

May 13th, 2020

Dear Editor,

Thank you very much for the given opportunity to revise and resubmit our manuscript entitled "Inflammatory niche: Mesenchymal stromal cell priming by soluble mediators" (Manuscript NO.: 56051) to the World Journal of Stem Cells.

We appreciate the constructive comments and suggestions given by the Editor and the reviewer which helped us revise and improve the manuscript. According to these comments we have made corrections in the manuscript and answered to the concerns raised in the peer-review report. Each change made in the revised manuscript is highlighted red or marked by tracking.

The followings are the point-by-point responses to the Editor's and reviewer's comments:

**Reply to editorial comments:**

(1) The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s);

*Answer: This was done accordingly, the copy of approval document from the funding agency is attached.*

(2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.

*Answer: The Figures are attached in the original and editable format (.pptx).*

In addition, to properly prepare the revised manuscript we checked all key points, including language, specific requirements for figures, tables and references. Previously missed minor typing and formatting errors have been corrected accordingly and highlighted red (e.g. in page 3 – line 1, page 17 – line 6, page 27 – line 10). Also, we recorded and uploaded the Audio Core tip.

**Reply to reviewer's comments:**

Reviewer #1:

**Scientific Quality:** Grade C (Good)

**Language Quality:** Grade B (Minor language polishing)

**Conclusion:** Minor revision

**Specific Comments to Authors:** The paper by Jauković et al reviews the Inflammatory niche. The review details the inflammatory priming of MSCs as well as MSCs priming with pro-inflammatory cytokines. Both classical studies and works of recent years are used. Additional table and figures should be added. I recommend for publication after minor revision.

Answer: Thank you very much for your comments. We appreciate the suggestion to improve the manuscript by incorporating additional table and figures. According to your recommendation, we have included one new figure as schematic illustration (now Figure 1) that summarizes in vitro studies data regarding the influence of inflammatory priming on MSCs regenerative features (proliferation, migration, differentiation). Additionally, new table (Table 1) has been provided which recapitulates in vitro studies data on immunomodulatory properties of MSCs primed with inflammatory mediators. In accordance, previous Figure 1 has been relabeled as Figure 2 and its title modified to 'Improved in vivo therapeutic potential of inflammatory primed MSCs', while figure legend has been revised consistently. All figures and the table have been correlated with corresponding data in the text of revised manuscript.

We hope that the revised version will fulfill the requirements for publication in the World Journal of Stem Cells. Thank you once again for your reconsideration.

Sincerely,

Dr Aleksandra Jauković

Associate Professor of Research  
Laboratory for Experimental Hematology and Stem Cells  
Institute for Medical Research  
University of Belgrade

e-mail: [aleksandra@imi.bg.ac.rs](mailto:aleksandra@imi.bg.ac.rs)