Reviewer's report

Title: Influence of Oral Glutamine Supplementation on Survival Outcomes in Locally Advanced Non-Small Cell Lung Cancer Patients Treated with Concurrent Chemoradiotherapy

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Reviewer: Jens Buentzel

Reviewer's report:

I have read the manuscript "influence of oral glutamine supplementation on survival ..." and give you the following review::

1. Is the question posed by the authors well defined? The question is good defined. It should be told that it is a glutamine therapy and no supplementation only. The resulting question is then – > Is my supportive therapy limiting the effectivity of radiochemotherapy in lung cancer patients?

2. Are the methods appropriate and well described? The authors are discussing the limitations of retrospective analysis. This method is appropriate but we have missed statistical plans regarding the number of patients who are necessary to give sufficient answers.

3. Are the data sound? Probably the groups are very small. The supportive effects were primary end points and are impressive. The secondary endpoint survival is calculated. A correct information needs larger patient groups or the method of metaanalysis (example: Bourhis J et al: MAART project – J Clin Oncol 2011).

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes, despite the missed statistical plan.

5. Are the discussion and conclusions well balanced and adequately supported by the data? The discussion reflects the benefits of glutamine supplementation / administration. It does not explain the critical points of cytoprotection. Do we really know all effects of glutamine on the tumour and normal cells? Do we have enough information regarding the interactions between irradiation / chemotherapy and glutamine?

6. Are limitations of the work clearly stated? No.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes, but it would be useful to look for other studies with cytoprotective agents as amifostine or selenium.

8. Do the title and abstract accurately convey what has been found? With limitation.

9. Is the writing acceptable? Yes.

Summary: The real interesting manuscript should be revised and should be
stated that survival is a secondary end point of each supportive care. The statistical analysis has to be discussed in extenso. The limitations must be clear and further steps should be defined well, e.g. prospective randomized studies or meta-analysis.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I have to declare no conflict of interests.