Reviewer’s report

Title: Long-term outcomes and predictors of recurrent aortic regurgitation after aortic valve-sparing and reconstructive cusp surgery: a single centre experience

Version: 0 Date: 04 Oct 2019

Reviewer: Takushi Kohmoto

Reviewer's report:

The authors are to be congratulated on their excellent outcomes after AVS in combination with ACR. I have the following comments.

- Since the authors had clearly described exclusion criteria for AVS in combination with ACR, there clearly was selection bias in the retrospective outcome analysis. Particularly, the patients who required addition of a pericardial patch were excluded (page 8), and this should be described in the method section, and not in the results section.

- Mean follow-up was 5.3 +/- 3.3 years. According to the figures, only 14 patients out of 81 total were at risk at 100 months, and only 11 out of 81 total were at risk at 10 years. This indicates that this study is "intermediate-term" outcomes and not a "long-term" outcomes. I would like to suggest the authors to modify the title of this study to reflect this.

- Page 10: "Neither bleeding nor thromboembolic or permanent neurologic events were reported during follow-up." However, one patient died after 122 months with "sudden unexplained death", and can the authors scientifically say no one had bleeding, thromboembolic or permanent neurologic event, because sudden unexplained death can occur associated with those conditions?

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