



PEER-REVIEW REPORT

Name of journal: *World Journal of Hepatology*

Manuscript NO: 91446

Title: A Review on The Molecular Mechanism of Nanomaterials Induced Liver Injury

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05492281

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Consultant Cardiac Surgeon, Full Professor, Neurosurgeon, Research Scientist

Reviewer’s Country/Territory: China

Author’s Country/Territory: India

Manuscript submission date: 2023-12-28

Reviewer chosen by: AI Technique

Reviewer accepted review: 2024-01-18 16:49

Reviewer performed review: 2024-01-18 16:59

Review time: 1 Hour

Scientific quality	<input checked="" type="checkbox"/> Grade A: Excellent <input 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 Grade E: Do not publish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 checked="" type="checkbox"/> Grade A: Excellent <input 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 checked="" type="checkbox"/> Grade A: Excellent <input 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 checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input 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 checked="" type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input 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

This review paper aims to provide an exhaustive examination of the molecular mechanisms underpinning nanomaterial-induced hepatotoxicity, drawing insights from both in vitro and in vivo studies. The most frequently observed manifestations of toxicity following the exposure of cells or animal models to various nanomaterials involve the initiation of oxidative stress and inflammation. In addition, the latest application of nanomaterials in the medical field should be added to the discussion section, and the following latest achievements should be cited.
<https://doi.org/10.1002/VIW.20200133> <https://doi.org/10.1002/VIW.20200180>
<https://doi.org/10.1002/VIW.20200154> <https://doi.org/10.1002/VIW.20200067>



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Reviewer’s code: 07955471

Position: Peer Reviewer

Academic degree: PhD

Professional title: Assistant Professor

Reviewer’s Country/Territory: Pakistan

Author’s Country/Territory: India

Manuscript submission date: 2023-12-28

Reviewer chosen by: AI Technique

Reviewer accepted review: 2024-01-18 04:04

Reviewer performed review: 2024-01-23 20:42

Review time: 5 Days and 16 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 checked="" type="checkbox"/> Grade A: Priority publishing <input 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

Overall the manuscript is well written and contain valuable information about the hepatotoxicity of NP. I suggest to draw the table as per the standard format of the tables. The authors can consult any published article to find out the standard format of the table. Please reduce the font size of the title of each table. Please write abbreviation in the form of paragraph and reduce the font size of the Heading abbreviation to 12.



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Reviewer’s code: 07948473

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer’s Country/Territory: China

Author’s Country/Territory: India

Manuscript submission date: 2023-12-28

Reviewer chosen by: AI Technique

Reviewer accepted review: 2024-01-22 01:05

Reviewer performed review: 2024-01-26 01:36

Review time: 4 Days

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" 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 type="checkbox"/> Grade B: Good <input checked="" 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 type="checkbox"/> Accept (General priority) <input checked="" 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

The manuscript provides a detailed overview of the potential hepatotoxic effects associated with various nanomaterials, including silver nanoparticles, carbon nanotubes, quantum dots, and gold nanoparticles. It categorizes nanoparticles based on their structural morphology and discusses their exposure routes in relation to human health. The review underlines the intricate mechanisms underlying nanoparticle-induced liver damage and emphasizes the necessity for comprehensive assessments to ensure safe use. This manuscript is a valuable resource for researchers, academics, and industry professionals interested in the field of nanotechnology and its implications on human health. It successfully synthesizes a vast amount of information on nanoparticle-induced hepatotoxicity and sets the stage for further investigations and responsible practices in nanotechnology. Questions: 1. Please check the spelling and grammar errors in the entire text and make the necessary modifications. 2. Please unify the reference format. 3. The summaries of the mechanisms of nanomaterials-induced liver injury in Fig. 1 and Fig. 2 are not comprehensive enough, and it is suggested to supplement and enrich them.