



Letter to the Editor

Reply to: IL-26 and the prognosis of hepatocellular carcinoma after resection

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To the Editor:

We thank Dr. Brailon for the thoughtful remarks regarding prognostic impact of interleukin (IL)-26 on patients with hepatocellular carcinoma (HCC) undergoing surgical resection [1]. This study drew a conclusion that relative high expression of IL-26 is an independent prognostic factor for HCC patients after resection. The raised concern regarding prospective confirmation is one of the most common underlying limitations of retrospective studies. In addition, a limited number of patients is an important determinant of power. Therefore, validation studies are warranted in the future.

As mentioned in the letter, the cut-off for IL-26 expression was generated by the median value despite continuous distributions. The purpose of deriving binary subgroups was to visualize cumulative events and describe the extent of hazard ratios. Therefore, the term "high IL-26" represented relatively high level among the HCC patients. Furthermore, there are disparities in evaluation systems for immunohistochemistry in terms of evaluation process, data adjustment, units, etc., thus we have divided patients into the high and low groups to support general interpretation. In addition, in medical statistics, the sample median is commonly utilized to define the dichotomizing value, because it is the rigid quotas for relatively high and low expressions [2]. A recent statistics in *Stat Med* also supports that subgroups based on binary biomarkers are constructed in a straightforward manner [3].

Lastly, we agree that smoking may be an important factor that may have affected the expression of IL-26 [4]. However, smoking was not evaluated due to retrospective nature of the study that we did not collect smoking-associated data. We call for future studies to explore the association between smoking-derived elevation of IL-26 and the prognosis of HCC after resection.

References

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