

February 7th, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 6842-review.docx).

Title: Purinergic receptors and nucleotide processing ectoenzymes: their roles in regulating mesenchymal stem cell functions

Author: Sonia Scarfi

Name of Journal: *World Journal of Stem Cells*

ESPS Manuscript NO: 6842

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

1. Format has been updated
2. Revision has been made according to the suggestions given. All corrections are highlighted in the text as requested. The following is a point-by-point reply to the Reviewers' comments.

Reply to Reviewer 02596102

- i) The writing style in the manuscript was very carefully revised as suggested by the reviewer and grammar errors and typos attentively corrected throughout the manuscript. Also sentences resulting unclear, such as the one reported by the reviewer (Page 4 in the revision, lines 16-23), were rewritten as kindly suggested.
- ii) A figure legend of the scheme was already included in the manuscript and in the revision can now be found at Page 22.

Reply to Reviewer 00239539

- i) The title has been corrected as pointed out by the reviewer, also integrating the suggestion of reviewer 00401241, so that the new proposed title is "Purinergic receptors and nucleotide processing ectoenzymes: their roles in Regulating Mesenchymal Stem Cell functions".
- ii) The suggested reference by Tao R et al. (J Cell Mol Med, 2011) on the calcium oscillation effects of cADPR in MSC has been included in the manuscript at Page 11 (ref number 104).
- iii) The writing style in the manuscript was very carefully revised as suggested by the reviewer, grammar errors and typos attentively corrected throughout the manuscript, and also the paragraph segmentation was standardized. The plural of abbreviations (i.e. MSCs and eNTPs) was used when the verb in the sentence was in plural form as correctly suggested.
- iv) In the abstract (Page 3 in the revision) the sentences resulting unclear such as the ones reported by the reviewer have been rewritten as suggested.
- v) Thank you very much for all the corrections suggested throughout the text, they have all been included in the revised manuscript and all the text has been double-checked to find further grammar mistakes and typos, furthermore opportune references have been added where suggested to support statements (Page 6 in the revision, lines 10-13).

Reply to Reviewer 00401241

- i) The writing style in the manuscript was very carefully revised and too long paragraphs were rewritten as kindly suggested by the reviewer.
- ii) A list of abbreviations has been included in the revision and can be found at Page 3.

- iii) As suggested, both in the title and in the abstract the mention to nucleosides has been included since also this topic is discussed throughout the manuscript.
- iv) The corrections suggested have been made to the text at Page 5 of the revision, lines 13-16.
- v) The contribute of transporters and channels to the extracellular adenosine concentration has been discussed together with the role of nucleotide degrading ectoenzymes when needed throughout the text as suggested by the reviewer; references have been added to support the new statements (i.e. Latini et al. J Neurochem, 2001; Heinrich et al. Br J Pharmacol, 2012).
- vi) As suggested by the reviewer the reference by Coppi et al. (Stem Cells, 2007) was anticipated to support also the statement on the mechanisms of ATP release (Page 5 in the revision, lines 28-30, new position of reference, number 42).

3. References and typesetting were corrected following all the reviewers' suggestions.

Thank you again for publishing this manuscript in the *World Journal of Stem Cells*.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'Sonia Scarfi', written over a horizontal dotted line.

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