



**Baishideng  
Publishing  
Group**

7041 Koll Center Parkway, Suite  
160, Pleasanton, CA 94566, USA  
**Telephone:** +1-925-399-1568  
**E-mail:** office@baishideng.com  
<https://www.wjgnet.com>

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Transplantation*

**Manuscript NO:** 89674

**Title:** Current status and future perspectives on stem cell transplantation for spinal cord injury

**Provenance and peer review:** Invited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 05247020

**Position:** Peer Reviewer

**Academic degree:** PhD

**Professional title:** Doctor

**Reviewer's Country/Territory:** China

**Author's Country/Territory:** Italy

**Manuscript submission date:** 2023-11-08

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2023-11-15 08:36

**Reviewer performed review:** 2023-11-20 08:43

**Review time:** 5 Days

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 Grade E: Do not publish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

<b>Scientific significance of the conclusion in this manuscript</b>	<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
<b>Language quality</b>	<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
<b>Conclusion</b>	<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
<b>Re-review</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Peer-reviewer statements</b>	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 manuscript is a systematic review of clinical trials on stem cell therapy for spinal cord injury (SCI). The review highlights the potential benefits and limitations of stem cell therapy in improving neurological function in SCI patients. It discusses the challenges and uncertainties associated with the translation of stem cell therapy from animal studies to clinical practice. The review emphasizes the need for well-designed clinical trials with larger sample sizes, control groups, and long-term follow-up to establish the safety and efficacy of stem cell therapy for SCI. The article also mentions the potential adverse events associated with stem cell transplantation. SCI constitutes an inestimable public health issue. The injured spinal cord is difficult to repair and regenerate. The most crucial phase in the pathophysiological process of SCI concerns the well-known secondary injury, which is the uncontrolled and destructive cascade occurring later with aberrant molecular signaling, inflammation, vascular changes, and secondary cellular dysfunctions. Because of their neuroregenerative and neuroprotective properties, stem cells are a promising tool for the treatment of SCI. Many types of stem cells have been used for transplantation, and each has its own advantages and disadvantages. Overall,

the manuscript is more comprehensively summarized, but the authors could have done a better job of categorizing and summarizing the clinical transplantation of different stem cells rather than listing all of them in one table. Some English errors in format and grammar need to be corrected.