Reviewer's report

Title: Hybrid Coronary Revascularization versus Coronary Artery Bypass Grafting for Multivessel Coronary Artery Disease: Systematic Review and Meta-analysis

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Reviewer: Shengshou Hu

Reviewer's report:

This article was aimed to evaluate the short-term outcomes of hybrid coronary revascularization (HCR) with those of coronary artery. However, the significance of the article was limited given the relatively low number of total cases being analyzed. Besides, considering the large time span (2007-2012) of the published studies included in the article, results may be biased as the protocol of HCR technology has changed over time. Therefore, we suggest that the authors make some necessary modifications according to the advices below:

1. The authors identified ten studies in this analysis from 2007 to 2012. To the reviewer’s knowledge, cases reported about HCR during this period was relatively small, and there are several other studies published in recent two years which may be eligible for the inclusion of studies. The authors need to include more data for this analysis. Also for the limited data in this article, the authors didn’t undertake a meta-analysis on the prevalence of TVR. The reviewer suggests the authors include more data to complete the meta-analysis on the prevalence of TVR. It should be noticed that when hybrid coronary revascularization was first introduced in 1996, the preliminary protocol was to combine bypass surgery and PCI with bare metal stent rather than drug eluting stents mentioned in the article. The authors may look into literatures further to correct such narration.

2. Even if there was no statistically difference of the ORs for MACCEs between HCR and CABG at one year of follow-up, the numerical difference (2.9% after HCR vs 11.8% after CABG) is quite remarkable, which may require the authors to further elaborate this result with more specific discussion.

Level of interest: An article whose findings are important to those with closely related research interests

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