Reviewer’s report

Title: Genetic Polymorphisms in Bone Morphogenetic Protein Receptor Type IA Gene predisposes individuals to Ossification of the Posterior Longitudinal Ligament of the Cervical Spine via the Smad signaling pathway

Version: 2 Date: 14 Jan 2018

Reviewer: Chikenji Takako

Reviewer’s report:

Major Comments

The authors performed ANOVA followed by Bonferroni post hoc test in their statistical analysis instead of LSD posthoc multiple comparison as I mentioned before.

In their discussion, they have addressed "the phosphorylated R-Smads recruit the common mediator Smad (Co-Smad4) and forms hetero-oligometric complexes", however, in their results, Smad4 was not different in any cells, only the p-Smad1/5/8 was increased in pcDNA3.1/BMPR-IA (MT -349C>T) and (MT -349C>T and 4A>C ) cells compared as WT cells. How do we understand the results? They should discuss these results theoretically in their manuscript. If they would address "Smad signaling pathway may play important roles in the pathological process of OPLL induced by SNPs in BMPR-IA gene" in their conclusion, their results would not be theoretical.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I am able to assess the statistics

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