

Reviewer's report

Title: Detection of 65kD heat shock protein in cerebrospinal fluid of tuberculous meningitis patients.

Version: 1 **Date:** 14 July 2006

Reviewer: Harald G Wiker

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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

Discretionary Revisions (which the author can choose to ignore)

This paper describes the application of an ELISA method for detection of the 65kDa heat shock protein of *M. tuberculosis* in cerebrospinal fluid of patients with tuberculous meningitis. The results indicate that the test can distinguish between patients with TB contra patients with other bacterial or viral infections or other neurological disorders. However there are several concerns with respect to the design of the study. It is probable that this test will work, but it is hard to know how specific it will be. That depends on the properties of the monoclonal antibody used and to which extent it will crossreact with the 65 kD heat shock protein from other bacterial species.

Major compulsory revisions:

1. It should be specified which type of organisms are the cause of the infections in the groups of pyogenic meningitis, and viral meningitis.
2. Page 5: To be able to repeat these results it is necessary to know the designation (name) of the monoclonal antibody and it should also be given which species it was derived from.
3. The ELISA method is not properly described. The first sentence on top of page 6 for example is difficult to understand.
- 4.
5. There is no indication of how the authors have taken care of plate to plate variation and the results are given as raw OD readings. Usually what is done is to use a standard on each plate. In this instance one would use dilutions of 65kD protein (maybe mixed with CSF) as the standard and use this as a reference and give the results either as arbitrary units (AU) or as concentration.
6. There are numerous mistakes in grammar. The paper should be carefully adjusted by someone fluent in english.

Minor Essential Revisions

1. It is not described whether each sample was tested in duplicate or triplicate in the ELISA.
2. The results are given in the present tense. It should be changed to the past tense.
3. Page 6: The source and product identification of the rabbit anti rat secondary antibody should be given.
4. In line 4 of page 6, the monoclonal antibody is described as a 65 kD protein. This should be corrected, and the text should be searched for similar types of mistakes.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests