Reviewer’s report

Title: The association of liver function and quality of life of patients with liver cancer

Version: 0 Date: 31 Aug 2018

Reviewer: Wei-Chu Chie

Reviewer’s report:

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The authors of this manuscript assessed the association between the EORTC QLQ-C30 and HCC18 scores and liver function indices of 472 patients with newly diagnosed HCC. There are some questions to be answered:

1. The authors may describe the ways of detection and guidelines for treatment of HCC. Is there any screening program for high-risk groups?

2. How was the sample size determined? Is there any prior information?

3. The authors developed many indices for either C30 / HCC18 and liver biochemistry or other blood data.

   a. The index scores of C30 / HCC18 came from a paper reference 21. Usually the two questionnaires are analyzed with separate domain scores. The reference developed index scores according to survival prediction. It is a little ambitious to develop such scores.

   b. The index scores for liver function are even more ambitious. The ALBI and MELD are composite scores of biochemistry data. The Alb-ALP and ALP-PL are ratios of biochemistry or blood cell data. These are seldom used in studies assessing liver diseases. The authors may provide more basis for development of them.

4. The correlation is assessed by Pearson or Spearman's r rather than t-test or ANOVA. The statistical method in Table 4 sounds not appropriate. For those scores which are not normally distributed, Spearman may be better.

5. For correlation, significant results are easy to obtained once the sample size is large. The authors may comment this issue in Discussion.

6. This is a cross-sectional study. Did the authors conduct any follow up? Both QOL and liver condition may change during treatment.
7. The value of this study is also to be discussed. QOL and clinical or lab data are of different concepts and measurement constructs. What do the authors want to tell the readers?

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

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