

## Peer Review File

**Article Information:** <https://dx.doi.org/10.21037/cdt-21-434>

The authors compared the characteristics of type 2 myocardial infarction (T2MI), and type 1 myocardial infarction (T1MI) with respect to major adverse cardiac events (MACE) and mortality as long-term outcomes among 13,105 consecutive patients enrolled in the Korea Acute Myocardial Infarction-National Institute of Health registry. They report that the total mortality rate was higher in T2MI than in T1MI, especially non-cardiac mortality.

Specific Comments:

1. Major limitations include retrospective nature of the analysis.

Reply 1: Thank you for your valuable comment. We added a sentence mentioning this point in the paragraph on limitations in the Discussion section.

Changes in the text: The revised text has been marked in red (page 17, lines 285–286).

2. Exclusion of patients who have not undergone coronary angiography.

Reply 2: Thank you for your comment. We changed the expression “non-procedure angiogram” to “no coronary angiography.”

Changes in the text: The revised text is marked in red (page 8, lines 109–110) in the manuscript. Figure 1 was also corrected.

3. Lack of details on the causes of death

Reply 3: Thank you for your comment. We agree with your point and tried to add the detailed causes of death. However, as the main observation outcome was simply mortality, we did not include other clinical outcomes in the analysis. We apologize for not being able to provide detailed information on the causes of death; however, if these data are mandatory, we will again try to include the necessary details.

Changes in the text: We added this point as a third limitation in the Discussion section, which is marked in red (page 17, lines 288–290).

4. Lack of adjustment for medical treatment after hospital discharge.

Reply 4: Thank you for your valuable comment. This is a very important point; however, our data are not sufficient to discuss the medical treatment after discharge. We apologize for not being able to provide this information.

Changes in the text: We included this point as a fourth limitation in the Discussion section and marked the revised part in red (page 17, lines 290–293).

5. A contemporary US study using the Nationwide Readmissions Database reported that patients with type 2 MI had lower risk of in-hospital mortality (adjusted odds ratio: 0.57 [95% confidence interval: 0.54 to 0.60]) and 30-day MI readmission (adjusted odds ratio: 0.46 [95% confidence interval: 0.35 to

0.59]). This discrepancy needs to be explored and discussed. [McCarthy CP, Kolte D, Kennedy KF, Vaduganathan M, Wasfy JH, Januzzi JL Jr. Patient Characteristics and Clinical Outcomes of Type 1 Versus Type 2 Myocardial Infarction. *J Am Coll Cardiol.* 2021 Feb 23;77(7):848-857. doi: 10.1016/j.jacc.2020.12.034. PMID: 33602466.]

Reply 5: Thank you for your valuable comment. The results of the large-scale US study are worth referencing, although they are somewhat different from our rates of in-hospital death (2.2%) and recurrent MI (only 4 patients at 3 years, 0.8%). These outcomes depend on the different treatments at each hospital and the severity of each patient's condition. We mentioned these points in the Discussion section and added the paper to the References section.

Changes in the text: The revised text is marked in red (page 14, lines 235–239 and page 22, lines 364–365).

6. Did women in this registry have less obstructive CAD or severe LV impairment and more likely to survive than men as has been previously reported. [Kimenai DM, Lindahl B, Chapman AR, et al Sex differences in investigations and outcomes among patients with type 2 myocardial infarction *Heart.* Published Online First: 20 April 2021. doi: 10.1136/heartjnl-2021-319118]

Reply 6: Thank you for your comment. The paper is very interesting. In our data, 7.3% female patients and 4.9% male patients had an LVEF of <40%; however, the difference was not significant ( $p=0.274$ ). Additionally, the number of female patients ( $n=205$ ) was lower than that of male patients ( $n=303$ ) in the T2MI group. We did not report this result in the paper because our purpose was to compare T1MI and T2MI and we did not intend to make a detailed comparison between the sexes. The above data are merely the results of our separate analysis. However, if these data need to be included, we will add them to the paper.