

Peer review file

Article information: <http://dx.doi.org/10.21037/jtd-21-268>

Reviewer A

Comment 1: In general, most of the studies were performed on high risk patients (Reduced LVEF or High Euroscore, several comorbidities etc..). Therefore, making additional subgroup analysis on only high risk patients does not add anything to the study. I think the authors should focus on the main outcomes in general without subgrouping the patients.

Reply 1: Subgroup analysis for high risk patients has been deleted from this article.

Changes in the text: We have deleted our text as advised (see Page 3, line 67; Page 3, line 75; Page 9, line 573; Page 12, line 826; Page 13, line 932; Page 14, line 1208)

Comment 2: the authors stated that 7 RCTs were included in the study. However, I counted 5.

Reply 2: We are sorry for making a mistake when counting the numbers of RCTs. After checked again, we confirmed the number of RCTs was 5.

Changes in the text: We have corrected our text. (see Page 10, line 631)

Comment 3: It would be appreciated for the authors to make forest plots of each outcome (more readable) and to divide the study into RCT studies and observational studies (OS) and at the end to sum the outcomes of both RCT and OS and to add reference number to each study in the tables.

Reply 3: We thought we could show outcomes in a table, but we did ignore the reading experience of data. And now we show the forest plots of each outcomes in Figure 2.

Changes in the text: We added Figure 2 in our article.

Comment 4: in the conclusion part the authors stated that “OPCAB has less risk of stroke, renal failure and drainage. There was no significant statistic difference in MI, arrhythmias, and low output syndrome”. However, from the table 2 it seems that OPCAB was associated also with fewer number of arrhythmias.

Reply 4: We made a mistake in the conclusion part when comparing arrhythmias in two groups, and the correct conclusion is “OPCAB was associated also with a lower risk of arrhythmias.”

Changes in the text: We have corrected our text. (see Page 14, line 1205)

Comment 5: I think the authors should also redo their searching methodology since there are some studies like the one below which is not included but could be added to the study.

Reply 5: Thank you for pointing this out. The article mentioned by reviewer (J Cardiothorac Surg. 2017 Feb 23;12(1):11.doi: 10.1186/s13019-017-0572-x) is the same study as the one included in our article (Reference 8: Myocardial revascularization using on-pump beating heart among patients with left ventricular dysfunction. J CARDIOTHORAC SURG. 2010 2010-11-10;5:109), and this two articles were conducted in the same institution with the same responding author and selection criteria. The only difference between this two articles is language, one was published in English and another one was in Chinese. Nevertheless, we have redone our searching methodology and no extra article which meets our inclusion criteria has been found.

Changes in the text: There were no changes in our text.

Reviewer B

Comment 1: A forest plot is not shown, but at least the primary outcome should be prepared for the sake of readability.

Reply 1: We thought we could show outcomes in a table, but we did ignore the reading experience of data. And now we show the forest plots of each outcomes in Figure 2 to ensure better experience.

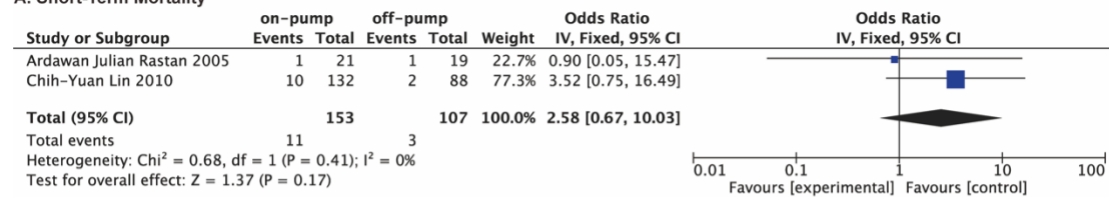
Changes in the text: We added Figure 2 in our article.

Comment 2: It is considered that subgroup analysis should be performed on the papers that conducted RCTs.

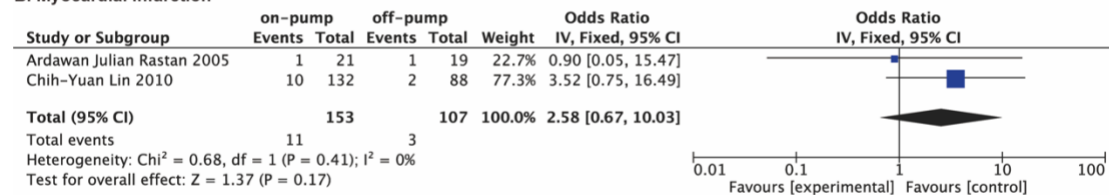
Reply 2: Thank you for pointing this out. When we made forest plots of each outcomes for RCTs separately, the results showed there was no significant difference between two groups. And the small scale of included patients could responsible for this result. And the forest plots of each outcomes for RCTs was attached below.

Changes in the text: There were no changes in our text.

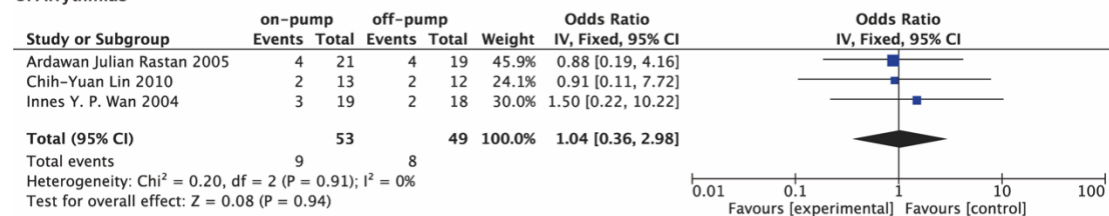
A. Short-Term Mortality



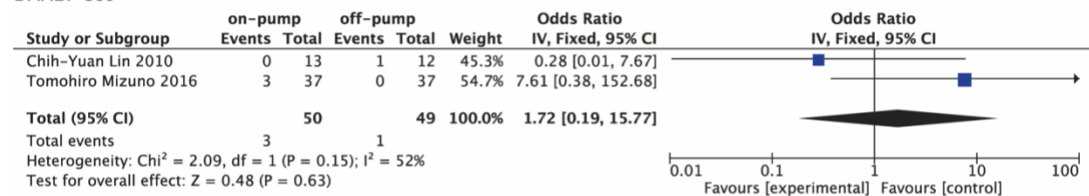
B. Myocardial Infarction



C. Arrhythmias



D. IABP Use



E. Incomplete Revascularization

