Reviewer’s report

Title: What is the Difference in Morphologic Features of the Lumbar Vertebrae Between Caucasian and Taiwanese Subjects? A CT-based Study: Implication of Pedicle Screws Placement via Roy-Camille or Weinstein Methods

Version: 2 Date: 01 Jul 2018

Reviewer: Wei Yang

Reviewer’s report:

Below are my comments on the statistical analyses.

- Post hoc power analysis has been adopted after finishing the statistical analysis. However, it has been mathematically proven that there is an one-to-one relationship between p values and observed power. Significant p values always correspond to high observed powers. It does not make sense to use post hoc power to show adequate sample sizes. Instead of performing post hoc power analysis, maybe acknowledge it as a limitation of the study.

For reference, please check

Lenth RV. Post hoc power: tables and commentary. Iowa City: Department of Statistics and Actuarial Science, University of Iowa. 2007 Jul.


- When comparing to findings reported for Caucasian populations, what data has been used, the summary statistics (mean/SD/sample sizes) only, or the observed data for all subjects? The data presented in Table 1 to Table 3 are not adequate to perform statistical analyses (lacking the sample sizes).

- Page 9 line 30-34. "A P<0.05 was considered statistically significant (the significance of a Type-I error was set a p=0.05)". It is OK to say either "the Type-I error" or "the significance level" was controlled at 0.05, but not "the significance of a Type-I error".

- Table 2. All information in Table 2 has already included in Table 1 (the last 2 rows).

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

No
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?
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Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

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