

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 55034

Title: Recent advances of single-cell RNA sequencing technology in mesenchymal stem cell research

Reviewer's code: 00505755

Position: Editorial Board

Academic degree: PhD

Professional title: Senior Research Fellow

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

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Reviewer chosen by: Jie Wang

Reviewer accepted review: 2020-03-09 00:08

Reviewer performed review: 2020-03-09 01:12

Review time: 1 Hour

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|---------------------------------|---|
| 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 Grade E: Do not publish |
| 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 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 is a very interesting review about MSCs and their marker identification in single cell RNA-seq technology. The description about cells in the outer peripheral clone with the higher level of genes related to cell proliferation and interior MSCs with higher expression of the extracellular matrix genes may be revised to have the specific surface marker information. Careful proofreading is needed.