Reviewer’s report

Title: Karyotyping of circulating tumor cells for predicting chemotherapeutic sensitivity and efficacy in patients with esophageal cancer

Version: 1 Date: 30 Apr 2019

Reviewer: Zhichao Fan

Reviewer's report:

Dr. Wang and co-authors present a study investigating the relevance of karyotypes and chemotherapeutic sensitivity in esophageal cancer. However, several issuers were identified below:

1. The methods are not clearly described. For example, the method of CTC isolation is not described. Reagents used in the studies are not identified. The microscope used in the imaging is not described. How to identify patients as triploid is not mentioned. Are there diploid cells? Please add new parts of Methods: Reagents and CTC isolation. The protocol of SET-iFISH should be described. Microscopy imaging should be described. The treatments of chemotherapy should be described.
2. Figure 1. Are there diploid cells? How to identify whether they are CTCs or leukocytes.
3. The number of Triploid patients is too low to do a Chi-square test (≥40) and draw the conclusion.
4. How to definite that the therapy is beneficial or not in Table 2.
5. Figure 2, is the non-triploid proportion from Table 1 or 3? I assume from table 3. There are 58 patients in Table 3, why only include 17 patients in Figure 2?
6. It is better to test the correlation of chemotherapeutic efficacy and the non-triploid proportion from table 1 (before therapy) than from Table 3 (after therapy) because you want a parameter to predict the therapeutic efficiency.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

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:

Needs some language corrections before being published

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