

2nd April 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: Sox2-review R1.doc).

Title: Sox2, a Key Factor in Regulation of Pluripotency and Neural Differentiation

Author: Shuchen Zhang, Wei Cui

Name of Journal: *World Journal of Stem Cells*

ESPS Manuscript NO: 7704

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 of the reviewer
 - 1) *Abstract, Line 1, the full name of Sox2 should be provided.*
Have added them in
 - 2) *Page 1, Line 15, should be “effects” on expression levels of intrinsic transcription factors through.....*
Changed
 - 3) *Page 2, Line 4-7, the two sentences “Specific target genes are Interaction with other cofactors also.....” are not clear. Please be more specific.*
We have re-written the section to make it clear.
 - 4) *Page 2, Line 17, should be “Sox2 is embryonically lethal.*
Changed.
 - 5) *Page 2, Line 18, should be a period sign between two sentences.*
Changed
 - 6) *Page 2, Line 24-27, ESCs from ICM were discussed, and all of the sudden “hESCs and their counterparts, iPSC,....”. Such transition does not make too much sense to me. Please provide some background information if new concepts are introduced. In addition, appropriate abbreviations should be noted when appear for the first time. For examples, hESC and mESC were never defined.*
 - a) We have moved iPSCs into iPSCs section and focus on ESCs in this section. b) We have defined hESCs and mESCs the first time when they appeared in the manuscript. However, we did not define all the gene name abbreviations and have added them in now.
 - 7) *Page 3, Line 1-4, it is not clear why Sox2 is crucial to maintain pluripotency since Oct4 can compensate Sox2 function.*

We have modified the sentence to clarify this.

8) *Page 3, Line 17, did you refer to “differentiating”, instead of “developmental”?*

We have changed text to clarify this.

9) *Page 3, Line 19, remove “between Sox2 and Oct4”*

Changed

10) *Page 3, Line 19, please define HMG and POU*

HMG has been defined earlier. However, we defined both them here.

11) *Page 3, Line 32, should be “bind to the canonical subset...”*

Changed

12) *Page 3, Line 33, remove “the activation of”*

Changed

13) *Page 4, Line 5, should be “central nervous system”*

Changed

14) *Page 4, Line 6-14, please focus on the function of Sox2 in neural cells and consider to remove Oct4 and Nanog*

We feel that it is necessary to mention Oct4 and Nanog here to address the point. However, we have considered the reviewer’s suggestion and modified the sentence to highlight Sox2.

15) *Page 4, Line 15-16, are you trying to address the self-renewal of neural stem cells? This sentence is not clear.*

We have changed the sentence to make it clear.

16) *Page 4, Line 19, “promoting pre-exist from cell cycle” is not a complete sentence*

We have corrected the error.

17) *Page 4, Line 20, what is “NPC”? Please define.*

We have added the definition of NPCs earlier in the paragraph.

18) *Page 4, Line 24-25, remove “it is evident that”*

Changed

19) *Page 5, Line 32, “differentially” or “specifically”?*

It is differentially.

20) *Page 6, Line 2, “wheras”, typo*

Changed

3 References and typesetting were corrected

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

Sincerely yours,

Wei Cui