Reviewer's report

Title: Peak plasma interleukin-6 and other peripheral markers of inflammation in the first week of ischaemic stroke correlate with brain infarct volume, stroke severity and long-term outcome.

Version: 4 Date: 1 October 2003

Reviewer: Nikolaos Kostulas

Reviewer's report:

General
Comments to Authors
This concise and interesting manuscript provides further data that soluble plasma levels of IL-6 in stroke correlate to CT brain infarct volume and mRS at 3 months. The data provide further evidence that systemic inflammation secondary to stroke is related to stroke severity. There are minor considerations that the authors should address:

Discretionary Revisions (which the author can choose to ignore)
1. The authors systemic study should be encouraged. A previous study has focused on assessing cytokine mRNA-levels in relation to the Scandinavian stroke scale. The authors could add this reference (Kostulas et al, 1999) on page 4 of the introduction.

Minor Compulsory Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. This study presents data from relatively few number of patients. The authors should specify why not more patients were included. An increased number of patients would further have strengthened the results and is also easily performed due to the relatively simple lab technique that ELISA is.

2. Why was not other lab techniques used to compare the ELISA results? Elispot-assays as well as flow cytometry are more specific techniques.

3. The authors have focused on IL-6. They acknowledge and refer nicely to the conflicting results of IL-6. Why was IL-6 studied? Why were not other cytokines included?

Advice on publication: Accept after minor compulsory revisions

Level of interest: A paper of considerable merit and interest in its field

Quality of written English: Acceptable

Declaration of competing interests:

none