Reviewer’s report

Title: The performance of rapid plasma reagin (RPR) titer in HIV-negative general paresis after neurosyphilis therapy

Version: 0 Date: 24 Sep 2017

Reviewer: Hanna Jarva

Reviewer's report:

This manuscript addresses two questions, namely can RPR titer be used to evaluate the treatment outcome of neurosyphilis and secondly the differences between neurosyphilis patients with reactive or non-reactive RPR test. The first question is adequately discussed. However, the second question is not. At the moment the possible differences between the groups are not really examined. I suggest removing this "exploration of differences" from the sentence describing the goals. The language needs to be thoroughly checked. In the title of the manuscript the authors speak of serum RPR titer. However, in the abstract and background section it remains unclear whether RPR titer refers to serum or CSF. Please clarify.

P. 5, ln 22 - what does "irregular follow-up visits" mean? Why where so many patients lost in follow-up? The characteristics of the patients: Was there a difference in the TPHA serum or CSF titers? Please show the serum RPR titers for both patient groups in a scatter plot with the MEAN value indicated. Was there any difference in the symptoms or duration of symptoms between these patient groups? Did the serum RPR titer correlate with the CSF RPR titer? P. 9, lns 8-12 are pure repetition of results (P. 7, In 58 - P. 8, lns 1-4). The conclusion that a 4-fold decline in CSF-RPR titer is a good predictor for treatment efficacy is not novel. Furthermore, the low number of patients in follow-up is a weakness of this study. Also, it should be emphasized that all patients were determined to be in the late phase of syphilis, since this may explain the different results compared with previous studies. Maybe there should be different guidelines for the follow-up of neurosyphilis, depending on the stage of the disease.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal