Cardiovascular magnetic resonance imaging assessment of outcomes in acute myocardial infarction

Running title: CMR assessment of outcomes in AMI

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Responses to reviewers (Answering Reviewers document)

(a) Reviewers 742221, 1277682, 2633437 and 607640 have accepted the manuscript for publication with no revision requested

(b) Reviewer 3498422 has accepted the manuscript for publication with only minor revision requested as below (our response to each comment is in **blue** *text):*

The Authors wrote an exhaustive review on the prognostic significance of CMR parameters in acute myocardial infarction, collecting and presenting the most important studies on this topic.

Some minor comments:

1. Paragraph 1. I would specify if the studies mentioned were on patients treated or not with primary percutaneous revascularization.

   Thank you for this comment. We have amended the paragraph in accordance to clarify that the studies are on patients treated with primary percutaneous coronary revascularisation.

2. I would add some studies on the relationship between LV remodelling and medical/revascularization therapy.

Thank you for this comment. The aim of our manuscript is to provide a comprehensive review on the role of Cardiovascular Magnetic Resonance Imaging in the assessment of outcomes in acute MI. As mentioned by the reviewer, we have provided an exhaustive review on this and included relevant studies. We feel that the relationship between LV remodelling and treatment strategy (medical, revascularisation) is not the focus of our review and would hence not add anything to the value of this manuscript, and may potentially detract from the focus of our review. We hence have not amended our manuscript with respect to this comment.

3. Table 1. Please check the abbreviations used (for example, months = m or mths?). Same for the other tables.

   Thank you for this comment. We have hence standardised abbreviations in all tables for time points as: d= days, w= weeks, m= months, y= years.

4. Paragraph 3.2. I would revise the sentence "the area of LGE is a mixture of viable (oedematous) and necrotic cells and thus can overestimate true IS"; actually, this phenomenon is likely due to the oedematous (increased) interstitium, more than the oedematous cells (where Gd does not enter, if the cell membrane is intact); I would change the sentence into something like "the area of LGE detects not only necrotic cells, but also the increased (oedematous/inflamed) interstitium surrounding viable cells, and thus can overestimate true IS".

Thank you for this suggestion. We have amended the sentence as advised.