Reviewer's report

Title: Adjuvant TACE inhibitor treatment improves the outcome of TLR2/-/ mice with experimental pneumococcal meningitis

Version: 3 Date: 19 December 2006

Reviewer: Annamaria AV vezzani

Reviewer's report:

General
The confirmatory exps should be referenced in the result section (i.e, as previously shown, ref).

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

Double TLR2/CD14 KO mice were treated with antibiotic: this is reported in panel C of fig. 1. The authors state that since these mice were protected by antibiotic alone then they were not treated with TACE inhibitor. The same holds true for CD14 KO (fig 1C); however, the authors indeed treated CD14 KO mice with TACE inhibitor. In their reply to my comment number 2 the authors state that they treated with TACE inhibitor TLR2 KO mice only, while in my view they also treated with TACE inhibitor CD14 KO mice. Am I correct? If so, why the authors did not treat the double KO mice with TACE inhibitor? Because of the emphasis given to the use of double KO mice, the omission of this experiment is not readily clear to the reader.

The authors now clarified that a significant relationship was previously shown by the authors between TNF-alpha CSF levels and the severity of the disease in wild-type and TLR2 KO mice. What about CD14 KO mice? I cannot find this information in the text.

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

The choice of the treatments schedule should be justified not only for the sake of this reviewer but also for the readers therefore the reply to the reviewer should be added in the method or result sections with the appropriate references.

The explanation of how measurement of motor activity was performed needs further clarification, the authors should explain in more detail how this exploratory activity was measured and quantified.

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Discretionary Revisions (which the author can choose to ignore)

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: Acceptable

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