

A REVIEW OF PUBLISHED DATA AND COMPARISON OF ASIA-PACIFIC AND INTERNATIONAL GUIDELINES ON THE USE OF QUANTITATIVE HBSAG IN THE MANAGEMENT OF CHRONIC HEPATITIS B

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Background:

Chronic hepatitis B (CHB) is commonly diagnosed and monitored in China using quantitative hepatitis B virus surface antigen (qHBsAg) measurement. However, its value in monitoring untreated patients and predicting outcomes remains unclear. This study systematically reviews literature on the use of qHBsAg in CHB and examines existing clinical guidelines.

Methods:

A systematic literature search was conducted using ProQuest to search Embase and Medline, supplemented by manual searches of congress abstracts from international society meetings (AASLD, EASL, APASL). Eligible publications were clinical trials or cohort studies involving people aged ≥16 years with CHB that reported qHBsAg measurements. Studies focused on HBV prevention/vaccination or coinfections (HIV, HCV, HDV) were excluded. Identified studies were screened by two reviewers. For

guidelines, systematic reviews, and meta-analyses, methodology, findings, and recommendations were summarized.

Results:

Out of 2477 publications identified, 348 were deemed relevant. After Screening, the proportion of studies from the Asia-Pacific region covering key topics were: prediction of HBsAg-loss (spontaneous, following pegylated interferon therapy, and as part of nucleos(t)ide cessation strategies), 59% (n=79/133); monitoring during management, 50% (n=114/227); prediction of clinical outcomes in treated patients, 53% (n=39/73). Additionally, 58% (n=18/31) of studies reported qHBsAg use in untreated CHB (disease natural history). Guidelines from 4 Asia-Pacific and 6 other societies were reviewed. Compared with guidelines from other regions, Asia-Pacific guidelines were more frequently updated since 2020 and more likely to include guidance on qHBsAg's role in predicting HBsAg loss and monitoring treated patients, especially those on antiviral therapy.

Conclusion:

Asia-Pacific guidelines provide more comprehensive guidance on using qHBsAg for predicting HBsAg loss and monitoring treated patients compared to other regions. Global consensus is needed to harmonize recommendations and support optimal use of qHBsAg in the management of patients with CHB.

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