Reviewer's report

Title: Preoperative Risk Factor Analysis of Postoperative Stroke after Cox-Maze Procedure with Mitral Valve Repair

Version: 1 Date: 23 June 2013

Reviewer: Rafael Sadaba

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In this manuscript, the authors aim to identify preoperative factors which predict the occurrence of stroke following concomitant mitral valve repair and cryoablation of atrial fibrillation. They have studied a cohort of 240 patients, of which 16 had a cerebral ischaemic event at a follow up of 23.6 months. Using a Cox proportional hazards regression model, they were able to identify previous thromboembolic event as the only risk factor.

Major Compulsory Revisions.

1. Table 3 and figure 2 show the same data. Nevertheless, there is no mention of figure 2 in the text, and therefore it should be removed.

2. In the discussion section, the statement “It has been known that the Cox Maze IV procedure is technically easier and takes less surgical time than the Cox Maze III procedure while it provides results similar to that of the Cox Maze III procedure” is supported by reference 21. The cited study was not a comparison of the Cox Maze III and IV procedures and therefore I consider either the statement or the reference inadequate.

Discretionary Revisions

1. The sample size is an important limitation of the study, and the findings should be considered in this context. The authors express their surprise that the CHADs2-VAS score did not come up as an independent risk factor for stroke. The sample size could be responsible for this finding.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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.