

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 91559

Title: Cellular strategies to induce immune tolerance after liver transplantation: Clinical perspectives

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 00069130

Position: Editorial Board

Academic degree: BM BCh, PhD

Professional title: Academic Fellow, Assistant Professor

Reviewer's Country/Territory: India

Author's Country/Territory: China

Manuscript submission date: 2023-12-30

Reviewer chosen by: AI Technique

Reviewer accepted review: 2024-01-05 05:36

Reviewer performed review: 2024-01-12 08:29

Review time: 7 Days and 2 Hours

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 Grade E: Do not publish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 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input type="checkbox"/> Anonymous <input checked="" type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The manuscript by Zhou et al is a timely review of the recent developments in transplantation immunology, with respect to liver. This is short and informative. 1) and a 5.8-fold higher risk of premature death than the general population. –define premature death 2) The authors need to discuss more on human CAR-Tregs. Other than HLA-A2, what are the other possible proteins which can be targeted to achieve tolerance? 3) The failure of tolerogenic DC in liver transplantation also needs more explanation. Is it the inability to generate personalized antigen specific tolerogenic DCs is the major challenge? 4) The usefulness of MSCs in transplantation is far from clear. Most studies show that these MSCs die and cause micro embolus. Even if they survive for few days and secrete some small amount of cytokines, will it have any significant effect for a large organ like liver? The evidences are not convincing. Will it have more effect than an extra dose/short low dose course of immunosuppressant? Is it worth the risk and cost? 5) The authors are encouraged to make a table condensing all the relevant studies in this direction. This will help the readers to understand the developments quickly.