

Format for ANSWERING REVIEWERS

September 30, 2014

Dear Editor,



Please find enclosed the edited manuscript in Word format (file name: 13183-review.doc).

Title: *In vitro* differentiation of human umbilical cord Wharton's jelly mesenchymal stromal cells to insulin producing clusters

Author: Seideh Masoomeh Nekoei, Negar Azarpira, Ladan Sadeghi, Sulmaz Kamalifar

Name of Journal: World Journal of Clinical Cases

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The manuscript has been improved according to the suggestions of reviewers:

Reviewer 1: It is a well written manuscript concerning the induction of Wharton's jellies derived MSCs into insulin secretion cells. The authors used the RT-PCR to assess the functional status of these insulin secretion cells. The conceptual models of various sources of mesenchymal stem differentiated into insulin secretion cells were widely published. The author iterated that the Wharton's jelly derived MSCs could produce high efficiency of insulin production. They should make a table consisting of different stem cell sources, differentiation protocol, and efficiency of insulin production

This part is re-written , a new table is added with more explanation.

Reviewer 2:

The topic of this work is very interesting even if the results are not definitive infact the authors conclude that the insulin production by Insulin producing clusters (IPC) is not sufficient. Some corrections must be effettuated before work acceptance. In particular english language necessited to be revised.

It is revised.

In the matherials and methods section the explanation of abbreviation must be written at the first appearance in the text (DMEM), it is also important to clarify in this section of the paper the mechanisms of action of some reagents such as the exendin-4 and dithizone.

It is considered in the text. The mechanism of these two reagents are mentioned.

There aren't figures reporting gene expression analysis. The insulin production was reported increased after incubation with high glucose concentration but data regarding the insulin production by control cells are not reported.

These parts are mentioned and two figures are added.

If you think the fig 7A, 7B is not informative, we can omit.

The discussion could be revised to effort the study results and the implications for further studies.

The discussion is improved.

The figure legends must me improved with a more detailed description.

This part is re-written with more explanation.

Sincerely yours,
Negar Azarpira, MD
Transplant research Center
Shiraz University of Medical Science
Zand Street, Shiraz 7193711351, Iran
negarazarpira@yahoo.com