

Specific Comments To Authors: Well written manuscript Add few more images depicting the combination therapy [hydrogels + stem cells] in DW

I would like to congratulate the authors for the manuscript. This manuscript summarizes the mechanisms and applications of stem cells and hydrogels for diabetic wound treatment. I have some comments: Please move the figure (Figure 1) into the body of manuscript, not in the conclusion. The conclusion should provide the concluding remarks of your manuscript, in brief. References no 82-86 are not available in the text, and only available in the table. They should appear sequentially in the text or table.

Apply:

Dear Editor and Reviewers,

Thank you for the comments and the opportunity for us to revise the manuscript titled "Combination therapy of hydrogel and stem cells for diabetic wound healing" (Manuscript NO.: 79599, Minireviews).

We have made extensive modifications and polished the language of our manuscript according to the suggestions. All the changes were highlighted in blue and point-by-point responses to

reviewer comments are listed below. We hope that the revised manuscript is now acceptable for publication in your journal.

Looking forward to hearing from you.

Yours sincerely,

Yan Li, PhD

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Point-by-point Response to Reviewers

Replies to Reviewer #1:

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Response:

Thank you for the comments. We have revised the manuscript as suggested and moved the figure (Figure 1) along with the corresponding descriptions into the body of the revised manuscript (Pg 8).

The concluding remarks of our manuscript have been briefly summarized in the CONCLUSION part (Pg 15).

Details can be found in Page 15:

“This review discussed the benefits associated with therapy combining hydrogels and MSCs for DW healing. Researchers have explored different application methods for stem cell delivery with hydrogels, including hydrogel sheets, in situ forming hydrogels, and hydrogel microspheres. In addition to providing a friendly microenvironment for stem cells, this strategy enhances the adhesion between the dressing and wound, and facilitates the function of stem cells, ultimately benefiting vascular and neural regeneration in DW. Furthermore, hydrogel microspheres have the advantages of a larger specific surface area, more uniform dispersibility, and more specific functions; additionally, they can effectively deliver various types and functions of cells into the wound. Therefore, hydrogel microspheres loaded with stem cells are expected to play an important role in clinical practice.”

We have checked the references in Table 1 and the corresponding descriptions in text. We have made the corrections in Table 1.

Replies to Reviewer #2:

Comment: Well written manuscript Add few more images depicting the combination therapy [hydrogels + stem cells] in DW.

Response:

Thanks for your suggestions.

In addition to Figure 1 which showed the mechanisms of hydrogels and stem cells on DW healing, we included another scheme in the revised manuscript as Figure 2 (Pg 9) to demonstrate the different application approaches of hydrogels and stem cell on DW. Furthermore, we quoted a result figure from a relevant article as Figure 3 (Pg 15) to illustrate the efficacy of applying stem cell entrapped hydrogel microspheres on DW healing.