To Editor, World Journal of Translational Medicine

We appreciate your kindly giving us an opportunity to submit a revised version of our manuscript (NO.: 20826). Here we are sending the point-by-point responses to the reviewers' comments. Thanks to the valuable comments from reviewers, we believe that our manuscript has been greatly up-graded.

Comments given by Reviewer 2446219

The manuscript is about two types of vascular endothelial cells, which have anti and pro proliferative effect on vascular smooth muscle cells. The study is well-design and written. The point should be considered by the authors is that the introduction is too long and wordy. It might be a good idea to shorten the introduction and abstract.
Classification: Grade C
Language evaluation: Grade A
Conclusion: Accept

Response:

According to the reviewer's suggestion, we shorten the introduction (717 words to 512 words) and abstract (424 words to 405 words).

Comments given by Reviewer 505755

General comments:

(1) ***The importance of the research and the significance of the research findings***

This research is important in terms of exploring the possibility of iPSC-derived endothelial cells in the application for the treatment of arteriostenosis.

(2) ***The novelty and innovative nature of the research***

This is an innovative research describing that the allogenic iPSC-derived endothelial cell (anti-proliferative, type II) can be transplanted for the treatment of arteriostenosis.

(3) ***The quality of the manuscript's presentation and readability***

It is well written.

(4) ***The ethics-related aspects of the research***

The risk of the experiment in terms of ethics seems to be low.

Specific comments:

Title: It accurately reflects the major topic and contents of the study.

Abstract: It appropriately describes about the content of the manuscript.

Introduction: The differences between type I and II of EC may be more emphasized.

Materials and Methods: The method for distinguishing type I and II may be described.

Results: The results or some references should be shown to show NK cells are induced and immunoreaction by NK cells were blocked by administration of anti-AGM1 in page 12. The reason why anti-AGM1 administration significantly inhibited the arteriostenosis may be described in page 13. The correlation between "WI+antiAMG1+transplantation (-)" and pro-stenosis capacity of type-I iPSdEC should be examined in page 13. The difference between ESdECs at early passages (type-I) and type-II-converted cells should be described with passage numbers in page 14.

Response:

In our previous manuscript, we already referred the paper by Young et al (Reference #12) regarding the effect of anti-AGM1 antibody administration on NK cell activities and the correlation between "WI+antiAMG1+transplantation (-)" and pro-stenosis capacity of type-I iPSdEC.

According to the reviewer's kind suggestion, we added descriptions regarding the passage number of ESdECs (i.e. P1 and p8) in page 14 in our revised manuscript.

References: The reference 1 has not been published yet, so it is difficult to determine whether ESdECs at early passages (type-II) and at late passages (type-I) show type conversion or not. Please check the reference citations in the manuscript carefully.

Figure and Table:

In figure 3B, the result of WI without anti-AGM1 administration may be presented.

Response:

In the experiments shown in figure 3B, WI-operated mice were exclusively administrated with anti-AGM1 antibody. The results of WI without anti-AGM1 administration were presented in supplementary figure 1 in our previous manuscript.

In figure 4D and E, the indication for type I and II in ESdEC experiments is needed.

Response:

According to the reviewer's kind suggestion, we added descriptions regarding the phenotypes of ESdECs (i.e. Type-I for the late passage (P8) ESdECs and type-II for the early passage (P1) ESdECs) in figure 4D and E in our revised manuscript.

Classification: Grade B

Language: Grade B

Conclusion: Minor revision