Reviewer's report

Title: Transesophageal echocardiography measurements of aortic annulus diameter using biplane mode in patients undergoing transcatheter aortic valve implantation

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Reviewer: Samir SAHA

Reviewer's report:

The authors should be congratulated for the nice study that they have performed. The manuscript is easy to comprehend. The data presented are robust and reliable and are of high interest in modern cardiology practice. I therefore warmly recommend publication of this work as a priority. I however have some minor essential suggestions for the authors.

Structural comments

Abstract (suggestion on a couple of sentences. I have rewritten a few))

Majority of the patients with AS are elderly often with co-morbidities and generally have high perioperative risk.

Four different sizes of CoreValve prosthesis are available.

Background

“5% of persons” may stand as “5% of patients”

“Gold Standard” could well be written as “gold standard”

Patient population

“Fifty retrospectively patients” can possibly be changed to “fifty patients were studied retrospectively”.

Results:

“statistical significant difference” maybe written as “statistically” significant difference

Discussion

The last three sentences at the end of the may be rewritten for better and unified clarification.

Other comments:

1. Table 1. Aortic valve area should be provided by taking BSA (cm²/m²) into consideration. Ejection fraction should be written as LV ejection fraction (LV= left ventricle)

2. Figures. There are 15 Figures in the manuscript but only 4 have legends.
Reorganization of the Figures would enhance the aesthetics of the paper with better clarity. Also in the Figures, “r values” could be accompanied by respective p values. Besides, the correlation curves and BA plots of similar pairs of variables could be put into the same Fig as A, B etc as in the case of other figures. In this way all figures could be accommodated by reducing the actual number of Figs. These would be easier for the readers (and also probably for publishers). Legends should be properly given in such a case.

3. Limitation section could be slightly shortened.

4. BP could be expanded whenever possible, esp in the Figures.

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Needs some language corrections before being published

**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.

Many thanks

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