Author’s response to reviews

Title: PRESERVATION OF RENAL FUNCTION IN CARDiac SURGERY PATIENTS WITH LOW CARDiac OUTPUT SYNDROMe: LEVOSIMENDAN VS BETA AGONISTS

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Author’s response to reviews:

Dear editor,

We would like to thank you and the reviewers for your thorough reading of the paper and for your constructive comments. We have improved the paper according to your suggestions and put changes in red. We hope that the new version will respond to all your comments.

Please, find below a point by-point response to reviewer’ comments.
Fardin Yousefshahi (Reviewer 3): Dear Editor,

The manuscript BANE-D-18-00443R2, entitled, "PRESERVATION OF RENAL FUNCTION IN CARDIAC SURGERY PATIENTS WITH LOW CARDIAC OUTPUT SYNDROME AND RENAL FAILURE: LEVOSIMENDAN VS BETA AGONISTS" is revised by authors. Majority of my concerns are replied by authors, but, following few points are not applied in the text as replied by authors.

The abstract version is similar to the original one and I could not see the reported changes!

Abstract

The aim of study in the background is not matched with the title and method of study. We have deleted the part of the aim that it had been changed in the title.

Method:

The type of study should be reflected in the abstract method. We have added it.

Conclusion: Please change the conclusion as you did in the main manuscript. We have changed it.

Method

How were your routine assessment methods and protocols for detecting LCOS? We have explained now: It was checked by echocardiogram and Mostcare® (continuous cardiac index monitoring).

When and how you checked the cardiac output? We have explained it.

The following data were collected from recruitment to ICU discharge: preoperative renal and cardiac function data (heart and renal function prior to surgery) at diagnosis of LCOS, at 24 h and 48 h after diagnosis (24 h following completion of levosimendan therapy) and at ICU discharge.

- Renal function parameters: Creatinine, stage of kidney failure as measured by the Acute kidney failure (AKI) scale, diuresis and use of diuretics (mg of furosemide). Requirement of renal replacement therapy.

- Hemodynamics: HR (arrhythmia de novo), multifocal atrial tachycardia (MAT), heart failure (HF), and ejection fraction of the left ventricle (EFLV), as monitored by an ultrasound specialist.
• SvcO2, central venous pressure (CVP). Heart rate and Cardiac Index was continuously monitored using MostCare®.

Results

Please mention the regression results in the manuscript. We have explained better what was the way to analyze the results.

A descriptive statistical analysis was first conducted. Continuous variables were expressed in a table as means, standard deviations or medians based on normality of distribution. If continuous quantitative variables were normally distributed –as assessed by Shapiro-Wilk test– were measured by the ANOVA test. Differences between baseline values and values at 24 h and 48 hours were assessed by Student’s t-test when normally distributed in each group. Normal distribution was tested by the Shapiro-Wilk test; otherwise, Wilcoxon or Friedman tests were used.

It was the same way that it was calculated in some articles:

