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LETTER TO THE EDITOR

The best predictive model for post-SVR HCC: can it be universal?

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To the Editor,

I read with interest the manuscript by Shiha et al. [1] regarding the predictive models for hepatocellular carcinoma (HCC) that develops after the achievement of sustained virologic response (SVR), i.e., viral eradication, in patients with chronic hepatitis C virus (HCV) infection. The number of patients who achieve SVR is increasing due to the high anti-HCV efficacy of current direct-acting antivirals, and it is therefore important to identify patients at high risk of HCC development after SVR. The authors assessed many reported predictive models for HCV-related HCC and identified models with the greatest predictive value for post-SVR HCC.

However, the predictive models were initially developed using different cohorts, and therefore each model can be the most effective only for the cohort on which it was based. In addition to differences in HCV genotypes, a point that the authors mentioned, HCC surveillance practice and guidelines for post-SVR patients [2–4], including the concepts, candidates, and quality [5], differ largely between the regions and countries of the various cohorts. Consequently, the post-SVR HCC tumor burden at detection and diagnosis differed between the cohorts. Later detection of advanced HCC after SVR will mean a longer interval between SVR and HCC development. In contrast, intensive surveillance of post-SVR patients will result in early detection of post-SVR HCC, which will mean a shorter interval between SVR and HCC. These differences in intervals between SVR and HCC, which result from the ability to detect early HCC by surveillance, would strongly influence the performances of predictive models; they differed based on the cohorts in which the models were developed and the cohorts in which they were tested. It may not be surprising that the GES model was one of the most effective for predicting post-SVR HCC, because this model was developed based on an Egyptian cohort originally, and was validated on an Egyptian cohort in this study.

A predictive model for post-SVR HCC that can be universally applicable for post-SVR patients remains to be established and, indeed, it is unclear whether developing such a model is possible. One may have to develop different predictive models that are effective in various regions or countries, respectively.

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Declarations

Conflict of interest Hidenori Toyoda reports speaker honoraria from AbbVie and Bayer; Masanori Atsukawa reports a speaker honorarium from AbbVie.

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