Reviewer's report

Title: Full-root aortic valve replacement with stentless xenograft achieves superior regression of left ventricular hypertrophy compared to pericardial stented aortic valves

Version: 1 Date: 26 November 2014

Reviewer: Vinicius Nina

Reviewer's report:

Major Compulsory Revisions:
1- Considering that the sample includes patients operated on until December 2013, how many patients have achieved complete follow-up of 1 year? This information is not clear in the manuscript. Therefore, authors must exclude from the analysis those patients with incomplete follow up.

2- Looking the number of patients allocated in the AS subgroup in tables 1, 2, and 3, one can depict a substantial lacking of data which may compromise the relevance of the results (75 vs 64, 68 vs 46 and 55 vs 36 in tables 1, 2 and 3 respectively). Again, in Figure 4, authors show a different number of patients assessed at 1 year in the stentless group (n=64).

3- Other questions to be answered: How many patients had maximum and mean gradient evaluated at 1 year? What was the mortality rate at 1 year?

4- In the Discussion, there is unnecessary repetition of technical aspects: 'The angle between.... to the free edge of the xenograft" and also of the methodology: "Peri-operative data... by the same surgeon"

Minor Essential Revisions: NA

Discretionary Revisions: NA

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.