Date: June 21, 2021

To:

Marco M Ciccone, MD
Ramdas G Pai, MD
Dimitrios Tousoulis, MD PhD
Editors in Chief, World Journal of Cardiology

Subject: Response to reviewers – WJC 68620

Dear Drs. Ciccone, Pai and Tousoulis,

Thank you very much for your prompt response to our submission, we would like to thank the editors and reviewers of *The World Journal of Cardiology* for their expert evaluation and welcome their constructive feedback. In response to the queries raised by the editors and reviewers, changes have been made in the manuscript. We continue to believe that this manuscript is of significant interest to the readership of *The World Journal of Cardiology*. In response to the editorial and reviewer comments, please note the points of discussion below.

Thank you for your time and attention to our revised submission. We look forward to your review and await further thoughts on the manuscript.

Sincerely,

Saraschandra Vallabhajosyula, MD MSc

Section of Interventional Cardiology, Division of Cardiovascular Medicine Department of Medicine, Emory University School of Medicine Atlanta, Georgia

Reviewer Comments:

Reviewer #1:

General Comments: Thank you for opportunity for reviewing this invited review "Pulmonary Artery Catheterization in Acute Myocardial Infarction Complicated by Cardiogenic Shock: A Review of Contemporary Literature" I recommend including clinical limitation and clinical practice in this review. Totally, I would like to congratulate the authors for the enthusiasm invested in this manuscript. If the above suggestions are incorporated and the paper is thoroughly edited, it will be a strong contribution to the literature.

Response: We thank Reviewer 1 for their detailed review and feedback on this manuscript. We are hopeful that we have addressed their comments both below and in the revised manuscript. We have thoroughly edited this article and added two small sections, as per your recommendations, clinical practice and limitations.

Manuscript Extract: <u>Limitations</u>: This review is based on the results of currently available observational, single/multi-center, and national cohorts. However, the contribution of confounding factors in these studies in unknown. For instance, use of PAC could be significantly higher in critically ill patients thus confounding the results of in-hospital, 30-day mortality and other relevant clinical outcomes. Therefore, the role of PAC in AMI-CS patients may need to be further explored through well-designed future RCTs.

<u>Future directions</u>: As PAC by itself has no intrinsic therapeutic benefit, future studies focused on testing the workflows and appropriate interventions that would allow prompt acquisition and action on hemodynamic information from the PAC including the timing, selection, management, and weaning of temporary MCS. There is also an ongoing clinical trial looking at whether PAC guided LV mechanical unloading after PCI for acute anterior wall MI will attenuate post-infarct scar and cardiac remodeling. The data from this study may further define the clinical utility of PAC in guiding the need for mechanical LV unloading to help improve clinical outcomes in the setting of AMI-CS.

Editorial Comments:

Editorial Office:

Comment 1: Language Quality: Please resolve all language issues in the manuscript based on the peer review report. Please be sure to have a native-English speaker edit the manuscript for grammar, sentence structure, word usage, spelling, capitalization, punctuation, format, and general readability, so that the manuscript's language will meet our direct publishing needs.

Response 1: We re-edited the article and corrected for potential errors.

Manuscript Extract: Please refer to the revised manuscript

Comment 2: Abbreviations: In general, do not use non-standard abbreviations, unless they appear at least two times in the text preceding the first usage/definition. Certain commonly used abbreviations, such as DNA, RNA, HIV, LD50, PCR, HBV, ECG, WBC, RBC, CT, ESR, CSF, IgG, ELISA, PBS, ATP, EDTA, and mAb, do not need to be defined and can be used directly.

Response 2: We re-edited the article and corrected for potential errors.

Manuscript Extract: Please refer to the revised manuscript

Comment 3: Title: Please spell out any abbreviation in the title. Abbreviations are not permitted.

Response 3: There are no abbreviations in the title

Manuscript Extract: Please refer to the revised manuscript

Comment 4: Running title: Please shorten the running title to no more than 6 words. Abbreviations are permitted.

Response 4: Running title is 5 words long.

Manuscript Extract: Role of PAC in AMI-CS

Comment 5: Abstract: Abbreviations must be defined upon first appearance in the Abstract. Abbreviations must be defined upon first appearance in the Key words. Abbreviations must be defined upon first appearance in the Core tip. Abbreviations must be defined upon first appearance in the Main Text. Abbreviations must be defined upon first appearance in the Article Highlights. Please verify the abbreviations used in figures and define them. Please verify the abbreviations used in tables and define them.

Response 5: These guidelines have been followed

Manuscript Extract: Please refer to the revised manuscript

Scientific Editor Comments:

General Comments: The manuscript describes a mini review of the pulmonary artery catheterization in acute myocardial infarction complicated by cardiogenic shock. The topic is within the scope of the WJC. (1) Classification: Grade B; (2) Summary of the Peer-Review Report: The reviewer recommended including clinical limitation and clinical practice in this review. Totally, the reviewer would like to congratulate the authors for the enthusiasm invested in this manuscript. If the above suggestions are incorporated and the paper is thoroughly edited, it will be a strong contribution to the literature; (3) Format: There are 2 tables and 4 figures; (4) References: A total of 75 references are cited, including 29 references published in the last 3 years; (5) Self-cited references: There are no self-citations; and (6) References recommendations: The authors have the right to refuse to cite improper references recommended by the peer reviewer(s), especially references published by the peer reviewer(s) him/herself (themselves). If the authors find the peer reviewer(s) request for the authors to cite improper references published by him/herself (themselves), please send the peer reviewer's ID number to editorial office will close and remove the peer reviewer from the F6Publishing system immediately. 2 Language evaluation: Classification: Grade B. 3 Academic norms and rules: The authors should provide the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement. No academic misconduct was found in the Bing search. 4 Supplementary comments: This is an invited manuscript. No financial support was obtained for the study. The topic has not previously been published in the WJC.

Response: We thank the Scientific Reviewer for their detailed review and feedback on this manuscript. We are hopeful that we have addressed their comments both below and in the revised manuscript.

Comment 1: The "Author Contributions" section is missing. Please provide the author contributions;

Response 1: This information has been added

Manuscript Extract: SPP: Literature search, manuscript writing, editing, revision

MHM: Literature search, manuscript writing, editing, revision PRS: Literature search, manuscript writing, editing, revision

MGD: Editing, manuscript writing, supervision AK: Editing, manuscript writing, supervision WAJ: Editing, manuscript writing, supervision WJN: Editing, manuscript writing, supervision

SV: Manuscript writing, editing, revision, supervision

Comment 2: The "Core Tip" section is missing. Please add the core tip;

Response 2: This information has been added

Manuscript Extract: The unstable hemodynamic status in acute myocardial infarction-CS patients and frequent use of vasopressor and inotropic medications along with mechanical circulatory support devices, may suggest a role for invasive hemodynamic monitoring with a pulmonary artery catheter (PAC) to help improve outcomes.

Comment 3: The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor;

Response 3: We do not have any original figures to contribute. These figures will need permissions from publishers for re-use. All figures have been represented in PowerPoint slides.

Manuscript Extract: Please refer to the revised figures.

Comment 4: PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout.

Response 4: PMID and DOI numbers are added for all 75 references except reference 67 (PMID number was not available)

Manuscript Extract: Please refer to the revised references.

Comment 5: Please obtain permission for the use of picture(s). If an author of a submission is re-using a figure or figures published elsewhere, or that is copyrighted, the author must provide documentation that the previous publisher or copyright holder has given permission for the figure to be re-published; and correctly indicating the reference source and copyrights.

Response 5: These copyrights have been attached.