



April 27th, 2018

**University of Chile  
Faculty of Medicine  
Institute of Biomedical Sciences**

Li-Jun Cui  
Science Editor, Editorial Office  
World Journal of Cardiology

This is to submit the revision of the manuscript entitled “**Myocardial reperfusion injury and oxidative stress: therapeutic opportunities**” to be considered for publication in the Journal as a review article, for the invitation received with the ID00482173. T

I would like to provide a detailed response to each of the comments made by the manuscript reviewers.

**Reviewer 1:**

1.1 Please revise the English of the text due to some typos.

**Response:** An exhaustive review of the English grammar of the manuscript was made, and also we sent the manuscript to Elsevier editing company (an edition certificate is attached).

1.2. The role of carotenoids in oxidative stress should be considered. Please consider and discuss the paper from Ciccone MM et al. Mediators Inflamm. 2013;2013:782137.

**Response:** On page 10, a complete paragraph was included about the role of carotenoids in the prevention of myocardial reperfusion injury, including five new references (including the reference suggested by reviewer)

1.3. Please include a table gathering the main findings from literature.

**Response:** A detailed table was included that synthesizes the main clinical studies in which antioxidants have been used to prevent myocardial injury due to reperfusion associated with acute myocardial infarction.

**Reviewer 2:** There are no specific comments

**Reviewer 3:** This is a lengthy review on myocardial reperfusion injury (MRI), focusing on relevant mechanisms and the therapeutic use of anti-oxidants (e.g., ascorbate and N-acetylcysteine) and iron chelator (e.g., deferoxamine). As a whole, there is a lot of information presented in such a way that sometimes it is difficult to extract useful clinical findings from the lengthy text.

3.1. One of the major problems with reading the article as a whole is to differentiate between experimental and clinical findings. It would be much better if the authors could emphasize on the current clinical status by using “clinically’ or simply use a separate paragraph as “clinical highlights”.

**Response:** A table was included that synthesizes the main clinical studies in which antioxidants have been used to prevent myocardial reperfusion injury in acute myocardial infarction, in order to clarify the clinical evidence supporting antioxidant therapy.

3.2. The conclusion is a bit too long. The authors may consider incorporating the information into the main text and present only the most important points in Conclusion.

**Response:** The size of the conclusion was significantly reduced, only focusing on the important topics of the text.

3.3. The idea of merging two images in Fig. 4 does not seem to be good one for the readers. Besides, the background wordings are not in English.

**Response:** Figure 4 was significantly modified to avoid readers confusion

We hope that our responses and adjustments to the manuscript will be liked by the reviewers and the Editorial Board

I look forward to hearing from you at your earliest convenience.

Sincerely yours,



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