

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 58775

Title: Effect of liraglutide on endoplasmic reticulum stress in the renal tissue of type 2 diabetic rats

Reviewer's code: 03537623

Position: Peer Reviewer

Academic degree: MD

Professional title: PhD

Reviewer's Country/Territory: Egypt

Author's Country/Territory: China

Manuscript submission date: 2020-08-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2020-08-10 23:43

Reviewer performed review: 2020-08-17 23:55

Review time: 7 Days

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors of this manuscript have reported the effect of liraglutide on endoplasmic reticulum stress in the renal tissue of type 2 diabetic rats. The findings observed in this study appear to be interesting. The majority of data is convincing and supportive for the working hypothesis. However, there are some concerns/questions that need to be addressed.

- 1-The authors attributed the beneficial effects of liraglutide to its modulatory effect on endoplasmic reticulum stress, please clarify whether endoplasmic reticulum expresses GLP-1 receptors or it may be an indirect effect.
- 2- It is better to use Periodic Acid Schiff (PAS) or Masson trichrome stain to determine the degree of collagen deposition and basement membrane thickening.
- 3- In order to verify the effect of liraglutide on podocytes, the expression of their proteins (nephrin and podocin) should be measured.
- 4- Mention the post-hoc test used following one-way ANOVA to determine the significance difference between groups.
- 5- Please clarify when liraglutide treatment has been started.
- 6- Add the references of doses of liraglutide and anaesthetic agent in material and method section.
- 7-Please indicate the number of animals used in the legend of the figures of each parameter.
- 8- Mention the volume of collected blood and method of plasma preparation.
- 9- Photomicrographs of histopathological features must show salient changes with arrows. In addition, figure legends should describe the gross morphological and histopathological changes.
- 10-The methods of measuring plasma creatinine and urea as well as protein in urine were not mentioned. In addition, the mortality rate should be stated.
- 11- In the abstract, the authors stated that Western blotting showed that GRP78 and caspase12 protein expression in kidney tissue was significantly lower in model rats than normal rats, while these proteins showed a higher level in the model group, please revise it.

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 58775

Title: Effect of liraglutide on endoplasmic reticulum stress in the renal tissue of type 2 diabetic rats

Reviewer's code: 00678278

Position: Editorial Board

Academic degree: MD

Professional title: Professor

Reviewer's Country/Territory: Turkey

Author's Country/Territory: China

Manuscript submission date: 2020-08-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2020-08-10 09:28

Reviewer performed review: 2020-09-04 13:05

Review time: 25 Days and 3 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In this manuscript the authors searched whether liraglutide is beneficial or not in diabetic kidney disease. The findings are interesting however I have several concerns to be highlighted. However, there are some concerns/questions that need to be addressed. 1. How do researchers define low dose Liraglutide as 100 µg/kg and high dose Liraglutide as 200 µg/kg? Please add a reference if available. 2. To be clear to readers please provide the number of rats in each group in the 'Liraglutide administration and grouping.' Section. 3. What does model group means? Please clarify this issue in the method section. 4. I can not understand when Liraglutide treatment was started? Please add this info in the method section. 5. Again in the methods section please verify the methods of measuring glucose with the kit's name and urea and creatinine and proteinuria. 6. What about the tubule-interstitial fibrosis and tubules status in every group? Please add this info if available. 7. In the statistical analyses you should mention all the tests you use. For instance one-way ANOVA test you should mention. 8. Please add the reference 'doi: 10.4103/0971-5916.200887' and discuss your finding according to this reference. 9. Please summarize your findings in the first paragraph of the discussion for better understanding. 10. You should mention and discuss your findings more clearly. I think you give a lots of info regarding ER stress. However you should clearly discuss your findings with others. Please reorganize your discussion part according to these suggestions