July 16, 2023

Manuscript 85011 A review of noninvasive prognostic models, imaging, and elastography to predict clinical events in primary sclerosing cholangitis

Dear Jia-Ping Yan, Professor Pyrsopoulos,

Thank you for the opportunity to revise the manuscript. We have addressed the reviewers' comments and the Editor-in-Chiefs comments and provide a point-by-point response below. The article is not under consideration elsewhere, is original work and there are no conflicts of interest or funding sources. A copyright form and audio form are also submitted. I was unable to download the conflict of interest form. Please email to mark.russo@atriumhealth.org.

Sincerely,

Mark Russo, MD MPH
Clinical Professor of Medicine
Atrium Health Wake Forest

Reviewer #1:
Scientific Quality: Grade B (Very good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Accept (General priority)
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.

RESPONSE: We thank the reviewer for the comments and appreciate the time taken to review our manuscript.

Reviewer #2:
Scientific Quality: Grade B (Very good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Accept (General priority)
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.

RESPONSE: We appreciated the reviewer's comments. We have defined all abbreviations in the revised manuscript.

Company editor-in-chief:

I have reviewed the Peer-Review Report and the full text of the manuscript, all of which have met the basic publishing requirements of the World Journal of Hepatology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. The quality of the English language of the manuscript does not meet the requirements of the journal. Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the Reference Citation Analysis (RCA). RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: https://www.referencecitationanalysis.com/. Uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the

following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2023.

RESPONSE: The author is fluent in English and checked the manuscript for spelling and grammar. The revised manuscript supplements and highlights the latest cutting edge research results, including the role of novel biomarkers, such as third generation anti-neutrophil cytoplasmic antibodies to serine protease-3 and role of artificial intelligence in imaging (page 15-16, references 45, 46, as well as page 15 references 40-44). The Figure is organized as recommended and in powerpoint, original with Copyright ©Mark Russo 2023.