

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA **Telephone:** +1-925-399-1568 **E-mail:** bpgoffice@wjgnet.com https://www.wjgnet.com

Answering Reviewers

Reviewer's comments

The potential non-linear relationship between variables and variable-outcome can compromise the predictive performance of the model, and the traditional multiple linear analysis methods limit the number of relevant variables that may be clinically significant. In contrast, machine learning techniques are not limited to linear relationships nor to the number of variables included in the analysis, and therefore may offer a better predictive performance. Acute kidney injury predictive models based on big data and artificial intelligence are potentially reliable tools to monitor the condition of each patient and help support clinical decisions accordingly individually and prospectively. This study used the machine learning algorithms to develop the liver surgery associated acute kidney injury models, with appropriate validation and evaluation of the model's performance. The study is well designed and the results are interesting. The criteria of data collection are reasonable, and clearly described. Performance evaluation are well displayed. The tables and figure are well described. A minor editing both for the discussion and the language of the main text is required.

Reply: Thanks for your positive comments. We have checked the main text throughout, edited and revised the section of "DISCUSSION".