



Reply to the letter to the editor: Effect of sacubitril/valsartan on cardiac filling pressures in patients with left ventricular systolic dysfunction

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We thank Dr. Okutucua and colleagues for their interest in our study and their suggestions regarding statistical analysis [1]. They have raised some valid points regarding pairwise comparisons utilized for statistical analysis. Our null hypothesis was that pulmonary artery (PA) pressures will not change when measured before or after sacubitril/valsartan initiation, with dose increase or at 3-month follow-up. As accurately pointed out, utilization of these comparisons increases the likelihood of type-1 errors. However, the aim of the study was to highlight the fact that yes, the PA pressures decrease with the initiation of sacubitril/valsartan but there is a “catch-up phenomenon” seen later on where PA pressures return towards their baseline - not what the drug does in the initial phase. These findings are similar to earlier studies on ACE-inhibitors and ARB's as highlighted in the discussion section.

While the assumptions for normality for repeated measures ANOVA will be more correct, since we are comparing two separate instances in time irrespective of each other, paired *t*-test or repeated measures ANOVA are equivalent because t^2 for paired observations is identical to the F-test from repeated measures ANOVA [2]. While using the Friedman test, nonparametric version of ANOVA will yield a similar non-statistically significant result (p -value $>.05$) for all reported variables. Last, we have specifically pointed out the small sample size as being one of the major limitations of our study which makes it difficult to draw any conclusions for long-term effect of sacubitril/valsartan or perform any Post-Hoc group comparisons if we rejected the null hypothesis.

Declaration of Competing Interest

The authors report no financial relationships or conflicts of interest regarding the content herein. The manuscript has been read and approved by all the authors, requirements for authorship have been met, and each author believes that the manuscript represents honest work.

References

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