Reviewer's report

Title: Single-center evaluation of a next generation fully repositionable and retrievable Transcatheter Aortic Valve Replacement

Version: 1 Date: 11 Mar 2018

Reviewer: Joëlle M Kefer

Reviewer's report:

- The affiliation of the authors could be simplified as number 1 for the author 1,2, 4 and 6 - number 2 for the author 3 and 5

- The authors stated that the population of patients of the present study were at high risk for SAVR. However, the mean STS score is 6.5%, which ranges in the intermediate risk according to the american guidelines (4-8%). High risk are defined as an STS > 8%. The authors should precise how many patients are at high risk (>8%) and how many are intermediate (between 4 and 8%)

- The echo follow-up is limited to 50% of the population. Grading PVL was not verified by a core lab. Therefore, this valve performance is probably not really reliable. The number of patients should be mentionned in the Table 4. The authors should mention in the paper that the PVL evaluation was only done in 50% of cases without a central core lab.

- One patient suffered from an aortic root abscess : do you think that it can be due to a delayed complication of the transcatheter valve procedure ?

- PCMK : Table 5 is not included in the paper. Please add dit. The authors should mention in the paper and in the abstract that the rate of new pacemaker after lotus valve implantation is 14,8%. How many patients developed new LBBB after TAVI. Patients requiring delayed pcmk implant after discharge had normal ECG at discharge or not

- Stroke : the rate of stroke after tavi is lower than after SAVR in the most recent studies ; But you experienced two major strokes leading to death. What is the exact cause of these strokes : A Fib underanticoagulated ? calcium dislodgement due to the lotus manipulation in the aortic valve ? other ? authors should provide more details about these fatal complications (timing : on the cath lab ? later ? - causes - imaging ischemic vs hemorrhagic -treatment : did you try a thrombectomy ?)

- In the discussion, the authors compare their results to the previous series of Lotus device only. It is important to compare this new technique of Lotus deployment with the results of the others devices : Sapien 3, Evolut-R, Portico,… Are the authors totally convinced that the current results of their study are better than the last series of competitive devices ? They should demonstrate that.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Please indicate the quality of language in the manuscript:

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