Reviewer’s report

Title: A Novel Combined Systemic Inflammation-Based Score Can Predict Survival of Intermediate-to-Advanced Hepatocellular Carcinoma Patients Undergoing Transarterial Chemoembolization

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Reviewer: Nicola Personeni

Reviewer’s report:

This paper illustrates the prognostic impact of a combined dNLR-PNI score in HCC patients undergoing TACE. The paper is well written but results reported by the Authors do not appear convincing with respect to the usefulness of such score.

Major comments:

1) Authors state that the dNLR has a similar prognostic impact compared to the NLR and indeed it can be used when the lymphocyte count is not available. However, in the current study, the lymphocyte count was available and it was used to calculate the PNI. So, given the availability of the lymphocyte count, why did the Authors choose the dNLR instead of the NLR?

2) Line 69-70: the prognostic role of PNI should be discussed in the frame of patients undergoing TACE. Actually, evidences do not seem to be straightforward in this setting (for instance, see He and Lin, Plos 2017)

3) Line 187: According to this subchapter, Authors should report the discriminatory performances of the staging systems and inflammation scores. However, they only reported the performance of the inflammatory scores. The reader should be made aware of the performance of the staging system (BCLC) which is, moreover, reported to be an independent prognostic factor. These discriminatory performances need to be appropriately compared with the inflammation scores.

4) Line 192: the combined dNLR-PNI score had a superior discriminative capacity compared with the dNLR and PNI separately. This sentence is not supported by results on Table 4. Indeed the 95% CI of the respective AUROC are broadly overlapping and superiority of a certain score over another one cannot be claimed.

5) Overall the AUROC values suggest a very modest discriminative efficacy of the different scores.

6) Among the limitations of this study is the lack of a training and validation set. This limitation need to be underscored.
Minor comments:

1) Line 224: "predictive value" is not appropriate and has to be rephrased into prognostic value.

**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 am able to assess the statistics

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