



## LETTER TO THE EDITOR

### Aortic valve replacement surgery improves the quality of life of octogenarians with severe aortic stenosis



### A cirurgia de substituição valvular aórtica melhora a qualidade de vida dos octogenários com estenose aórtica grave

We appreciate your attention to our article<sup>1</sup> and your comments on it. The description of the statistical methods may not be clear.

The statistical methodology used was as follows.

Normality was tested with the Kolmogorov-Smirnov test. The eight SF-36 dimensions and the two summary measures at the four established times were compared with the non-parametric Friedman test, and multiple comparisons were then made using one-way analysis of variance. Before applying one-way analysis, we performed a rank transformation of the data, which accounts for the issues associated with variables with non-normal distribution.

In our paper, we omitted to state that we used the Friedman test and a rank transformation of the data prior to application of one-way ANOVA. Rank transformation versions of parametric tests closely mimic the properties of the best-known rank randomization tests (e.g. Spearman's rho, Mann-Whitney U or Wilcoxon T) with moderate to large sample sizes.<sup>2</sup>

In another article we published on the same subject, the reviewers had the same doubt you had, and we changed

the section on statistical methodology accordingly.<sup>3</sup> They accepted the justification that we provide in the previous paragraph.

### Conflicts of interest

The authors have no conflicts of interest to declare.

### References

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3. Coelho PNMP, Miranda LMRPC, Barros PMP, et al. Quality of life after elective cardiac surgery in elderly patients. *Interact CardioVasc Thorac Surg.* 2019;28:199–205.

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