

Editor:

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.

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/>.

- Thank you for this suggestion. We used the software to ensure that all recent high-impact articles are included in the manuscript.

**Reviewer 1:**

Authors extensively reviewed diagnostic performance of serological and imaging biomarkers for evaluation of NAFLD and NASH in children.

My comment:

- The term “imaging biomarkers” cause confusion with “serological biomarkers”. Therefore, I suggest author to use non-invasive tests (NIT) that is generally excepted term in literature; serology-based NIT vs. imaging-based NIT.
- Thank you very much for your recommendation. As suggested, we have included the term ‘noninvasive test, NIT’ at several locations throughout the manuscript in order to orient readers. We performed another review of recent literature and found that leaders in the NAFLD field and the NAFLD field in general do use the terms ‘imaging biomarkers’ and ‘serological biomarkers’ (PMID: 29203392, 34558828, 29463906, 36526000, 32387227, 33529485). We hence kept the terms ‘imaging biomarkers’ and ‘serological biomarkers’.
- Subtitles and text of “Imaging Biomarkers” section should be rearranged, and also extensively redacted, such as:
  - A. Ultrasound based NIT
    - a. Steatosis (attenuation parameter (CAP))
    - b. NASH
    - c. Fibrosis (Transient Elastography (TE) / Vibration Controlled Transient Elastography (VCTE) / Acoustic radiation force impulse (ARFI))

- B. MRI-based NIT
  - a. Steatosis (Proton Density Fat Fraction (MRI-PDFF))
  - b. NASH
  - c. Fibrosis (Magnetic Resonance Elastography (MRE))
- Thank you for this astute suggestion. We have reorganized the imaging-based biomarkers/NIT section as recommended.
- APRI and FIB4 are index/scores developed for evaluating degree of fibrosis rather than differentiating NAFL from NASH. Therefore, the data for APRI and FIB4 at Table 7 should be either excluded or moved to Table 8.
- Thank you very much for your suggestion. The data for APRI, FIB-4, and other fibrosis-related imaging-based NITs were moved from Table 7 to Table 8, as recommended. We kept studies that evaluate APRI and FIB-4 performance in NASH within Table 7 given its novel approach, as it is usually employed for fibrosis assessment as stated by the reviewer. Inclusion of those 2 indices/scores also allows for greater performance comparison across various diagnostic modalities for NASH.
- Similarly, TE is used for evaluating fibrosis rather than steatosis, so sentences at Page 30, Line 22-23: “MRI-PDFF appears to be superior to TE...” and at Page 31, Line 4-5: “... elastography with fat quantification.” must be corrected accordingly.
- Thank you for this insightful comment. We clarified these statements to read “MRI-PDFF was superior to ultrasound-based CAP for the diagnosis of steatosis” and “... proceed to subsequent elastography with fat quantification through MRI-PDFF or ultrasound-based CAP measures”. Furthermore, we edited additional portions throughout the manuscript, where formulations related to the imaging modalities could be ambiguous.
- Some minor typological error should be corrected, i.e. Page 10, Line 19: “(50% and 24\$ in patients...”; Page 14, Line 20-21: F2 should be added to “histologic categories: F0 (no fibrosis), F1 (portal fibrosis with no septae), ...”; “ng/mL” rather than “ng/ml”, missing units of leptin, etc.
- Thank you for noting these typological errors. We have reviewed the manuscript and corrected these.

#### **Reviewer 2:**

The manuscript is well written and comprehensive, which is useful for us to understand the current research of noninvasive Biomarkers in Pediatric NAFLD.

- Thank you for very much for your positive feedback!