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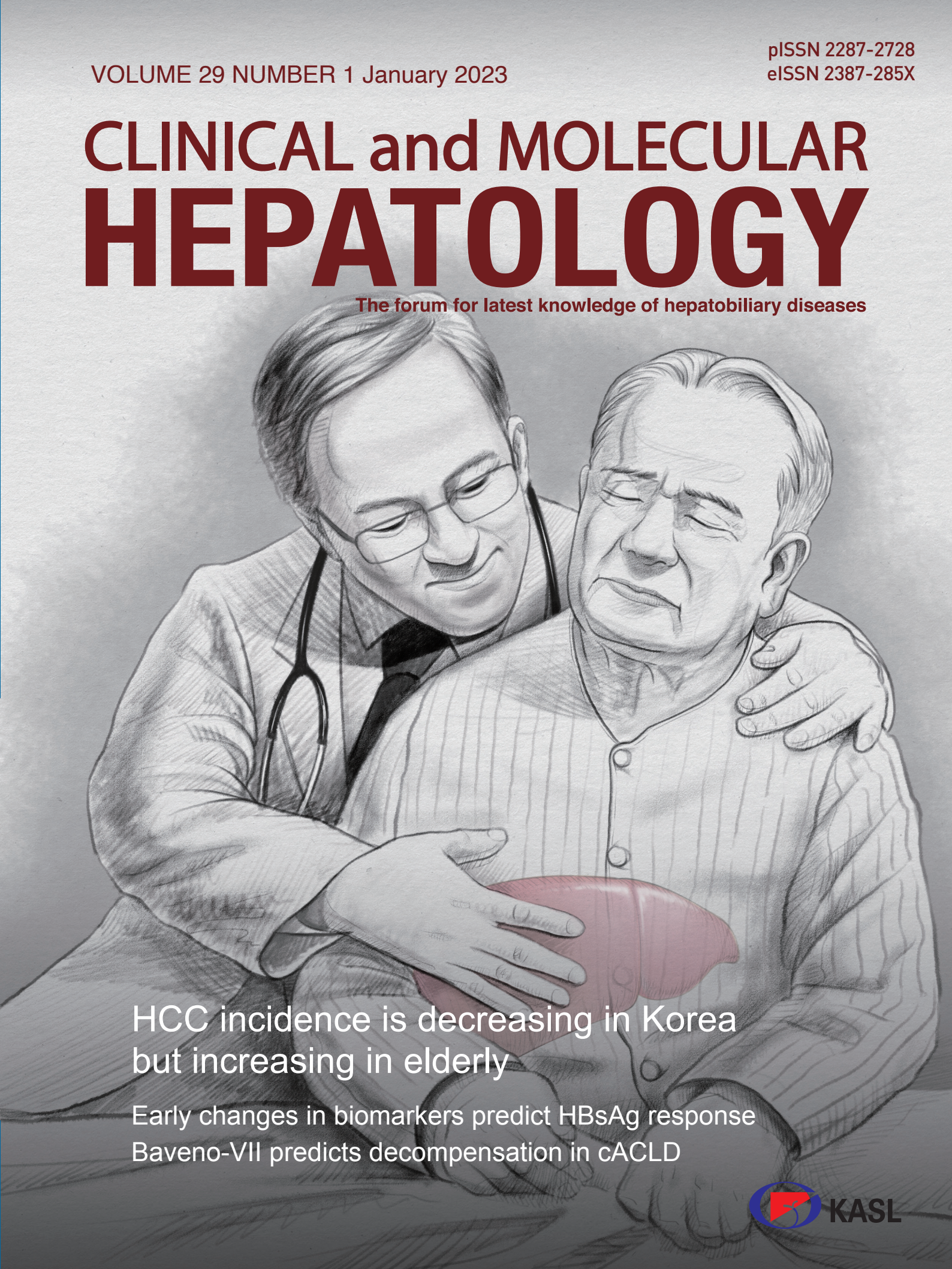

HCC incidence is decreasing in Korea but increasing in elderly

Early changes in biomarkers predict HBsAg response

Baveno-VII predicts decompensation in cACLD

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Correspondence

Correspondence on Editorial regarding "Baveno-VII criteria to predict decompensation and initiate non-selective beta-blocker in compensated advanced chronic liver disease patients"

Yu Jun Wong[1,2], Sanchit Sharma[3], Giulia Tosetti[4], Xiaolong Qi[5], and Massimo Primignani[4]

[1]Department of Gastroenterology & Hepatology, Changi General Hospital, Singapore; [2]Duke-NUS Academic Clinical Program, SingHealth, Singapore; [3]Department of Gastroenterology and Human Nutrition Unit, All India Institute of Medical Science, New Dehli, India; [4]Division of Gastroenterology and Hepatology, Foundation IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy; [5]CHESS Center, Institute of Portal Hypertension, the First Hospital of Lanzhou University, Lanzhou, China

Keywords: Liver cirrhosis; Hypertension; Portal; Ascites; Hepatic encephalopathy

Dear Editor,

We would like to thank Dr. Semmler and colleagues[1] for their interest in our study.[2] In the present study, we sought to demonstrate the applicability of non-invasive tests (NIT)-based criteria in risk-stratifying compensated cirrhosis patients in the real-world clinical practice.

