Reviewer's report

Title: Beta-blockers for the primary prevention of anthracycline-induced cardiotoxicity: a meta-analysis of randomized controlled trials

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Reviewer: Alessandra Ghigo

Reviewer's report:

The paper by Ma et al is a meta-analysis of randomized controlled trials aimed at investigating the efficacy of beta blockers in the primary prevention of anthracycline-induced cardiotoxicity. Authors conclude that prophylactic beta blockers are associated with a decreased risk of HF and improved left ventricle systolic function. Furthermore, they found that beta blockers do not interfere with the anticancer action of chemotherapy and thus are effective and safe for the primary prevention of anthracycline-induced cardiotoxicity.

Given that anthracycline-induced cardiotoxicity is expected to become a serious health emergency, the topic of the manuscript if of high interest. Results are well presented, and I do not see major methodological concerns.

Major issues:

The efficacy of beta blockers in patients diagnosed with anthracycline-induced cardiotoxicity is well documented (Zamorano et al, 2017 - PMID 27565769). Authors should discuss this point more extensively and highlight which is the major novelty of their study, that I presume is the efficacy of beta blocker in a preventive setting. This concept however reads between the lines and should be better emphasized.

The structure of the manuscript is imbalanced. Results are concise while the discussion is wordy and presents several grammatical errors.

e.g. Page 15 line 3 should read "reactive oxygen species"; Page 15 line 14 should read "as high as 16%"; etc... Furthermore, the use of contracted verb forms (e.g. page 16 line 5 "what's more important") should be avoided. Revision by a native speaker is highly recommended.

The discussion is wordy and should be extensively rephrased. Most information could be moved to the results section which is instead too concise. In the discussion, most concepts can be elaborated in a more concise and effective way.

Supplementary figure legends should be expanded to contain all the information necessary for a full comprehension of the results at first sight.
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.

Yes

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 recommend additional statistical review

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

Needs some language corrections before being published

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