Reviewer’s report

Title: Low dose of flurbiprofen axetil decrease the rate of acute kidney injury after operation: a retrospective clinical data analysis of 9915 cases

Version: 0 Date: 02 Nov 2019

Reviewer: Nuttha Lumlertgul

Reviewer's report:

The title of the article is "Low dose of flurbiprofen axetil decrease the rate of acute kidney injury after operation: a retrospective clinical data analysis of 9915 cases".

Authors conducted a research article. This study aimed to determine whether the effects of different dose of 5 perioperative flurbiprofen axetil on postoperative AKI.

This is an interesting study that can benefit from more thorough reporting and discussion and appears to be well performed in general and the manuscript is well written. However, the manuscript still could be further improved after some revisions.

Specific comments:

1. In definition of outcome part, the authors state that "postoperative AKI was diagnosed within 7 days after surgery..." and "Flurbiprofen axetil using during perioperative period was defined... to 48 hours post-surgery". If participants developed AKI had history Flurbiprofen axetil use after 48 h, how did the authors deal with this condition?


3. How many times that you collected serum creatinine for define postoperative AKI in the study? Please clarify explicit. How the authors deal with missing data?

4. In "Table 2", the authors define P-value*: compared with the group of not using flurbiprofen axetil. What statistical methods did the authors use? Were the authors used post hoc analysis for multiple comparison?

5. Do you have data of cumulative dose comparing between non-AKI and postoperative AKI group?
6. The authors conclude that "low dose flurbiprofen axetil (50-100mg) perioperatively may effectively reduce the incidence of postoperative AKI". In the group of not using flurbiprofen axetil, what analgesia/NSAIDs used for reduced postoperative pain instead?

7. In "methods", the authors exclude 58996 patients who had missing data of serum creatinine. One of possible causes of missing data might be from these patients had low risk for develop AKI. These data may affect to rate of AKI in the group of not using flurbiprofen axetil. The author should be explained in the "limitation" part

Thank you for the opportunity to review this original study.

Please confirm that you have included your review in the ‘Comments to Author’ box?

As a minimum standard, please include a few sentences that outline what you think are the authors’ hypothesis/objectives, their main results, and the conclusions drawn. Your report should constructively instruct authors on how they can strengthen their paper to the point where it may be acceptable for publication, or provide detailed reasons as to why the manuscript does not fulfill our criteria for consideration. Please supply appropriate evidence using examples from the manuscript to substantiate your comments. Please break your comments into two bulleted or numbered sections: major and minor comments.

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Are the methods appropriate and well described to allow independent reproduction of experiments?
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Does the work include the necessary controls?
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Yes
Are you able to assess the statistics?

- Are the statistical test(s) used in this study appropriate and well described?

- Is the exact sample size (n) reported for each experimental group/condition (as a number, not a range)?

- Are the description of any error bars and probability values appropriate?

- Are all error bars defined in the corresponding figure legends?

- Has a sample size calculation been included, or a description and rationale about how sample sizes were chosen?

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