Reviewer’s report:

Title: Hemodynamic behavior of stentless aortic valves in long term follow-up

Version: Date: 31 October 2014

Reviewer: Lehmann Sven

Reviewer’s report:

Manuscript: Hemodynamic behavior of stentless aortic valves in long term follow-up

Authors: Thorsten Christ, Herko Grubitzsch, Benjamin Claus, Georg Heinze, Simon Dushe, Wolfgang Konertz

The authors describe their long term results from 54 young patients after stentless aortic valve replacement.

This is an interesting manuscript but there are severe shortcomings in the whole manuscript. Major issues are the following:

• In this time 188 young patients were operate with a stentless aortic valve replacement. This data were published from the same group in the same journal. With this fact only from 28.7% of their patients we have a follow up.
• Data need to be given in more detail, including more detailed patient data and echocardiographic data.
• There were some patients with an increase in left ventricular mass index. Have these patients a higher transvalvular gradient or a poor health?
• The authors described a left ventricular mass reduction from 21.8%. In with time was this reduction?
• The echocardiographic data in figure 1 shows only individual data and not the data from 54 patients.
• Effective orifice area was described without the data from this individual stentless aortic valve replacement and without the numbers of this patients at the difference time interval.
• In survival function and freedom from reoperation there are 188 patients in there analysis not 54 patients.
• These results from the rate of mortality and reoperation in these young patients cohort must be explain from the authors.