Reviewer’s report

Title: Molecular features of lung adenocarcinoma in young patients

Version: 0 Date: 13 Mar 2019

Reviewer: Helmut Popper

Reviewer’s report:

Zhen and colleagues analyzed the features of adenocarcinomas in a very young population. This is an interesting report, and although the number of patients is small it is worth to be reported. However, there are some shortcomings:

1. ALK testing is done only by immunohistochemistry. This might be acceptable in cases with strong 3+ staining if the appropriate antibody is used - this is not clear from the method section.

2. The authors discuss survival; however, it is not clear if this was corrected by stage

3. Staging is not adequately presented, as there are stage IA, IB, IIA, etc. not just stage I-II-III; this might have an impact on survival

4. The authors use a fusion panel which is not known for its quality, therefore more details are necessary, such as what fusions are detected, what controls are used, etc.

5. The authors detected mutations in the HER2 gene (Erbb2); where there also amplifications? Have amplifications been tested for?

6. As the study is based on retrospective cases, probably no patients was treated by tyrosine kinase inhibitors; but this should be stated

7. Did the authors also looked for copy number variations?

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.
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:

Needs some language corrections before being published

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