Reviewer's report

Title: Oxygen Therapy in Patients with ST Elevation Myocardial Infarction based on the culprit vessel: Results from the Randomized Controlled SOCCER Trial

Version: 0 Date: 28 Aug 2019

Reviewer: W Szczeklik

Reviewer's report:

The manuscript I was asked to review describes the results of a substudy of a randomized controlled study SOCCER. Results of the study has been already published in 3 other publications elsewhere.

In current sub-study the authors try to answer the question if the results of treatment STEMI with oxygen are dependent on the location of the culprit vessel.

The rationale for this question are nicely explained in the manuscript. The groups are well characterized. The results and discussion reads well.

I can see two major issues with this substudy:

1. In my opinion the groups are probably two small to answer the question if oxygen treatment can be influenced by the culprit vessel in STEMI. So - the authors should be very cautious in giving the opinion on it as in the conclusions of the abstract.

2. After the recent metataanalyses and guideliness (also cited in the manuscript) - there is not much space for treatment MI without hipoxemia with oxygen. In my opinion it should be more precisely stated in the discussion. However, oxygen therapy was not deleterious in single studies of MI patients in pooled data it showed to increase short and long term mortality.

Minor issue:

Please describe shortly what was reported in other SOCCER publications if there is no important overlap with current sub-study

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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