Reviewer’s report

Title: The COMT-polymerorphism is not associated with the incidence of acute kidney injury after cardiac surgery - a prospective cohort study

Version: 0 Date: 28 Apr 2017

Reviewer: Mark De Caestecker

Reviewer’s report:

The study appears to be properly powered to detect reported COMT M/M associated AKI incidence in this patient population and discusses the potential that the study may not have detected weaker associations. The discussion needs to be more explicit in explaining why these data are different from one of the other two published studies that used the same KDIGO AKI criteria. There are sections in the text that are poorly described and poorly referenced that need to be corrected: abstract paragraph 3 is hard to understand; methods needs to use the term KDIGO discussion page 12 paragraphs 2 and 3 need to more clearly reference the published papers so it is clear which paper is being discussed at which point; some of the text in these paragraphs is not clear (e.g.: "because of a stricter definition more incidences of AKI are recorded than before"). Other than these minor corrections, the only significant change needs to be acknowledgement and analysis to account for the one potentially confounding variable: the increased incidence of cardiac dysfunction in COMT M/M vs. the more common COMTV/M genotypes. While this would have been likely to make AKI incidence higher, it needs to be accounted for and ideally some additional analyses need to be included to control for this potentially confounding variable.

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 am able to assess the statistics

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

Needs some language corrections before being published

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