

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 35695

Title: Yin and Yang of mesenchymal stem cells and aplastic anemia

Reviewer's code: 01554116

Reviewer's country: Spain

Science editor: Fang-Fang Ji

Date sent for review: 2017-08-03

Date reviewed: 2017-08-03

Review time: 4 Hours

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|--|--|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input checked="" type="checkbox"/> Grade A: Priority publishing | Google Search: | <input checked="" type="checkbox"/> Accept |
| <input checked="" type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input checked="" type="checkbox"/> Plagiarism | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | [Y] No | <input type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | [Y] No | |

COMMENTS TO AUTHORS

The review by Broglie et al. gives a fine and complete overview of the role of MSCs in AA and their possible use as therapy.

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 35695

Title: Yin and Yang of mesenchymal stem cells and aplastic anemia

Reviewer's code: 01851506

Reviewer's country: Japan

Science editor: Fang-Fang Ji

Date sent for review: 2017-08-03

Date reviewed: 2017-08-10

Review time: 6 Days

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|---|--|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing | Google Search: | <input type="checkbox"/> Accept |
| <input type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input type="checkbox"/> Plagiarism | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | <input type="checkbox"/> No | <input type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | <input type="checkbox"/> No | |

COMMENTS TO AUTHORS

In this manuscript Broglie et al discuss the etiology of Aplastic Aneamia (AA) and the potential of mesenchymal stem cells (MSC) for the treatment. While the manuscript is concisely written, the lack of epidemiology background in AA makes it difficult to follow, especially for those who are not in the field. Since AA comprises congenital (Fanconi, dyskeratosis congenita, and Shwachman-Diamond syndrome) and acquired forms, the authors should mention this, even though they focus on acquired form in this review. It will also be helpful for readers to have a comparison between MSC monotherapy and MSC as conjunct for hematopoietic stem cell transplantation as a therapy.

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 35695

Title: Yin and Yang of mesenchymal stem cells and aplastic anemia

Reviewer's code: 02446054

Reviewer's country: United States

Science editor: Fang-Fang Ji

Date sent for review: 2017-08-03

Date reviewed: 2017-08-10

Review time: 7 Days

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|--|--|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input checked="" type="checkbox"/> Grade A: Priority publishing | Google Search: | <input checked="" type="checkbox"/> Accept |
| <input checked="" type="checkbox"/> Grade B: Very good | <input type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input type="checkbox"/> Plagiarism | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | [Y] No | <input type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | [Y] No | |

COMMENTS TO AUTHORS

This is a short well written paper on the potential role of MSC in therapy for aplastic anemia.

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 35695

Title: Yin and Yang of mesenchymal stem cells and aplastic anemia

Reviewer's code: 02446280

Reviewer's country: Russia

Science editor: Fang-Fang Ji

Date sent for review: 2017-08-03

Date reviewed: 2017-08-14

Review time: 11 Days

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|--|--|--|--|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing | Google Search: | <input checked="" type="checkbox"/> Y] Accept |
| <input type="checkbox"/> Grade B: Very good | <input checked="" type="checkbox"/> Y] Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input type="checkbox"/> High priority for publication |
| <input checked="" type="checkbox"/> Y] Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input type="checkbox"/> Plagiarism | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | [Y] No | <input type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | [Y] No | |

COMMENTS TO AUTHORS

The manuscript entitled "The Ying and Yang of Mesenchymal Stem Cells and Aplastic Anemia" summarizes current knowledge on experimental approaches of mesenchymal stem cells use for aplastic anemia treatment. It is clear that immunological system is involved in AA manifestation however exact mechanisms remain unknown. To this end MSC transplantation maybe beneficial due to known immunosuppressive effect of MSC in vitro. Additionally MSC may provide cell niche for hematopoietic cells. The manuscript is clearly written and maybe recommended for publication. However I would like to admit that MSC were never differentiated into hematopoietic cells, on contrary in the cited ref 18 (page 7) inability of MCS differentiation into CD14, CD45 cells has been demonstrated.

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 35695

Title: Yin and Yang of mesenchymal stem cells and aplastic anemia

Reviewer's code: 00504800

Reviewer's country: United States

Science editor: Fang-Fang Ji

Date sent for review: 2017-08-03

Date reviewed: 2017-08-29

Review time: 26 Days

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|--------------------------|---|---------------------------|-----------------------------------|
| [Y] Grade A: Excellent | [Y] Grade A: Priority publishing | Google Search: | [Y] Accept |
| [] Grade B: Very good | [] Grade B: Minor language polishing | [] The same title | [] High priority for publication |
| [] Grade C: Good | [] Grade C: A great deal of language polishing | [] Duplicate publication | [] Rejection |
| [] Grade D: Fair | [] Grade D: Rejected | [] Plagiarism | [] Minor revision |
| [] Grade E: Poor | | [Y] No | [] Major revision |
| | | BPG Search: | |
| | | [] The same title | |
| | | [] Duplicate publication | |
| | | [] Plagiarism | |
| | | [Y] No | |

COMMENTS TO AUTHORS

This is an excellent summary of MSC biology as it pertains to AA, and clarifies the current state of this field. I only have a few minor comments for the authors to address prior to publication. Page 7, paragraph under "Impaired MSC function" heading: I am not aware of reports that MSC can differentiate into HSC or other hematopoietic cells. Unless I am mistaken, the Pittenger 1999 paper you cite (ref. 18) does not claim this, and in fact (to my reading) clearly states that no hematopoietic cells were obtained from expanded MSC cultures. Thus, I would recommend removal of "and hematopoietic cells". I would also remove the reference to hematopoietic cell differentiation from Figure 1 and its legend. Page 8, bottom paragraph, 8 lines from bottom: I would recommend adding the phrase "from AA patients" after "...studies suggest MSCs" for clarity. Page 12, third line from bottom: rational, not rationale. I congratulate you again on writing a very nice review.