Reviewer’s report

Title: Application of the 2016 diagnostic approach for autoimmune encephalitis from Lancet Neurology to Chinese patients

Version: 0 Date: 16 Jul 2017

Reviewer: Eric Lancaster

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NURL-D-17-00304

Li and colleagues retrospectively applied the Graus et al. (2016) criteria for the clinical diagnosis of autoimmune encephalitis to a series of 76 encephalitis patients. This is an interesting idea for a paper and I'm glad the authors did this. There are several problems with the presentation of the data, as outlined below.

In the conclusion of the abstract, the authors write that the criteria are "not sensitive enough to diagnose definite autoimmune limbic encephalitis and anti-NMDAR encephalitis, especially during the early disease stage". Isn't the whole idea of the "definite" category that the specificity should be very high, even at the expense of sensitivity? If you want a category that is more sensitive (and thus less specific), isn't that what the possible category is? In short these "definite" categories seem to function as designed. This seems to be clearly presented in the rest of the paper but not the abstract.

Line 55 refers to the better prognosis of autoimmune encephalitis - but it is not clear what it is being compared to. Better than what?

The sentence that starts on line 231 is difficult to understand. Despite reading it several times I don't know what the authors are trying to say.

The tables had some kind of formatting problem and cannot be read. The authors should resubmit the manuscript with the tables properly formatted. I cannot properly evaluate them as they are now.

The discussion of Bickerstaff encephalitis is based on a very small number of patients and may not be helpful to the paper.

The figures should be revised. Figure 1 is extremely difficult to read or follow. Extracting information from this figure is very difficult. The authors should figure out some other way to present this data. Figure 2 is also difficult to follow - it is not clear what the zero bars mean as this is not explained in the figure legend.

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.

Yes

**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.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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I was an author on the Graus et al. paper that established the guidelines currently being evaluated.

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