Reviewer’s report

Title: The Na+/Ca2+ Exchange Inhibitor SEA0400 Limits Intracellular Ca2+ Accumulation and Improves Recovery of Ventricular Function When Added to Cardioplegia

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Reviewer: Luiz Felipe Moreira

Reviewer’s report:

The evaluation of the use of the Na+/Ca2+ exchange inhibitor SEA0400 to prevent myocardial injury as a cardioplegia additive has a great scientific interest. Despite to be performed in an exvivo experimental protocol, which represents a limitation regarding the final conclusions, the study was well designed with appropriated methodology. Study limitations were well discussed by the authors. The results are important and support the development of a preclinical study in whole animal model.

The discussion and the conclusions are clear and include the principal aspects related to the study results.

One minor aspect need to be clarified:

If there is statistical difference when the survival rates of cells arrested with cardioplegia with and without the SEA0400 addition were compared.

It is also important to emphasize that the control group is that of cardioplegia without SEA0400 in some data comparisons.

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'