Author’s response to reviews

Title: Establishment and utility assessment of the Posterior Reversible Encephalopathy Syndrome early warning score (PEWS) scale

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Author’s response to reviews:

Dear Editor DR. Naoum P Issa:

Thank you for your letter and for the reviewers’ comments concerning our manuscript entitled “Establishment and utility assessment of Posterior Reversible Encephalopathy Syndrome early warning scoring (PEWS) scale” (manuscript number: NURL-D-18-00117R1). Your comments are very helpful to the revision and improvement of our paper. In addition, your feedback served as a guide in improving the significance of our research. Below are the main revisions we implemented and our responses to the reviewers’ comments.
Editor Comments:

The authors have addressed most of the major concerns.

A few changes/edits remain:

1. In the abstract change "golden standard" to "gold standard" (this is the only use that was missed in the first revision).

Response: Thank you for your suggestion. We have corrected the term in page 5.

2. Thank you for including the ROC analysis. The Youden Index is reported as 12, but should only range between 0 and 1 (\(YI = \text{Sensitivity} + \text{Specificity} - 1\)); this should be revised or removed. Positive and negative predictive values should not be reported in this section since the study population was intentionally matched to have nearly equal numbers of true positives and true negatives.

Response: Thank you for your suggestion. We apologized for the mistakes we made in the statistics. We have modified the Youden Index and removed the positive and negative predictive values. The corresponding modification is shown on page 12.

3. In figure 3 the channel labels for the EEG should be made larger to be legible. It is currently not possible to interpret the EEG without legible channel labels.

Response: Thank you for your suggestion. We have re-drawn the channel labels for the EEG in figure 3.

4. You have included figure legends/captions in the response to editor, but they have not been included in the manuscript. Please include a section entitled "Figure legends" after "References" and before the tables and charts.

Response: Thank you for your suggestion. We have added "Figure legends" section in page 19, as you recommended, after the “References” and before the tables and charts.

5. The discussion of the usefulness of EEG in the diagnosis of PRES should be qualified. Background slowing on EEG is perhaps sensitive for PRES, but it is not at all specific since it is common to any encephalopathic process.
Response: Thank you for your suggestion. Background slowing on EEG alone is indeed not specific, but for patients with hematological malignancies, their original normal EEG before chemotherapy makes this abnormal sign meaningful. For these patients, background slowing, especially slow waves in occipital region, is an indicator that these patients may have a higher probability of presenting PRES than those whose test results are negative. Therefore, we think it reasonable to include this EEG feature in the variable list.

6. In Table 5 please include a column with the final diagnosis (for example, +PRES imaging confirmed, -PRES imaging confirmed, or -PRES without imaging).

Response: Thank you for your suggestion. We have added contents in table 5.

7. While language was significantly improved in the first revision, the manuscript would still benefit from professional editing for English grammar and word usage.

Response: Thank you for your suggestion. We have made further amendments to grammatical errors and language by native English speakers.