Reviewer's report

Title: Minimal Access Median Sternotomy for Aortic Valve Replacement in elderly patients

Version: 1 Date: 9 February 2013

Reviewer: Martin Oberhoffer

Reviewer's report:

Major Revision:
is wrong in my opinion. I found it elsewhere: Ann Thorac Surg 2006;May;81(5) 1599-604

Discretionary Revisions:
1 ) Interesting would be and should be mentioned in the text , which exclusion criteria for this approach were chosen?? did those criteria arise during the series?? was there a learning curve??

2) Were there any technical difficulties in implanting stentless valves ? (n=8); if yes, how were they managed??

3) LV- venting is not mentioned; how was that performed (PV, via the valve, LAA, PA) ??

Although I consider this article as another study reporting that aortic valve replacement by minimal access sternotomy is possible without increasing operative risk, the authors’ aim to recommend this approach as a second option after "real " minimally invasive AVR is demonstrated and to be supported.

The lack of a control group is a major disadvantage and my suggestion would be to add e.g. conventionally operated patients and compare both groups. That would be less effort and add valuable scientific information as many reports exist with conflicting results. The results and conclusions of a review by Bari Murtuza, Ann Thorac Surg 2008; 85, 1121-31 ( Minimal Access Aortic Valve Replacement: Is it Worth It? ) should definitively be part of the discussion..

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.