Reviewer's report

Title: A biochemical marker panel in MRI-proven hyperacute ischemic stroke - a prospective study

Version: 2 Date: 7 January 2012

Reviewer: Matthew Boyko

Reviewer's report:

In the present work, Karolin Cnauer and co-authors investigated a biomarker panel in a setting of hyperacute stroke. I found this work to be well planned and conducted, novel and important for clinical application. The authors failed to find any statistical relationship between the elevation in multiple plasma stroke markers, clinical appearance and MRI imaging.

The present publication may potentially help avoid an unnecessary delay in the early diagnosis and treatment of acute stroke.

I still have a few minor concerns which if addressed could contribute to the manuscript.

Minor Essential Revisions
1. As non-parametric data, NIHSS would be better expressed as median±range instead of average±SD.
2. Considering that thrombolysis is a gold standard for the treatment of acute ischemic stroke, which is indicated when initiated during the first 3 hours after stroke presentation, it would be interesting to compare the effectiveness of the marker panel for the detection of stroke in 2 separate subgroups (markers collected within a 3h interval and a 6h interval).

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests' below.