

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 88556

Title: Uridine diphosphate glucuronosyltransferase 1 Y prevents the progression of liver injury

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03662585

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Egypt

Author's Country/Territory: China

Manuscript submission date: 2023-09-28

Reviewer chosen by: Jia-Ru Fan

Reviewer accepted review: 2023-11-17 21:18

Reviewer performed review: 2023-11-25 09:50

Review time: 7 Days and 12 Hours

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 Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
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 checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" 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

Nice article that addresses the degree in f liver injury related to genetic mutation

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Title: Uridine diphosphate glucuronosyltransferase 1 Y prevents the progression of liver injury

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03214202

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: China

Manuscript submission date: 2023-09-28

Reviewer chosen by: Jia-Ru Fan

Reviewer accepted review: 2023-12-04 08:19

Reviewer performed review: 2023-12-05 08:48

Review time: 1 Day

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
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
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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

This article has a good innovation. From the analysis of clinical samples, it is concluded that liver injury is closely related to UGT1A1 gene. Patients with severe liver disease exhibited relatively reduced levels of UGT1A1 protein in the liver. In mice with lipopolysaccharide (LPS) intervention and liver steatosis-mediated liver injury progression, the protein levels of UGT1A1 were decreased in the liver, which is similar to the observations in patients with severe liver disease. UGT1A1 knockout exacerbated CCl₄- and ConA-induced liver injury in mice, intensified hepatocyte endoplasmic reticulum stress and oxidative stress, and disrupted lipid metabolism. UGT1A1 is involved in the progression of liver injury by regulating endoplasmic reticulum stress, oxidative stress and lipid metabolism homeostasis. However, minor modifications to the article are still needed. 1. Please supplement the references of LPS and CCl₄-induced severe acute exacerbation of liver injury model 2. List acronyms 3. Significant differences are suggested to be indicated by * 4. All the HE and TUNEL experimental pictures in the experimental results were added with a ruler 5. Remove the background line from all bar charts 6. When it is proved that the ccl4 liver injury model increases the level of

UGT1A1, it is inconsistent with clinical results. Why not just use LPS to model liver injury, that in the following experiments, ccl4 was still used first. 7. Brief the discussion 8. Please indicate your fund number