

**Name of journal:** World Journal of Critical Care Medicine

**Manuscript NO:** 62887

**Title:** Glucocorticoid and mineralocorticoid receptor expression in critical illness

We thank the Reviewers and Editors for their comments that helped us improve our manuscript. We have replied to all comments raised. We have also provided three (3) figures to help with visualization. Please note that we have added “A narrative review” at the end of the title of our manuscript, in order to conform to the Reviewer’s comment.

**Reviewer #1:**

**Scientific Quality:** Grade C (Good)

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

**Conclusion:** Major revision

**Specific Comments to Authors:** Peer Review: Glucocorticoid and mineralocorticoid receptor expression in critical illness Authors provide a narrative review about the GCR and MR expression in critically ill patients and evaluation of the currently available literature. Major comments: Overall well written manuscript with demonstration of a good understanding of GCR and MR in sepsis patients and critical illness. Manuscript lacks any breakthrough information, although authors have tried to compile a lot of information in a review article. The information imparted in the review is very dense (not much can be done about that) however the presentation could certainly be improved upon. Authors should utilize visual presentation of some of the text (especially the cellular mechanism of receptor transport/translocation). “Glucocorticoids, the end-products of the HPA axis, have been used for over 40 years in the treatment of sepsis, however not all patients benefit from their administration” There is data supporting benefit in patients with septic shock to reduce the use of vasopressors and overall better outcome. Page 6 paragraph 2, could definitely improve the understanding if the authors use a visual representation for the mechanism. Authors should also discuss the interplay of vitamin C levels and GCR expression in the cell surface. This has been studied and known that vitamin C def can alter the expression of receptors. Page 9 paragraph 2: whole paragraph can be summed into a good informative image. The content is very dense and factual, authors could use some ways to present all the information which could be easily readable and would have retention.

*Response: We thank the Reviewer for his/her kind comments.*

1) *The Reviewer is correct. We have now added the beneficial effects of corticosteroids in septic shock patients. Page 5, paragraph 2 REVISED.*

2) *We have added 3 Figures to help with visualisation. Pages 26-27, Figures 1-3 REVISED*

3) *We have now also discussed the interplay between vitamin C and glucocorticoid receptors. Pages 7-8 REVISED*

## **5 EDITORIAL OFFICE'S COMMENTS**

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

**(1) Science editor:** 1 Scientific quality: The manuscript describes a review of the glucocorticoid and mineralocorticoid receptor expression in critical illness. The topic is within the scope of the WJCCM. (1) Classification: Grade C; (2) Summary of the Peer-Review Report: The authors reported a well written manuscript with demonstration of a good understanding of GCR and MR in sepsis patients and critical illness. However, the manuscript lacks any breakthrough information, and useful illustrations. The questions raised by the reviewer should be answered; and (3) Format: There are no tables and figures. A total of 70 references are cited, including 12 references published in the last 3 years. There are 4 self-citations, which are related to this study. 2 Language evaluation: Classification: Grade B. 3 Academic norms and rules: No academic misconduct was found in the Bing search. 4 Supplementary comments: This is an invited manuscript. The topic has not previously been published in the WJCCM. 5 Issues raised: (1) The authors should add some figures or tables; and (2) Please obtain permission for the use of picture(s). If an author of a submission is re-using a figure or figures published elsewhere, or that is copyrighted, the author must provide documentation that the previous publisher or copyright holder has given permission for the figure to be re-published; and correctly indicating the reference source and copyrights. For example, "Figure 1 Histopathological examination by hematoxylin-eosin staining (200 ×). Citation: Yang JM, Sun Y, Wang M, Zhang XL, Zhang SJ, Gao YS, Chen L, Wu MY, Zhou L, Zhou YM, Wang Y, Zheng FJ, Li YH. Regulatory effect of a Chinese herbal medicine formula on non-alcoholic fatty liver disease. World J Gastroenterol 2019; 25(34): 5105-5119. Copyright ©The Author(s) 2019. Published by Baishideng Publishing Group Inc[6]". And please cite the reference source in the references list. If the author fails to properly cite the published or copyrighted picture(s) or table(s) as described above, he/she will be subject to withdrawal of the article from BPG publications and may even be held liable. 6 Re-Review: Required. 7 Recommendation: Conditional acceptance.

*Response: We thank the Editor for his/her kind comments. We have addressed all comments raised by the Reviewer.*

1) *We have added 3 Figures to help with visualization. Figures 1-3 REVISED*

2) *No permission required for the three Figures. They were created with the help of the Smart Servier Medical Art website, which is included in the acknowledgements. REVISED*

**(2) Editorial office director:**

**(3) Company editor-in-chief:** I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Critical Care Medicine, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, the author(s) must add a table/figure to the manuscript.

*Response: We thank the Editor for the conditional acceptance of our manuscript. We hope we have addressed all comments raised by the Reviewer, and the Editorial's office comments satisfactorily. Three (3) figures have been added, as requested.*