Reviewer’s report

Title: Miniaturized Cardiopulmonary Bypass: The Hammersmith Technique

Version: 1 Date: 21 March 2013

Reviewer: antonio A calafiore

Reviewer’s report:

The Authors report their experience with standardised ‘Hammersmith’ miniaturized CPB, used in 184 consecutive operations. Theyu clinical experience suggests that:

i. Venous drainage is optimally maintained using kinetic energy.

ii. Venous collapse pressure depends on the patient’s anatomy and cannula size, but most importantly on the negative pressure generated by venous drainage.

iii. The patient-prime interaction is optimised with antegrade and retrograde autologous priming, which mixes the blood and prime away from the tissues and results in a reduced oncotic destabilization.

iv. mCPB is a safe and reproducible technique.

This paper has many flaws.

@ in the “Results” paragraph the conclusions are included and there is also part of the discussion.

@ the format of the study is not reported. Definitively, this paper is not a study, but only a report of what the Authors do.

@ figg 2 and 3 show data from conventional CPB, but nothing is said about any patient who had cCPB and it is not indicated where data were taken from.

In conclusion, this is not a scientific paper, but only a technical report which describes only a method. I think that it does not deserve publication.

Level of interest: Reject as not of sufficient priority to merit publishing in this journal

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