PEER-REVIEW REPORT

Name of journal: *World Journal of Hepatology*

Manuscript NO: 85011

Title: A review of noninvasive prognostic models, imaging, and elastography to predict clinical events in primary sclerosing cholangitis

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03699990

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Chief Doctor, Director, Professor

Reviewer's Country/Territory: China

Author's Country/Territory: United States

Manuscript submission date: 2023-04-07

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-05-15 02:48

Reviewer performed review: 2023-05-24 05:41

Review time: 9 Days and 2 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent　　[Y] Grade B: Good　　　[ ] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[ ] Grade A: Priority publishing　[Y] Grade B: Minor language polishing　[ ] Grade C: A great deal of language polishing　[ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority)　[Y] Accept (General priority) [ ] Minor revision　[ ] Major revision　[ ] Rejection
Re-review	[ ] Yes　[Y] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous　[ ] Onymous
	Conflicts-of-Interest: [ ] Yes　[Y] No

SPECIFIC COMMENTS TO AUTHORS

The author reviewed the reports on non-invasive prediction of clinical event study in primary sclerosing cholangitis（PSC）, including prognostic models, MR imaging, elastography, etc. The role of systematically organizing the research results involved in relevant clinical studies in evaluating the prognosis of PSC：Compared to Mayo Risk Score (MRS), the UK-PSC score has superior testing performance in short-term and long-term transplant free survival; The Primary Sclerosis Risk Assessment Tool (PREsTo) has good testing performance for the risk of liver decompensation; The Amsterdam Oxford model includes patients with overlapping small catheter PSC and PSC autoimmune hepatitis; Elastic imaging and magnetic resonance imaging are expected to become prognostic tools.　　There are some improvements as following. There are many abbreviations in the manuscript. The conventional way of expression when first appearing is the original text (abbreviation). Some abbreviations in this paper are not expressed according to the above stated.

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Reviewer's code: 05770409

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Serbia

Author's Country/Territory: United States

Manuscript submission date: 2023-04-07

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-06-17 12:24

Reviewer performed review: 2023-06-21 14:04

Review time: 4 Days and 1 Hour

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation

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Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
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Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The author reviewed of noninvasive prognostic models, imaging, and elastography to predict clinical events in primary sclerosing cholangitis. The Mayo risk score incorporates noninvasive variables and has served as a surrogate endpoint for survival, but newer models, including the primary sclerosing risk estimate tool model and UK-PSC score have better test performance than the Mayo risk score. The Amsterdam-Oxford model included patients with large duct and small duct PSC and patients with PSC-autoimmune hepatitis overlap. Other noninvasive tests include MRI, elastography and the enhanced liver fibrosis score warrant further validation. Prognostic models and noninvasive tests serve to inform   patients about their prognosis and serve to be useful in clinical trials of investigational agents so accept this paper for publication.