Reviewer's report

Title: Sex-related differences and age of peak performance in breaststroke versus freestyle swimming

Version: 1 Date: 15 September 2013

Reviewer: Hideki Takagi

Reviewer's report:

Major Compulsory Revisions

1. METHODS: You mentioned that you obtained the race results from the finals in the FINA World Swimming Championships, but there was no indication when the Championship was held, so please describe them. Because there is a large gap about the number of sample data between national level and international level, please explain reasons why the number of sample data for international level was sufficient.

2. DISCUSSION, Sex-related differences in peak swim speed; It seems for me that you discussed about not only sex-related differences but also skill-related differences between Swiss swimmers and international swimmers in comparing crawl to breaststroke. If you admit that the hypothesis about sex-related differences was supported not in FINA data but in Swiss data, the sex-related differences might non-universal by nature. Therefore, I suggest that you rethink the logical structure of the part.

3. DISCUSSION, Age of peak performance, 3rd paragraph; Although you suggested that men can achieve these longer strokes (200m breaststroke) at a relatively young age, it seems to be contradict the previous paragraph, and not to show sufficient cause for leading to the suggestion.

4. REFERENCES; Please check the font of 17th paper, because it is not indicated properly.

5. Table 2; The table legend indicates that “Results are mean ± SD”, but the actual display format is different in the table.

6. Figure 3, 4 and 5; Please indicate the title of abscissa axis.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.