Letter in Reply: Prevalence and Risk Factors of Significant Hepatic Fibrosis in Omani Patients with HBeAg-negative Chronic Hepatitis B Virus Infection

Said A. Al-Busafi[1,2*]

[1]Department of Medicine, College of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman

[2]Medical Research Center, Sultan Qaboos University, Muscat, Oman

Received: 14 November 2025

Accepted: 9 December 2025

**Corresponding author: busafis@squ.edu.om*

DOI 10.5001/omj.2025.111

To the Editor,

We thank the authors of the letter for their interest in our study, "Prevalence and Risk Factors of Significant Hepatic Fibrosis in Omani Patients with HBeAg-negative Chronic Hepatitis B Virus Infection".[1] We appreciate their insightful comments regarding the reference standards used for liver stiffness cut-off values (LSCOVs) in our methodology.

We fully agree that liver biopsy (LB) remains the gold standard for assessing liver fibrosis (LF), as it provides direct histopathologic evaluation of hepatic architecture, allowing for accurate staging and grading of chronic liver diseases.[2] While non-invasive methods such as 2D-SWE have emerged as valuable tools in clinical practice due to their safety and reproducibility, their performance is highly dependent on the accuracy of the reference method used to establish LSCOVs.[3]

In our study, we adopted LSCOVs referenced to transient elastography (TE), as they were widely available in the regional literature and provided clinically useful benchmarks for non-invasive staging of fibrosis.[4] However, we acknowledge the limitation that TE itself is a non-invasive modality and may not provide the same level of diagnostic precision as LB.[5]

Indeed, reference values for 2D-SWE derived from studies using LB, such as those provided by Aksakal et al.[6], offer a more robust foundation for evaluating liver stiffness. These LB-based thresholds may enable more accurate differentiation between fibrosis stages, thereby enhancing the diagnostic performance of 2D-SWE. Future research in our region, incorporating LB-validated cut-off values, would further enhance the clinical applicability of elastography in the management of chronic hepatitis B virus (HBV) infection.

We also concur with the authors' final point: regardless of the diagnostic method, periodic monitoring of inactive HBV carriers is essential for the early detection of fibrosis progression and optimizing long-term outcomes.

Once again, we sincerely thank the authors for their valuable feedback, which highlights key methodological considerations and supports the ongoing effort to improve non-invasive approaches to liver fibrosis assessment.

References

1. Al-Shuaili, H. H., Al Mashikhi, B., Al Sinani, A. & Al-Busafi, S. A. High Prevalence and Risk Factors of Significant Hepatic Fibrosis in Omani Patients with HBeAg-negative Chronic Hepatitis B Virus Infection: A Retrospective Study. Oman Med J 39, (2024).

2. Chowdhury, A. B. & Mehta, K. J. Liver biopsy for assessment of chronic liver diseases: a synopsis. Clin Exp Med 23, 273–285 (2023).

3. Castera, L. et al. EASL-ALEH Clinical Practice Guidelines: Non-invasive tests for evaluation of liver disease severity and prognosis. J Hepatol 63, 237–264 (2015).

4. Sporea, I. et al. Which are the cut-off values of 2D-Shear Wave Elastography (2D-SWE) liver stiffness measurements predicting different stages of liver fibrosis, considering Transient Elastography (TE) as the reference method? Eur J Radiol 83, e118–e122 (2014).

5. Rockey, D. C., Caldwell, S. H., Goodman, Z. D., Nelson, R. C. & Smith, A. D. Liver biopsy. Hepatology 49, 1017–1044 (2009).

6. Aksakal, M. et al. Diagnostic performance of 2D shear wave elastography in predicting liver fibrosis in patients with chronic hepatitis B and C: a histopathological correlation study. Abdominal Radiology 46, 3238–3244 (2021).