Reviewer's report

Title: Minimal invasive aortic valve replacement: Associations of radiological assessments with procedure complexity

Version: 0 Date: 02 Jul 2019

Reviewer: Kasra Shaikhrezai

Reviewer's report:

I have read with interest the paper written by Boti et al. The paper deals with an important issue which is of importance for the surgeons in the field. I advise the following recommendations:

1- the two following important RCT’s need to be cited and mentioned in the introduction:


B- Manubrium-limited ministernotomy versus conventional sternotomy for aortic valve replacement (MAVRIC): study protocol for a randomised controlled trial.
Randomized controlled trial

Akowuah E, Goodwin AT, Owens WA, Hancock HC, Maier R, Kasim A, Mellor A, Khan K, Murphy G, Mason J

2- the following relevant paper needs to be cited and mentioned in discussion section:

Right Thoracotomy Minimally Invasive AVR: Use of Preoperative CT Scan to Plan Incision
Arthur Martella, Steven Kernis, Steven Curiale, Uche Ndubizu and Jane Cichelli
Journal of Cardiothoracic Surgery201510 (Suppl 1) :A28

3- Define the calcium scoring system and the scoring categories in methods section
4- There is a satisfactory implanted valve for which authors need to be commended, did pre-op CT play a role in patient selection regarding the annulus size and the future implanted valve size? Can CT predict the implanted valve size? If yes can the specificity and sensitivity be reported?

5- the 3D image should be the surgeon view, so this needs to be rotated to get into a more understandable orientation with clinical application.

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

An article of importance in its field

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

Acceptable

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None to declare
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