Reviewer’s report

Title: Impact of sarcomatoid differentiation and rhabdoid differentiation on prognosis for renal cell carcinoma with vena caval tumour thrombus treated surgically

Version: 0 Date: 18 Sep 2019

Reviewer: Takashige Abe

Reviewer's report:

General comments

The authors reported that, in the 125 patients with RCC and VC thrombus treated by surgery, sarcomatoid differentiation and rhabdoid differentiation were both independent adverse predictors.

Major

1. In general, regarding progression free survival (PFS), death due to any cause should be included as an event. The authors should reanalyze their data regarding the PFS analyses.

2. In my opinion, overall survival should be more appropriate endpoint for survival analyses.

3. Regarding the lymph node dissection (LND), did the authors perform LND routinely? Was there any rule of template? If not, this would be another potential limitation.

4. Details of metastatic sites should be added in Table 1. In my opinion, it would be a valuable information for readers.

5. Table 2. Among the 3 three significant variables (metastasis, sarcomatoid differentiation, rhabdoid differentiation) in the univariate model, which one is independent in the multivariate model, only including these three characteristics? This information should be added in the text.
6. The authors should describe the details of their surgical procedures according to thrombus level. It would be a valuable information for readers.

7. Were there any patients undergoing neoadjuvant systemic therapy including TKI or immune check point inhibitors before surgery, aiming to level the thrombus down? In addition, were there any patients undergoing these drugs as an adjuvant setting? These variables should be included in the present survival analyses, if those patients existed.

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As a minimum standard, please include a few sentences that outline what you think are the authors' hypothesis/objectives, their main results, and the conclusions drawn. Your report should constructively instruct authors on how they can strengthen their paper to the point where it may be acceptable for publication, or provide detailed reasons as to why the manuscript does not fulfill our criteria for consideration. Please supply appropriate evidence using examples from the manuscript to substantiate your comments. Please break your comments into two bulleted or numbered sections: major and minor comments.

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- Is the exact sample size (n) reported for each experimental group/condition (as a number, not a range)?
- Are the description of any error bars and probability values appropriate?
- Are all error bars defined in the corresponding figure legends?
- Has a sample size calculation been included, or a description and rationale about how sample sizes were chosen?

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