Reviewer's report

Title: Plasma D-dimer level is an independent prognostic factor for nasopharyngeal carcinoma patients

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Reviewer: Xiaoqiang Yue

Reviewer's report:

Chen et al. presented an interesting paper concerning the role of plasma D-dimer in nasopharyngeal carcinoma patients. In fact, increasing studies have indicated the prognostic role of plasma D-dimer in different cancers including lung cancer, colorectal cancer, breast cancer, gastric cancer and etc in recent years, however, related report in NPC is rare. The authors collected a cohort of 717 samples, and their results indicated that high level plasma D-dimer would be negatively associated with the prognosis of the patients. Although most of descriptions within the paper are interesting, the paper includes required features.

- Major Compulsory Revisions

1. In the Materials and Methods section, the authors claimed: “Plasma D-dimer concentrations <1.0 µg/ml were considered normal”, however, no reference was cited about how they make the determination. More importantly, in the following group division, the 1st quartile of plasma D-dimer is 0.0-0.3µg/mL, the 2nd group is 0.3-0.5µg/mL and the 3rd group is 0.5-0.8µg/mL, all considered to be normal according to the above criteria, it would then be hard to speculate what is the clinical value for a specific maker which would be normal in the majority of the patient.

2. In the Discussion section, the authors did not make a comparison of their results with previous published data. A lot of papers have been published about the role of plasma D-dimer in cancers, for example, gastric cancer, the authors should cite some of these important references to make the discussion more sound.

3. In previous studies, a great number of molecular alterations and clinical parameters were reported to be able to predict the prognosis for nasopharyngeal carcinoma patients, it is necessary for the authors to make a discussion of the advantages of plasma D-dimer testing in comparison to other prognostic markers.

4. Thorough out the paper, it looks like that the copy of EBV DNA would contribute more in predicting the prognosis than plasma D-dimer, the authors should try to make an explanation for this result.

5. Since the level of plasma D-dimer could be affect by many other factors, I recommend the authors make an estimation of its value with the
clinicopathological parameters.

6. In Table 1, the total number of the patients in some items is not 717, the authors should check if there are some mistakes. In Table 2, the authors should mark specifically when P value is <0.05, also in Table 2, the ECOG in DMFS is not correct.

-Minor Essential Revisions

1. Normal control is very important and necessary in the study, the authors failed to present such a group in the research. And then, of course, it is impossible to draw conclusions on what are the sensitivity, specificity and accuracy of plasma D-dimer in predication of the prognosis in these patients.

2. The writing of the manuscript should be improved, all the abbreviation, units, as well as the references should be consistent throughout the manuscript and meet the requirements of BMC Cancer, and some grammar mistakes should be avoided.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.