



Regarding the role of post-transplant inflammatory cytokine signature on predicting tumor recurrence after liver transplantation for hepatocellular carcinoma

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Dear Editor,

We read Ng KT's paper [1] with great interest. This study investigated the prognostic value of post-transplant cytokines on tumor recurrence after liver transplantation (LT) for hepatocellular carcinoma (HCC). A prediction model for post-LT tumor recurrence was generated by the logistic regression. They found that the P3C-UCSF-AFP score significantly predicted post-LT tumor recurrence and poor survival, and the P3C-UCSF-AFP score was validated to significantly predict post-LT 2-year and 5-year tumor recurrence. Finally, they concluded that the integrated P3C-UCSF-AFP score can predict post-LT tumor recurrence accurately. However, in this letter, we raise some statistical concerns about this study which may change the result of this study.

As we know, 1 covariate per 10 outcome events are demanded in logistic regression analysis [2]. Forty recurrence cases of 150 HCC recipients could at most analyze 4 variables in this study. However, there are 11 variables in Table 1 for the logistic regression analyses of the P3C score and clinical factors. Moreover, 9 variables based on 35 dead patients were analyzed for the predicted role of P3C score on overall survival and disease-free survival of HCC recipients after LT. However, 35 dead patients at most analyzed

4 variables in this study, but there are 9 variables. Thus, these overcrowded analysis models in Ng KT's study may result in unreliable results. Finally, the accurately predicting role of the P3C score or P3C-UCSF-AFP score in post-LT tumor recurrence may not be accurate, further validation study should validate their conclusion.

However, despite these comments, we show great gratitude to Ng KT et al. for their outstanding study.

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Declarations

Conflict of interest We declare no competing interests.

Ethical approval Not applicable.

Informed consent All the authors reviewed this manuscript and agreed to submit this manuscript.

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