OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://sites.kowsarpub.com/kowsar/knowledgebase/category/tree.html#opr.html

Gene, Cell and Tissue
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Peer Review Report for "Preparing Sheep Bladder Scaffold and Examining the Differentiation of Mesenchymal Stem Cell Into Myocytes on Scaffolds"

Author(s): Reza Najafi, Asadollah Asadi, Saber Zahri, Arash Abdolmaleki

Review Timeline:

Submit Date: 13 Mar 2021
Revised Date: 25 Apr 2021
Accepted Date: 26 Apr 2021

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Nadia Sheibak: Reviewer | Revision (0) — 25 Mar 2021

Dear AE,
The manuscript is not acceptable in its current form.
1- Lack of novelty (similar studies have been previously published)
2- Lack differentiation assessment by western blots and immunocytochemistry (In particular, for confirming of differentiation and to evaluate myogenic growth factors)
3- lack of in-vivo study of revascularization in vivo.
4- Some editing for English is warranted.
Thanks

REFEREE: Reviewer | Revision (0) — 3 Apr 2021

Dear AE,
Comments on manuscript entitled" Preparation of Sheep Bladder Scaffold and Investigation the Differentiation of Mesenchymal Stem Cell to Myocytes on these scaffolds"
1. What does it add to the subject area compared with other published material?
2. Did you have any data for identification and characterization of bone marrow stem cells?

3. Which methods the author used to confirm the appropriate differentiation?
4. There is some grammatical errors in manuscript.
5. Limitation and suggestion should be add .
Thanks.

Azam Asemi Rad: Associate Editor | **Revision** (0) 5 Apr 2021

Dear EIC,
Thanks for submitting the manuscript. There are some major issues with the manuscript, especially in the method part. The authors are cordially invited to respond to the reviewer's comment and modify the necessary part point by point.
sincerely,

Zahra Heidari: EIC | **Revision** (0) 11 Apr 2021

Dear Author,
Based on the reviewers' and AE comments and as I read, this manuscript needs major revisions and a reply to the comment point by point.
Thanks.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Thanks for your good comments.

1-What does it add to the subject area compared with other published material?

18.Gilbert TW, Sellaro TL, Badylak SF. Decellularization of tissues and organs. Biomaterials. 2006; 27:3675-3683.

19. Abousleiman RI, Reyes Y, McFetridge P, Sikavitsas V. The human umbilical vein: a novel scaffold for musculoskeletal soft tissue regeneration. Artificial organs. 2008; 32:735-741.

20. Barnes CA, Brison J, Michel R, Brown BN, Castner DG, Badylak SF, Ratner BD. The surface molecular functionality of decellularized extracellular matrices. Biomaterials. 2011; 32:137-143.

21. Chen JC, Goldhamer DJ. Skeletal muscle stem cells. Reproductive Biology and Endocrinology. 2003; 1:1-7.

Reply: The difference between our study and this articles is that in articles 18 and 19 Physical method and in articles 20and 21 chemical method were used for decellularization. in the manuscript Physical combination method and chemical were used for decellularization so that the pieces of the bladder were put in the freezer at -4°C for 24 hours and immersed in distilled water containing 0.1 of sterile sodium azide every 6 hours for 10 minutes. By the end of the 24 hours, they were put in a freezer for 2 hours and 1 hour, respectively, at -20°C and -40°C ,to make ready for placing in liquid nitrogen. The bladders were placed in liquid nitrogen at five 2-minute steps by cryotubes and then were washed by PBS containing 0.1 of sodium azide.

2-Which methods the author used to confirm the appropriate differentiation?

Masson's trichrome staining was used to assess the myogenic differentiation of cells on the scaffold. Staining was studied during the second, third ,and fourth weeks. The first signs of differentiation appeared in the second week, and at the end of the fourth week of muscular cells were differentiated and distinguishable.

Investigation of differentiation genes in the fourth week demonstrated that α-Actinin and Desmin genes had the highest expression after 28 days of treatment of cells with the 5-azacytidine

3-Limitation and suggestion should be add .

Limitation and suggestions were added and highlighted with yellow color.

4-Did you have any data for identification and characterization of bone marrow stem cells?

We add the identification and characterization of bone marrow stem cells and highlighted it in the manuscript.

There is some grammatical errors in manuscript.

We check the English language of the manuscript. And correct the English of the manuscript and highlighted them in the manuscript with green color.

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Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Azam Asemi Rad: Associate Editor | **Revision (1)** 26 Apr 2021

Dear EIC,
Thanks for sending us the article entitled " Preparation of Sheep Bladder Scaffold and Investigation the Differentiation of Mesenchymal Stem Cell to Myocytes on these scaffolds " and giving us the chance to consider the work. The article was read by reviewers and the manuscript is accepted for publishing in Gene, Cell, and Tissue journal.
Best regards,

Zahra Heidari: EIC | **Revision (1)** 26 Apr 2021

Dear Author,
Based on the reviewer's and AE's comments, revisions were done well. Thus this manuscript can be accepted for publication in GCT.
Thanks.