Reviewer’s report

Title: 18F-fluorodeoxyglucose–positron emission tomography/computed tomography for the diagnosis of polymyalgia-like illnesses: A retrospective study

Version: 0 Date: 15 Oct 2019

Reviewer: Naoki Iwamoto

Reviewer's report:

The authors described the relation the findings of PET/CT with PMR. The point of focus is interesting because diagnosis of PMR is often difficult, especially distinguish with PMR-like symptom which come from malignancy. However, several numbers of concerns need to be addressed by authors.

1. In table 1, P value about MMP-3 is 0.04, however the authors wrote "the difference was not significant" at p.12 line 229. Considering the result from table 1, it seems to be statistically significance. Why the authors described " not significant."?

2. The detailed accumulation sites of non-PMR should be described. There were no FDG accumulation at other site except PMR-specific site such as shoulder, sternoclavicular joint?

3. The author said that multivariate logistic regression analysis showed that FDG accumulation in the shoulder joints was identified as independent predictor of PMR. The authors have to describe table of multivariate analysis. In this study, the number of patients was very low so, the reliability of multivariate analysis was very low.

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 recommend additional statistical review

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

Acceptable

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