Reviewer’s report

Title: Reendothelialisation after Synergy stent and Absorb bioresorbable vascular scaffold implantation in acute myocardial infarction: COVER-AMI study

Version: 0 Date: 29 May 2018

Reviewer: Joshua Feinberg

Reviewer’s report:

I want to congratulate the authors for their completed trial and I only think the manuscript needs minor, but important revision:

1) I would make the aim of the trial more clear and what the current study aims to add to the body of information already available eg. contrasting the information obtained in this trial to that obtained in the trial in reference 4. I would already in the introduction specify the evidence from non-MI patients on the subject rather than in the discussion. In general I encourage the authors to move parts of the discussion to the introduction section.

2) I lack a sample size calculation for the primary outcomes. If none was performed prior to performing the trial, it should be stated as a limitation and added to the discussion that the trial might not have sufficient power to detect a difference not only on the clinical end points but also the non-clinical.

3) The authors state in the result section that: " At 3-month follow-up, the lumen loss was lower in SYNERGY device (0.03 mm [IQR: 0.00 to 0.07 mm] vs. 0.10 mm [IQR: 0.03 to 0.31mm]; p = 0.096" but in the discussion write "Finally, late loss was not significantly higher in the ABSORB arm (0.10 vs. 0.03 mm in the EES arm; P: 0.096)". This seems contradictory.

4) The results of the clinical endpoints should be mentioned in the article or as an appendix.

5) I would add what kind of participants were included in the Absorb 2 trial.

6) If there is a pre-published protocol, this should be made available as an appendix (I see the clinical trial registration, but if there is a more detailed protocol?). Any outcomes not reported that were called for in the original protocol should be mentioned with reasoning for failure to report these, if there are any such outcomes. Otherwise, I would state that all outcomes called for in the protocol were reported.

7) Lack of blinding should be mentioned as a limitation

8) If there was data available from all participants for all outcomes, this should be mentioned. If data from any participants were missing, this should be mentioned.

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