Reviewer’s report

Title: Optimal INR Level for Warfarin Therapy after Mechanical Mitral Valve Replacement

Version: 1 Date: 01 Mar 2019

Reviewer: Research Square

Reviewer's report:

"STATISTICAL REVIEWER ASSESSMENT:

Is the study design appropriate for the research question (considering whether the analyzed population accurately reflects the design and whether you see any problems with control/comparison groups, e.g., likely confounders)?
No - there are minor issues

Are methodologies adequate and well implemented (considering whether assumptions are addressed and whether analyses are robust)?
No - there are minor issues

Are the analyses adequately communicated (considering whether reporting details are adequate and whether figures and tables are well labeled and described)?
Yes - important reporting details are present, analyses are adequately communicated, figures and tables are well labeled and described

Does the interpretation accurately reflect the analyses without overstatement (considering whether limitations/bias are acknowledged and whether accurate descriptors, e.g., 'significant', are used)?
No - there are minor issues

Could an appropriately REVISED version of this work represent a statistically sound contribution?
Probably - with minor revisions

STATISTICAL REVIEWER COMMENTS:

The authors have addressed most of the concerns raised previously.

The authors have applied patient-year concept which is a good statistical and epidemiological interpretation in terms of descriptive statistic. They have also mentioned the application of chi square test (although underutilized) and have also applied descriptive statistics such as frequency distribution and percentage.

Concerns about probable application of repeated measure ANOVA (if data were normally distributed) or Friedman's test (if data were not normally distributed) has not been addressed. Status of normality of
their dataset has not been mentioned yet. Other comments have been given with this peer review.

REQUESTED REVISIONS:
General comments:
* Still not addressed

Specific comments:
Methods:
* Study design is still not mentioned clearly.
* Still, sample size calculation is not clear.
* Concerns about probable application of repeated measure ANOVA (if data were normally distributed) or Friedman’s test (if data were not normally distributed) has not been addressed. Status of normality of their dataset has not been mentioned yet.

Limitations of the study:
* The statement about power analysis has been hidden.
* Limitation about single-centric or multi-centric studies has been omitted.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
No

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

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