Author's response to reviews

Title: Left Ventricular Remodeling After Acute Myocardial Infarction. The Influence of Viability and Revascularization. An echocardiographic substudy of the VIAMI-trial.

Authors:

Ramon B. van Loon (rb.vanloon@vumc.nl)
Gerrit Veen (g.veen@vumc.nl)
Otto Kamp (o.kamp@vumc.nl)
Leo H.B. Baur (l.baur@atriummc.nl)
Albert C. van Rossum (ac.vrossum@vumc.nl)

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Author's response to reviews:

Reviewer 2: Luciano Agati
We would like to thank dr. Agati for his valuable review and comments. Please find our response to his comments below.

Major Comments:
Even though in the title the authors underline the influence of viability and revascularization on LV remodeling, in the text they organize the discussion looking at the determinants of LV ejection fraction improvement at follow-up. Looking at the results a significant increase in LVEDV may be observed at follow-up in group 2 and 3 (+20% and +21% respectively). Why to do not use these data for logistic regression analysis?

We agree that the significant increase in LVEDV is an important observation at follow-up in group 2 and 3. Even though in group 1 we observe a trend in LVEDV increase.

The reason we did not use these follow-up data in our logistic regression analysis is twofold;

1) Because myocardial viability may only be temporary present if no revascularization takes place (page 6 Knudsen et al.), we were particularly interested in predictors of LV EF improvement early after acute myocardial infarction but before revascularization. Even in this study we observe loss of myocardial viability in the non-revascularized group (group 2) resulting in a significant increase in LVEDV and LVESV without change in LV ejection fraction. Therefore, we only included the baseline LVEDV in our logistic regression analysis.

2) The combination of LVEDV at baseline and follow-up (delta LVEDV) are both
the most important determinants of our outcome (LV EF improvement).

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\frac{\text{[End diastolic volume baseline/follow up – end systolic volume baseline/follow up]}}{\text{end diastolic volume baseline/follow up}} \times 100.
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A relative increase of LV ejection fraction of >10% at follow up was defined as a significant improvement.

The change in LVEDV is probably dependently related to our outcome and therefore not incorporated in our logistic regression analysis.

We hope our response will comply with your comment.