

Peer Review File

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Reviewer A

General considerations:

- Major problem of synthesis: text, image, table far too numerous
- in the text, the "p value" must be lowercase, not uppercase

Reply: We have collated the images and changed the P value to lower case.

Title: The title seems to formulate the objective of the study well and does not seem misleading.

Reply: Thanks for the reviewer's recognition.

Objective: The objective is well formulated and the purpose of the study is clearly defined.

Methods

1. The methodological approach is thorough, including details about patient recruitment, data collection, surgical procedures, and statistical analyses.

Reply: Thanks for the reviewer's recognition.

2. Patient selection criteria are well-defined, focusing on left ventricular ejection fraction (LVEF) and coronary heart disease diagnosis.

Reply: Thanks for the reviewer's recognition.

3. Cardiac Magnetic Resonance (CMR) with late gadolinium enhancement (LGE) was appropriately used for cardiac visualization, but reasons for the specific parameters selection remain unclear.

Reply: The reasons for specific parameters selection are based on previous reports in the literatures. We have added relevant literatures.

4. The surgery protocol is well-detailed, with an emphasis on complete revascularization and graft quality assessment, yet lacking reasoning behind surgical technique choice.

Reply: Previous studies have found that complete revascularization can significantly reduce the frequency of angina pectoris and the incidence of adverse events in patients with coronary heart disease, and improve the quality of life. We have added literatures on complete revascularization and graft quality assessment.

5. The statistical analysis is comprehensive and rigorous, using multiple tests and regression models, and employing validation and verification methods.

Reply: Thanks for the reviewer's recognition.

6. Being a single-center, retrospective study introduces potential biases and limits generalizability of the findings.

Reply: Single-center, retrospective study is the limitation of our study. In the next step, we will further expand the sample size and conduct multi-center, prospective verification.

7. No mention of blinding during data collection and analysis, which could lead to additional bias.

Reply: Data collection and analysis for this study are not clear about the grouping. We have added to the study protocol: Data collection and analysis personnel are not clear about the grouping.

Results

1. Clarity and detail: The authors clearly outline the process of patient recruitment and selection, ensuring transparency in the initial steps of their study. They've detailed both preoperative imaging data and surgical data, which provide a comprehensive perspective on the patient's condition and treatment history.

Reply: Thanks for the reviewer's recognition.

2. Statistical analysis: The researchers have utilized multivariate regression to determine predictive variables. This is a standard and robust method for such analysis, lending credibility to their results.

Reply: Thanks for the reviewer's recognition.

Discussion

1. Linking Results to Objectives: The researchers successfully connect their findings to the research objectives in the discussion section. They analyze their results in the context of the study's goal to predict LVEF improvement post-CABG in ICM patients.

Reply: Thanks for the reviewer's recognition.

2. Comparisons to existing literature: The researchers have compared their results to existing studies and have identified where their results align or differ. This comparison helps to place their work in the broader context of the field.

Reply: Thanks for the reviewer's recognition.

3. Limitations: The authors acknowledge their study's limitations, which is crucial for providing a balanced view of the research. However, they could have discussed potential strategies for addressing these limitations in future research.

Reply: Thanks for the reviewer's recognition. Single-center, retrospective study is the limitation of our study. In the next step, we will further expand the sample size and conduct multi-center, prospective verification. In the future, we will strengthen the CMR follow-up of these patients.

4. Implications and Future Directions: They've effectively highlighted the potential implications of their work for patient care, suggesting that their findings could inform treatment strategies. Additionally, they propose directions for future research, which can guide others in the field. They could have expanded on the practical implications and real-

world applications of their findings.

Reply: Thanks for the reviewer's recognition.

Reviewer B

The authors have submitted an interesting paper describing the predictors of improvement in LVEF after CABG in patients with ischemic cardiomyopathy.

There are several comments to be addressed.

Reply:

Thank you very much for reviewing our manuscript in your busy schedule, and sincerely thank you for your affirmation of this study.

1. "Non-improvement" is not a very accurate word to be used and should be changed throughout the manuscript.

Reply: We can't think of a more accurate word to describe "Non-improvement". Can you provide language editing service? We are willing to provide additional language editing service fee. Thanks.

2. There are too many figures and tables. Some should be placed in the supplementary appendix. Figure 4 is confusing and needs to be clarified.

Reply: We have combined some figures. Figure 4 is a graphical representation of Table 4, which we have deleted.

3. Cath data should include LM involvement

Reply: We have added the data of left main lesions in Table 2.

4. One of the main limitations is that sample size is small and model validated internally by bootstrapping

Reply: Thanks for the reviewer's recognition. Single-center, retrospective study is the limitation of our study. In the next step, we will further expand the sample size and conduct multi-center, prospective verification.

5. The manuscript should be proof read by a copywriter and grammatical and sentence structure errors corrected.

Reply: Can you provide language editing service? We are willing to provide additional language editing service fee. Thanks.