Reviewer’s report

Title: Have we achieved adequate recommendations for target volume definitions in anal cancer? A PET-imaging based patterns of failure analysis in the context of established contouring guidelines

Version: 1 Date: 16 Jul 2019

Reviewer: Julian Rogasch

Reviewer's report:

The authors' changes to the manuscript based on the reviewers' recommendations are generally appropriate. This includes a change of the statistical method to test association between T stage and LN appearance in-/outside of the CTV to a chi-square test. The results of this test are now only very briefly stated without giving at least the effect size (relative distribution of T stages among groups of LN coverage or misses) and/or a p value.

However, regarding the low importance of this statistical test for the overall manuscript, I don't recommend another review cycle only for this minor aspect.

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.

I am able to assess the statistics
Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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