Reviewer’s report

Title: Incidence and influence of prosthesis-patient mismatch after reoperative aortic valve replacement: A retrospective single-center study

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Reviewer: Mate Petricevic

Reviewer's report:

Dear authors

Thank you for submitting the manuscript "Incidence and influence of prosthesis-patient mismatch after reoperative aortic valve replacement: A retrospective single-center study"

(1) Objectives of the paper and importance of the research question:

In my opinion authors failed to present the importance of the research question. The objectives of the paper are somewhat blurry.

(2) Study group, methods and sample size:

This is a retrospective observational - non interventional study. Sample size is frankly low. Given the retrospective nature of the study and small sample cohort size I think this study is underpowered for any meaningful conclusions.

(3) Results

Put briefly, PPM incidence was similar (38.7% vs. 34.8% , p= 0.87). Sample size effect could make the difference here. At the same time, the mean pressure gradient was greater (15.2 ± 6.4 vs. 12.7 ± 6.2 mmHg, p = 0.04) and indexed EOA was smaller (0.92 ± 0.26 vs. 1.06 ± 0.36 cm²/m², p = 0.04) during re- AVR than primary AVR. This is an example of statistically significant but, clinically irrelevant difference.

(4) Conclusion

Authors concluded that the clinical outcomes of reoperative AVR were acceptable. furthermore, the reference EOA of new implanted valves was smaller than that of previous valves, re-AVR did not increase the incidence of PPM.
Well, I completely agree with authors conclusion, but this results do not add to the current knowledge.

**Level of interest**
Please indicate how interesting you found the manuscript:

An article of limited interest

**Quality of written English**
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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