Reviewer’s report

Title: Prognostic Value of Total Tumor Volume in Patients with Nasopharyngeal Carcinoma Treated with Intensity-Modulated Radiotherapy

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Reviewer: Panagiotis Balermpas

Reviewer's report:

The authors present a retrospective analysis of a large patient cohort with nasopharyngeal cancer, treated relatively homogeneously with IMRT and chemotherapy in a single institution.

The total tumor volume comprising the primary tumour and the involved nodes is evaluated and its influence on the main oncological endpoints is tested.

The manuscript is very well written, the language used flawless and the statistics well done and reasonable.

However, I have some questions/remarks:

1) Please edit the chemotherapy dose used in each case (concomitant, adjuvant, induction)

2) What was your median follow up? This is very important in order to check the reasonableness of your "4-year-" endpoints. Please calculate and add it!

3) The endpoints are not clearly defined: for example with "distant metastasis-free-survival" you mean that both metastases and death are counted as events? The same with LRRFS! Please explain under "methods"

4) I'm very curious if the tumour volume would still be multivariate significant if compared to solely T- and N-stage and if T- or N-stage separately are also significant. It would be nice to provide supplementary data with e.g. T1-2 vs. T3-4 and N1 vs N2 vs N3 and then a new multivariate analysis if significant.
5) In your conclusions you refer to "assist with treatment strategy selection". What do you recommend? Please make such a recommendation in your discussion or at least a comment for the practical-clinical impact of your findings.

**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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