AASLD practice guideline on noninvasive liver disease assessment of portal hypertension.

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American Association for the Study of Liver Diseases (AASLD)

Sterling RK, Asrani SK, Levine D, et al. AASLD practice guideline on noninvasive liver disease assessment of portal hypertension. Hepatology. 2025 Mar 1;81(3):1060-1085. [143 references] PubMed

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Overview

Guideline Objective

To develop a guideline to rigorously evaluate and address the use of noninvasive liver disease assessments (NILDAs) to identify clinically significant portal hypertension (CSPH)

Note: Each blood-based and imaging-based NILDA to detect fibrosis and steatosis is discussed in separate guidelines.

Patient Population

Adult patients with chronic liver disease (CLD)

Recommendations

Recommendation Statements

Patient, Intervention, Comparator, Outcome (PICO) 1: In adult patients with chronic liver diseases (CLDs), what is the diagnostic performance of noninvasive methods (blood- and/or imaging-based) for predicting the presence and/or severity of portal hypertension, including clinically significant portal hypertension (CSPH) (based on hepatic venous pressure gradient [HVPG])?

1. In adults with CLD, AASLD advises against using the currently available blood-based markers or thrombocytopenia alone for the detection of CSPH (defined as HVPG ≥10 mmHg). (**Conditional recommendation; Low quality evidence**)

2. In adults with CLD, AASLD suggests using the combination of liver stiffness measurement (LSM) and platelet count to assess for the presence of CSPH. (**Conditional recommendation; Low quality evidence**)

3. In adults with CLD, AASLD suggests against using LSM to quantify higher degrees of portal hypertension (HVPG ≥12 mmHg). (**Conditional recommendation; Low quality evidence**)

4. AASLD suggests that serial LSM and platelet count levels may be followed over time to monitor for progression to CSPH in adults with CLD without baseline CSPH, in whom the underlying etiology of cirrhosis is active/uncontrolled. (**Ungraded statement**)

5. In adults with cirrhosis who are receiving treatment for their liver disease or known portal hypertension, AASLD suggests caution around the use of LSM or spleen stiffness measurement (SSM) to detect longitudinal changes in portal hypertension (i.e., HVPG). (**Conditional recommendation; Low quality evidence**)

PICO 2: In adult patients with CLD and CSPH, what is the prognostic performance of noninvasive liver disease assessments (NILDAs) to predict liver-related clinical

outcomes (decompensation and transplant-free survival) compared with HVPG?

6. In patients with CLD and CSPH, there is insufficient evidence to support the use of blood- or imaging-based NILDAs to predict clinical outcomes. (**Ungraded statement**)

Evidence Rating Scheme

AASLD used the GRADE (Grading of Recommendations Assessment, Development, and Evaluation) approach to rate certainty in the estimates.

Rating the Quality of Evidence

Study Design	Initial Rating of Quality of Evidence	Rate Down When	Rate Up When
Randomized Controlled Trial (RCT) Observational	High Moderate Low Very Low	Risk of bias Inconsistency Imprecision Indirectness Publication bias	Large effect size (e.g., RR=0.5) Very large effect (e.g., RR=0.2) Dose-response gradient All plausible confounding would increase the association

Recommendation Rating Scheme

Implications of the Strength of a Recommendation

Strong	• Population: Most people in this situation would want the recommended course of action, and only a small proportion

	would not. • Health care workers: Most people should receive the recommended course of action. • Policy makers: The recommendation can be adopted as policy in most situations.
Conditional	• Population: The majority of people in this situation would want the recommended course of action, but many would not. • Health care workers: Be prepared to help patients make a decision that is consistent with their values using decision aids and shared decision-making. • Policy makers: There is a need for substantial debate and involvement of stakeholders.

Related Content

Supporting Documents

- Noninvasive Liver Disease Assessment to Identify Portal Hypertension: Systematic and Narrative Reviews Supporting the AASLD Practice Guideline; 2025 Mar 1.
    - Supplemental Methods.
- Imaging-based Noninvasive Liver Disease Assessment for Staging Liver Fibrosis in Chronic Liver Disease: A Systematic Review Supporting the AASLD Practice Guideline; 2025 Feb.
    - Appendix.
- Accuracy of Blood-based Biomarkers for Staging Liver Fibrosis in Chronic Liver Disease: A Systematic Review Supporting the AASLD Practice Guideline; 2025 Jan.
    - Supplemental Digital Content.

    - Supplemental Table S1. Diagnostic Performance of Blood-based Biomarkers for Stages F2-4, F3-4 and F4.
- AASLD Policy on Development and Use of Practice Guidelines, Guidances, and Position Papers.

Implementation Tools

- Liver*Learning*® website.
- The Original Guideline includes the following:
    - Figure 1. A Simplified NILDA Algorithm for Detection of CSPH (p. 1079)

Patient Education

No patient education materials available.

Disclaimer

TRUST Scorecard

Composition of Guideline Development Group (GDG)

Multidisciplinary GDG Members	**Yes**
Methodologist Involvement	**Yes**
Incorporation of Patient and Public Perspective	

Systematic Review of Evidence

Literature Search	
Study Selection	
Evidence Synthesis	

Foundations for Recommendations

Strength of Evidence Grade	
Description of Benefits and Harms of Recommendations	
Summary of Evidence Supporting Recommendations	
Strength of Recommendations Rating	
Clear Articulation of Recommendations	

Funding Source	**Yes**
Disclosure and Management of Financial Conflicts of Interests	
External Review	
Updating