



Is Ki-67 a prognostic factor for post-operation survival in patients with non-alcoholic fatty liver disease-associated hepatocellular carcinoma?

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Comment on: D'Silva M, Na HY, Cho JY, *et al.* Pathological prognostic factors for post-resection survival in patients with hepatocellular carcinoma associated with non-alcoholic fatty liver disease. *Transl Cancer Res* 2021;10:3345-55.

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Recently, we read the paper “Pathological prognostic factors for post-resection survival in patients with hepatocellular carcinoma associated with non-alcoholic fatty liver disease,” by D'Silva *et al.*, published in *Translational Cancer Research*, with much interest (1). The authors evaluated the pathological prognostic factors associated with survival in patients with hepatocellular carcinoma (HCC) caused by non-alcoholic fatty liver disease (NAFLD), and they found that Ki-67 was the independent pathological prognostic factor associated with systemic recurrence-free survival. Although this was the first time that the pathological prognostic factors were evaluated in NAFLD-associated HCC patients, and the study showed significant implications for clinical practice, we have certain queries which are discussed below:

In recent times, the incidence of NAFLD-associated HCC has increased, and hepatitis B virus (HBV)-associated HCC accounts for a large proportion of HCC (2). However, HCC caused by hepatitis C virus (HCV), alcohol and other chemicals, and heredity also account for a non-negligible proportion (3). Hence, we do not think that comparing the Ki-67 labeling index of NAFLD-associated HCC only with those of HBV-associated HCC and thereby, ignoring with the Ki-67 labeling index of other factors associated HCC could draw the above conclusion. Hence, comparing only

NAFLD and HBV, and ignoring other factors, we do not think that it could draw the conclusion above. Also, the authors determined that Ki-67 labeling index, Ki-67 >15%, was associated with systemic recurrence in the patients with NAFLD-associated HCC. It is well known that Ki-67, a classical proliferation marker, has been widely used for the evaluation of proliferation capacity of tumors and other cells (4). Theoretically, malignant tumors with a high Ki-67 expression have a high potential for proliferation, and it also indicates a high degree of malignancy and recurrence potential (5). Therefore, we conclude that the assessment of NAFLD-associated HCC recurrence based on the Ki-67 labeling index could be inappropriate.

We believe that the clarification of these queries by the authors would provide a better understanding of the paper.

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Footnote

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