Reviewer's report

Title: Prognostic significance of interim PET/CT based on visual, SUV-based, and MTV-based assessment in the treatment of peripheral T-cell lymphoma

Version: 2
Date: 20 December 2014

Reviewer: Claudio Spick

Reviewer's report:

This is a prospective study of 59 patients that evaluates the prognostic accuracy of interim PET/CT using visual and quantitative assessment to determine whether it provided prognostic information for the treatment of PTCL. The study provides evidence that interim PET/CT is valuable for early treatment response assessment and therefore is additive to the current literature. The paper is well written and this is a topic of interest.

Abstract OK

Introduction

Minor Essential Revisions
1: Rows 18-21: Please provide a reference

2: Final paragraph should equal to abstract

Discretionary Revisions
3: Please provide more references to PET data in peripheral T-cell lymphoma and its controversy subject.

Materials and Methods

Minor Essential Revisions
4: Was enrollment consecutive? Why do the authors report clinical information on 63 patients but final analysis was only reported in those 59 patients with an interim PET/CT?

5: Page 7 Rows 25-27 The authors should describe how patients that were lost to follow-up were coded. How did the authors handle patients who died during the follow-up period? These patients should be considered as censored data. The same holds true for OS. Patients who survive during follow-up should be considered as censored data. Please elaborate.

Major Compulsory Revisions
6: ROC analysis requires dichotomous variables as gold standard. What was the gold standard for this analysis?

7: Why do the authors use for an analysis of "survival" (here, progression free
time) the univariate analysis of the influence, a process in which the survival time is not included?

Discretionary Revisions

8: There are not many predictors included. Thus, a cox regression would be more helpful. This could be also stepwise performed.

Results

Major Compulsory Revisions

10: Page 9 Row 26/27: The authors write about comparing two percentages. Which test was applied?

11: Page 10 Row 2: The authors compare two means. Please provide a p-value.

12: Page 10 Row: An AUC of 0.672 is rather low and thus does not allow good discrimination. Please elaborate.

13: The authors should provide sensitivity and specificity for the selected cut-off values.

Discussion

Major Compulsory Revisions

14: Please elaborate this section according recent reports indicating the discordant situation regarding the role of interim PET in PTCL.

References

OK

Tables

OK

Figures

OK

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests