Dear Prof. Ventura,

Dear Prof. Ma,

Herewith I would like to re-submit a manuscript entitled:

**"Dental stem cells: the role of biomaterials and scaffolds in developing novel therapeutic strategies"**

for publication in the *World Journal of Stem Cells*. Please find enclosed the revised version of our manuscript and a detailed account of our statements concerning the reviewers' points. The following revisions have been made:

***Reviewer #1:***

1. Could you review the advantages and disadvantages of different biomaterials in detail and scaffold?

**Response:** a short discussion on the advantages and disadvantages of most effective biomaterials in tissue regeneration using dental stem cells was added.

2. Could you elaborate on your personal views in the light of the pieces of literature, with regard to the current issues facing stem cells transplantation therapy, such as the targeted location of transplantation, the safety of cell differentiation, extraction and purification of dental stem cells, and the sufficient number of cell sources?

**Response:** a paragraph on the current issues facing stem cells transplantation therapy with dental stem cells was added.

3. There are some grammatical and spelling mistakes. Besides, it's better to use less long sentences, break some long sentences into short ones that could be better?

**Response:** the language of the manuscript was revised.

4. "Dental stem cell" in the title should be "Dental stem cells"? Other places like this need to unify the forms of proper nouns.

**Response:** the terms were unified through the manuscript.

5. In Page 19, "DSCs display a high expression of various neural crest-related and developmental genes", could you specify which type of dental stem cells?

**Response:** the type of dental stem cells was described.

6. Some of the quoted references are unnecessary and can be deleted to made paper more concise. Moreover, the recently published review or research articles should be discussed in the revision, for example, Cells 2019, 8 (8), 886; Acta Biomaterialia 2018, 73, 103-111; Advanced Healthcare Materials 2019, 8 (14), 1900312.

**Response:** the mentioned references were added to the manuscript.

***Reviewer #2:***

1. More figures will be required for readers to follow the text, for example, a figure depicting the difference of scaffold materials and their propensity in orienting the potential of DSCs into a defined lineage, a figure or table summarizing the cell surface markers in DSCs, and a figure or table summarizing characteristics of DSCs derived from the different anatomic region.

**Response:** according to the suggestions of the reviewer, two figures and a table were added to the manuscript.

2. Figure legend is not sufficiently self-explanatory. Readers will not understand what the authors want to explain in the present legend. In summary the reviewer recommends to revise the text so that it is more succinct and easier to understand for non-expert readers.

**Response:** The legends of the figures were revised.

***Science Editor:***

**(1)** The topic has not previously been published in the WJH. 5 Issues raised: (1) The language classification is Grade C.
**Response:** The language of the manuscript was revised.

**(2)** The "Author Contributions" section is missing. Please provide the author contributions; (3) 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.
**Response:** Please find the "Author Contributions" section in page 28. Original figures were submitted using PowerPoint.

**(3)** PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references
**Response:** PMID and DOI numbers were added to the references.

We appreciate comments provided by both reviewers that significantly improved our manuscript.

We hope that after revision of the manuscript it will be satisfactory and can be considered for publication.

Thank you very much for your efforts,

Yours sincerely,

Ali Gorji