

PEER-REVIEW REPORT

Name of journal: *World Journal of Stem Cells*

Manuscript NO: 82589

Title: Human retinal secretome: A cross link between mesenchymal and retinal cells

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05816287

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Italy

Author's Country/Territory: Italy

Manuscript submission date: 2022-12-23

Reviewer chosen by: Dong-Mei Wang

Reviewer accepted review: 2023-02-26 18:13

Reviewer performed review: 2023-02-26 18:23

Review time: 1 Hour

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 Grade E: Do not publish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 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

This manuscript arouses considerable interest especially towards the concept of immunomodulation and cross talk that the secretome develops. Congratulations to the authors.

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Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03814201

Position: Editorial Board

Academic degree: PhD

Professional title: Associate Professor, Senior Researcher

Reviewer's Country/Territory: China

Author's Country/Territory: Italy

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Reviewer chosen by: Dong-Mei Wang

Reviewer accepted review: 2023-02-23 05:01

Reviewer performed review: 2023-03-02 11:31

Review time: 7 Days and 6 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
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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
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	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors of this review summarized the features of MSC mesenchymal stem cell (MSC) and the features of MSC secretome. They also highlighted a significant role of MSC secretome in immunomodulation and Central Nervous System Pathologies. Additionally, they further elucidate the features of retinal cells and retinal pigmented epithelium (RPE) cell secretome and retinal diseases. Moreover, the authors discuss delineated the importance of the “cross-talk” between mesenchymal stem cells and retinal cells, focusing on common/induced secreted factors, during experimental therapy for retinal diseases. The topic of the review is significant and the manuscript is organized well enough. However, my major criticism is that the manuscript is mainly a description of words, and lacks a summary with tables or figures. Therefore, it is suggested to add a table or figure in the manuscript. I have some special comments and concerns that can be considered by the authors as follows: 1. *in vivo*, *in vitro* should be written in Italics throughout the text. 2. Phrase abbreviation, human bone marrow-derived mesenchymal stem cells (hBMSCs) changed to human BMSCs will be good. Please check all the full names and abbreviations. 3. Figure 1 is not mentioned in

the text. 4. It is suggested that the authors make a table to summarize the key molecules of mesenchymal secretome derived from different cell types in the treatment and regeneration of retinal cells.