. Stenting for extracranial stenosis might be beneficial, so we are planning the VIST 2 – interested investigators please contact info@cambridgestroke.com!"

This paper is now published in Lancet Neurology.

Sex Differences in the Presentation and Outcomes after Transient Ischaemic Attacks and Minor Strokes

It has been shown that women are less likely than men to be diagnosed with heart attack, but what about stroke? This Canadian study of 1,648 patients showed women and men were equally likely to present with non-focal symptoms, but women were still more likely to be diagnosed with a stroke mimic. The risk of recurrent stroke within 90 days, however, were similar in men and women. Dr Yu's findings raise questions about missed opportunities in preventing vascular events in women.

"What's important to recognize in stroke is that the brain has so many different functions, so that when a stroke is happening, people can feel different things beyond the typical stroke symptoms," said Dr Yu. "Accurately diagnosing TIA and stroke would change a patient's treatment plan and could help prevent another stroke from happening."

The research is published in the Journal of the American Medical Association (JAMA).

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For more information, to schedule interviews or for access to the password-protected Media Portal, please send your request to: ESOC@ESO-stroke.org.