Reviewer’s report

Title: A hypothesized TNM staging system based on the number and location of positive lymph nodes may better reflect the prognosis for patients with NSCLC

Version: 0 Date: 20 Jan 2019

Reviewer: Christine Bestvina

Reviewer’s report:

1. There are extensive grammatical errors throughout the paper which require a significant amount of editing. The paper is extremely difficult to read. These errors are evident even in the abstract of the paper. For example:

   - Objectives: should be rephrased as: "Our study evaluated the feasibility and prognostic utility of incorporating the number of positive lymph nodes into the TNM staging system..."

   - Results: "Basing on the cut-off values" should be "Based on the cut-off values"

   - "And then, we drawn..." should read "And then, we drew"

   - Conclusions: should read "The hypothesized TNM staging system combining locational pN stage..."

2. The objective of the paper is to improve the TNM staging system. However, the authors used the AJCC seventh edition. This has already been replaced by the AJCC eighth edition. As I believe you would have had the information required, could you reclassify patient's stage based on AJCC 8th edition? Please defend.

3. The first four paragraphs of the discussion belong in the introduction. Please reformat.

4. The sentence: "Obviously, from the view of survival prognosis, the current TNM staging system is irrational." - This is an extremely inflammatory comment, and one which I do not believe belongs in the paper. Perhaps stating this instead as: "Improvements to the TNM staging system from the view of survival prognosis should be considered."

5. It is unclear to me throughout the paper whether the patient's stage should be reclassified based on the number of lymph nodes simply to improve prognostic information to the patient or provider, or whether the authors believe differences in treatment should be considered. These are very different conclusions, and I do not believe a statement of choosing different treatment
interventions could be supported based on available clinical data. Any illusions to changing
treatment based on this information should be removed. For example, in the discussion section,
line 7 should be revised to "The results require further large-scale prospective clinical study to
confirm these recommendations."

6. The decision to include only patients treated with surgery was not discussed enough as to how
this might affect the results of this study. Many patients who have N2+ disease are treated with
chemotherapy and radiation, and not surgery. This should be acknowledged as well as
commented upon.

7. The authors extensively discuss in the section "The current TNM Stage and Survival" certain
surprising OS outcomes. As an example, "The 2 year OS rate of each substage in Stage IIA-IIIB
was even better than in stage IA and IB." The authors use this to essentially argue the statistical
inaccuracies of the TNM staging. However, this data would not be supported by many prior
publications, and additional reasons why this data might be as it is were not given. This makes
me suspicious of the statistical methods used in the paper, as opposed to skeptical of the TNM
staging system. These statistical examples are also in multiple cases outside of the original intent
of the paper, which is to discuss whether adding number of lymph nodes to the staging system
may be of prognostic utility. Please consider revising this section.

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.

No

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 recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:
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