Reviewer's report

Title: Intestinal ischemia after cardiac surgery: analyse of a large registry

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Reviewer: Helena Rexius

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The article: "Intestinal ischemia after cardiac surgery: analyse of a large registry" covers an important topic concerning a severe complication after cardiac surgery. It emphasizes the importance of early diagnosis and treatment. The authors identify risk factors for intestinal ischemia from a large patient registry. The question posed by the authors is well defined and difficult to study as the complication is rare.

I have some questions concerning presentation of data.

Minor Essential Revisions

1. There are some spelling mistakes in the manuscript that has to be corrected, and I think that the language in the manuscript has to be revised as it sometimes is a bit difficult to follow.
2. The number of surgical procedures was 18,879, it would be interesting to know in how many patients?
3. The registry contained 248 variables, were all the variables tested in the analyses? If not how were the variables selected in the analyses? 248 variables compared with 17 endpoints makes it difficult to perform sound statistical analyses.
4. Concerning Table 2 and 3.
   The column named "Total number of patients N=18879", are the figures given here the number of patients where the variable is known? It is difficult to understand the meaning of the column.
   The variable Smoking is as I read it known in 8518 patients which is less than half of the patients. Smoking is one of the variables in the GICS score, how does this affect the result?
5. Concerning Table 4.
   How were patients with missing data concerning any of the variables in the scores treated? Were they excluded or was the score calculated without the unknown variable?

Level of interest: An article of importance in its field

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests.