

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 67267

Title: Liver injury changes the biological characters of serum small extracellular vesicles and reprograms hepatic macrophages in mice

Reviewer's code: 06045528

Position: Peer Reviewer

Academic degree: MSc, PhD

Professional title: Doctor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

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Reviewer chosen by: AI Technique

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The research article reports the differential expression of sEV in both ALI and CLI. The authors performed extensive bioinformatic analysis and identified a panel of miRNAs that would be potentially utilized as diagnostic biomarker for liver injury diseases. Subsequent mechanistic studies provided the evidence that ALI sEVs may induce macrophage polarization to M2 type. The manuscript is well structured. The story line is clear and coherent. However, there are some minor concerns as below: 1. CLI model. From Figure 1D, we can clearly appreciate that ALT level change was very subtle at 8W and 12W. Also, the histological changes were attenuated at 12W. All the results indicate the chronic liver injury was not well established (i.e. not 'chronic' per se). Pls justify and explain in the discussion session. 2. For Figure 5C and Table 2, suggest to change to Venn diagram format, which better visualizes the result and readable. 3. Table 1 is confusing and misleading. The miRNA list of GSE78792 liver database is duplicated several times. The ALI/CLI rank are duplicated as well, but just represent in different order. Suggest to combine as ONE simple summary table. First column is the miRNA list of GSE database. Second column ALI rank. Third column CLI rank. The specific miRNA annotation columns are optional. 4. The representation of Figure 6C can be improved by changing the Y-axis scale from log2 to linear. Log2 data make difficult to evaluate the changes of relative expression of cytokines.