



Answer to the Letter to the Editor of A. De Giorgio et al. concerning “Effects of lumbosacral orthoses on postural control in individuals with or without non-specific low back pain” by J. Mi et al. (Eur Spine J; 2017: doi:10.1007/s00586-017-5355-5)

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To the editor,

We thank the authors for their comments on this paper. The authors raise concern over our methodology.

1. First, each position lasts 10 s and is repeated three times, 30 s totally in each position. Second, after the subject stands on the surface and achieves stability then we start the test, and screen will tell the subject the test will start. Third, these procedures were guided by the manufacturer, which are also used in lots of studies.
2. What the authors proposed is the detailed way to calculate COP. In our study, the COP is automatically calculated by the software, and what we wrote in the manuscript is the concept of COP.
3. The LSO position is guided by the manufacturer.
4. According to the previous studies, the test–retest reliability is excellent (ICC = 0.91) [1] (<http://www.rehabmeasures.org/Lists/RehabMeasures/DispForm.aspx?ID=897>). To confirm that, an additional experiment was also conducted based on a sample with ten subjects in two independent testers. The result showed that the interobserver (ICC = 0.94) and intraobserver reliability (ICC = 0.91) was similar to previous studies.
5. ANOVA with repeated measure is commonly used in repeated measure design. In our study, it is not a repeated measure design.
6. We mentioned in the Method section, and we calculated the analysis power using an interactive program named PS (Power and Sample Size Calculation version 3.1.2, 2014, <http://biostat.mc.vanderbilt.edu/wiki/Main/PowerSampleSize#References>). The power of statistical analysis in the effect of LSO on Foam-EO and Foam-EC was 0.982 and 0.996, respectively. The power of statistical analysis in the difference between two groups in Foam-EO and Foam-EC was 0.814 and 0.815, respectively.

Compliance with ethical standards

Conflict of interest None of the authors has any potential conflict of interest.

Reference

1. Suttanon P, Hill KD, Dodd KJ, Said CM (2011) Retest reliability of balance and mobility measurements in people with mild to moderate Alzheimer's disease. *Int Psychogeriatrics* 23:1152–1159

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