Reviewer's report

Title: Pathogenic Role and Prognostic Value of Selected Cerebrospinal Fluid Acute Phase Factors for Clinical Course and Outcome of Ischemic Stroke

Version: 3 Date: 21 December 2010

Reviewer: Roman Huber

Reviewer's report:

Major Compulsory Revisions

From a practical point of view blood-sample-measurements of these factors would be more interesting (especially as it has been shown, that the measurement of at least some of these parameters in blood samples is possible and correlating with the CSF-values). Did you perform corresponding measurements?

There are several interactions between classical drugs like ASA or statins and IL-6 as well as TNF. Did you correct your statistics for these as well in the control as in the stroke group? Did you exclude patients treated with corticoids?

In the introduction you conclude the need for devising the more effective protective and repair strategies and cellular treatment. In the light of the numerous ineffective treatment trials using this approach a judgement like that sounds a little bit difficult.

In your proposed pathogenic cascade IL-1ß is triggering IL-6 via several mechanisms. However, whereas IL-6 is significantly correlated with larger defects, ILß is not. Could you explain this?

In total, the discussion is very long and speculative. Please shorten this part?

Minor Essential Revisions

Did you perform fibrinolysis? if not please mention.

Is there any connection between TOAST and the factors investigated or the final lesion size?

From our point of view this paper does not tell to much about the pathogenic role of these factors. Would you consider to rename the title?

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published
Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.