We included patients with cirrhosis driven by non-alcoholic steatohepatitis or non-alcoholic fatty liver disease, whom etiological cure is not currently available - these patients represent compensated advanced chronic liver disease (cACLD) without removal of primary etiology. We also included viral-related cirrhosis with adequate virological suppression, which is the current standard of care.[3,4] The inclusion of treated viral-related cirrhosis should not invalidate our conclusion, because even after virological suppression, cirrhosis patients with clinically significant portal hypertension (CSPH) may still have CSPH, meaning these patients remain at risk of future decompensation and hepatocellular carcinoma.[2,5]

The number needed-to-treat was probably higher by including patients with treated viral-related cirrhosis in this study. However, given the robust scientific evidence of removing primary etiology can improve outcomes in viral-related cirrhosis, there should be little debate on whether these patients should be treated.[6] What remains uncertain, is whether non-selective beta-blockers (NSBB) are needed to prevent decompensation in all cACLD patients with virological suppression and persistence CSPH, when CSPH was assessed using NIT-based criteria.[7] Indeed, there was a risk of first hepatic decompensation in almost half of our patients (predominantly cured hepatitis C virus [HCV] infection and CSPH-ruled in by NIT) vs. the placebo group of the PREDESCI (β blockers to prevent decompensation of cirrhosis in patients with clinically significant portal hypertension) trial,

Corresponding author : Yu Jun Wong
Department of Gastroenterology & Hepatology, Changi General Hospital, 2, Simei Street 3, 529889, Singapore
Tel: +65-69365729, E-mail: eugene.wong.y.j@singhealth.com.sg
https://orcid.org/0000-0002-0727-1183

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which mostly included untreated HCV patients with CSPH (13.3% vs. 24.0%). This difference likely reflects the impact of virological suppression in HCV patients in our cohort. In a way, it is reassuring to see that NIT-based assessment of CSPH remained predictive of liver decompensation in viral-related cirrhosis patients achieving viral suppression. Since cirrhosis patients may continue to have CSPH (thus, the risk of liver decompensation), NSBB should be considered to prevent decompensation in these patients.

As described in our study, patients with NSBB at baseline (presumably at higher baseline risk of CSPH, high-risk varices and liver decompensation) were excluded since NSBB may reduce the risk of liver decompensation,[8] as shown in PREDESCI trial.[9] Nevertheless, this subgroup was small, and subgroup analysis showed that CSPH (liver stiffness measurement ≥25 kPa) remained predictive of decompensation after excluding patients with high-risk varices.

There were a significant proportion of patients falling within the grey zone, which was also demonstrated in a recent study by Semmler et al.[10] This is consistent with the performance of transient elastography to exclude or include patients with advanced fibrosis. Unfortunately, we did not have the data on spleen stiffness and the ratio of von Willebrand factor and platelet count (VITRO) in the current cohort. Finally, as stated in our manuscript, we performed competing risk regression by cluster to account for heterogeneity and regional differences across the four cohorts of patients.

In summary, our findings demonstrated that Baveno-VII criteria of CSPH can predict liver decompensation and liver-related events in compensated cirrhosis/cACLD patients. We agree that a pragmatic "non-invasive" PREDESCI trial would be desirable to re-ensure our current clinical practice using contemporary patients, particularly cACLD patients after HCV cure, as it would also help confirm our findings. Until then, our findings suggest that NSBB should be considered in cirrhosis patients with CSPH diagnosed using non-invasive criteria.

Authors' contribution

Drafting of manuscript: YJW; Critical review of manuscript: All authors

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Conflicts of Interest

YJW is an invited speaker for Gilead Science and AbbVie. The other authors have no conflicts to disclose.

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Abbreviations:

cACLD, compensated advanced chronic liver disease; CSPH, clinically significant portal hypertension; HCV, hepatitis C virus; NASH, non-alcoholic fatty liver disease; NIT, non-invasive tests; NSBB, non-selective beta blocker; VITRO, the ratio of von Willebrand factor and platelet count

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