Reviewer’s report

Title: Observational Dutch Young Symptomatic StrokE studY (ODYSSEY): study rationale and protocol of a multicentre prospective cohort study.

Version: 2 Date: 21 August 2013

Reviewer: Adria Arboix

Reviewer’s report:

The authors present the project of a multicentre observational prospective cohort study (ODYSSEY) with the aim to estimate the prognosis and risk factors of young patients with a TIA, ischemic stroke or intracerebral hemorrhage. The authors intend to include 1500 patients.

The study is potentially interesting but can be improved if the following considerations are addressed:

1. It is not clear whether intracranial angio-MRI study will be performed
2. It would be interesting to add a comment on the relevance of in-hospital mortality of the site of bleeding in intracerebral hemorrhages (Acta Neurol Scand 2002; 105: 282-8)
3. Previous studies have suggested that obstructive sleep apnea (OSA) may be a risk factor for stroke. It may be interesting to investigate if OSA is an independent risk factor for stroke in young stroke patients.
4. It would be interesting to include a comment regarding that small subcortical infarcts have remote consequences on gray matter volume. Using MRI scans acquired before and after an incident subcortical infarct, they are able to show that the appearance of a new subcortical infarct is associated with cortical thinning in connected brain regions (Neurology 2012; 79: 2025-2028; Neurology 2012; 79: 2016-2017). Such an eventuality may affect the cognitive performance in young patients after stroke.
5. Typo errors in reference 10 should be corrected

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'