Reviewer’s report

Title: Peak CK-MB has a strong association with chronic scar size and wall motion abnormalities after revascularized non-transmural myocardial infarction - a prospective CMR study

Version: 0 Date: 02 Jan 2018

Reviewer: Po-Yuan Chang

Reviewer’s report:

The authors tried to investigate the role of peak CK-MB in subsequent scar size and wall motion abnormalities after PCI for AMI. Several issues need to be addressed.

1. This study was carried out in 2003-2005, and the MI terminology has been changed since then. For example, we don't use "transmural/non-transmural MI" in routine practice, but instead use STEMI/NSTE-ACS according to latest AHA/ACC guideline, or, different types of AMI according to the ESC. These terminology should be taken into account and updated.

2. The title says ...non-transmural..., but among the 41 AMI patients, 33 were "STEMI" (Table 1). However, in the abstract Results, the authors say 33 patients "had a non-transmural MI". These statements are confusing and not consistent with current opinions on STEMI definition and need to be clarified.

3. The individual ECG findings should be described and compared to CMR findings for the "transmural/non-transmural" issue.

4. The predictive value of CK-MB in CV outcome is already known for transmural MI. The current recommendations for CK-MB measurement in AMI should be added in the Background section and also discussed.

5. The value of Troponin (I and T) vs. CK-MB in MI should be discussed.

6. The references should be updated.

7. Table 1 is all related to STEMI, which should be, as stated above, "transmural" according to current practice. If the authors do find out by CMR that most STEMI are "non-transmural" as in the title, that would be very interesting but the sample size needs to be much larger.

8. Table 1: Add "Door-to balloon" time or "door-to needle" time for STEMI.

9. In the "Methods" section, the authors say this is a CMR substudy of the prospectively conducted "ISKE project". What is this project about? Is it published? More details should be provided in the "Background" section.
10. Is this a "case-control" study? What is the "control" group?

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
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