

## ANSWERING REVIEWERS

**Name of journal:** World Journal of Hepatology

**ESPS manuscript NO:** 71935

**Title:** Risk factors and Prediction of Acute Kidney Injury After Liver Transplantation: Logistic Regression and Artificial Neural Network Approaches

**Reviewer's code:** 05735339

Review date: 2021-09-29 04:13

**Scientific Quality:** Grade B (Very good)

**Language Quality:** Grade B (Minor language polishing)

**Conclusion:** Accept (General priority)

### COMMENTS:

The manuscript is well written and clearly mentioned the problem statement. Also experimentally verified the achieved results and shows the importance of regression model in prediction of acute kidney injury after deceased-donor liver transplantation. The manuscript is acceptable after the inclusion of following comments: 1. Abstract of the manuscript is too much lengthy. Author has to rewrite it and present their work within the limited number of words. 2. At the end of introduction section, you have to add the structure of the manuscript for better readability. 3. Author has to conclude the entire manuscript in a separate section before the reference or acknowledgement. 4. Include some latest literature section and compare your result with recent work. 5. Author has to include some references like DOI: 10.4018/IJACI.2017040104 <https://doi.org/10.1016/j.jksuci.2020.01.003>

### Answers:

1. Abstract length was reduced
2. At the end of introduction section, the structure of the manuscript was added
3. Exclusive conclusion section OK
4. Latest literature included - DOI: 10.4018/IJACI.2017040104 <https://doi.org/10.1016/j.jksuci.2020.01.003>

**Reviewer's code:** 05207387

Review date: 2021-10-02 12:26

**Scientific Quality:** Grade C (Good)**Language Quality:** Grade B (Minor language polishing)**Conclusion:** Minor revision

## COMMENTS

Thanks for recommending me as a reviewer. This study aimed to identify pre and intraoperative risk factors for the occurrence of the acute kidney injury (AKI) after deceased-donor liver transplantation (DDLT), enabling the identification of patients at risk immediately after the end of the surgery. If the author completes the revision, the quality of the study will be further improved. 1. The intro section is well written. There are many different algorithms for machine learning. If the author describes the reason for using logistic regression analysis and artificial neural networks in more detail in the introduction section, it can help readers understand. 2. page 6: "To assess the effect of bivariate independent variables (graft quality, patients characteristics and intraoperative events) on the incidence of postoperative AKI, a model was fitted with bootstrapping with a cutoff of  $p < 0.10$ . " - The author needs to add references to the rationale for setting the significance level to 0.10 in this sentence. 3. Authors should add to the discussion section about the limitations of the study.

## Answers:

The reasons for using logistic regression analysis and artificial neural networks were described. On page 6: *"To assess the effect of bivariate independent variables (graft quality, patients characteristics and intraoperative events) on the incidence of postoperative AKI, a model was fitted with bootstrapping with a cutoff of  $p < 0.10$ . "* – This statement about the statistical methods have been correctly rewritten, in addition corrections regarding the sample of patients were made. The limitations of the study were included in the discussion section.

**Reviewer's code:** 05975745

Review date: 2021-09-27 04:52

**Scientific Quality:** Grade D (Fair)

**Language Quality:** Grade C (A great deal of language polishing)

**Conclusion:** Minor revision

## COMMENTS

1. Title should be generalized. i.e. Logistic regression is a type of Machine learning algorithm. 3. Add an architecture depicting the system model of the proposed work. 4. You should emphasize the difference between other methods to clarify the position of this work further. 5. The Wide ranges of applications need to be addressed in the Introduction 6. Add the advantages of the proposed system in one quoted line for justifying the proposed approach in the Introduction section. 7. In the introduction, the findings of the present research work should be compared with the recent work of the same field towards claiming the contribution made, kindly provide several references to substantiate the claim made in the abstract (that is, provide references to other groups who do or have done research in this area). 8. Authors can refer to some latest related works from reputed journals like IEEE/ACM Transactions, Elsevier, Inderscience, Springer, Taylor & Francis, etc. 9. Add some recent references.

## Answers:

1. The title was correctly reformulated.
2. List of the authors contributions were included in the re-submission after the review.
3. The differences between other methods for AKI prediction were more emphasized.
4. The wide ranges of applications of ANN and the advantages of the proposed system were addressed in the Introduction
5. In the introduction, the findings of the present research work were compared with the 2 more recent works of the same field and recent references from reputed journals were added.