

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 69391

Title: Thioredoxin interacting protein, a key molecular switch between oxidative stress

and sterile inflammation in cellular response

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05338743

Position: Peer Reviewer

Academic degree: Doctor, PhD

Professional title: Doctor, Professor

Reviewer's Country/Territory: China

Author's Country/Territory: United States

Manuscript submission date: 2021-06-30

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-07-15 00:50

Reviewer performed review: 2021-07-22 04:02

Review time: 7 Days and 3 Hours

Scientific quality	[] Grade A: Excellent [Y] Grade B: Very good [] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Language quality	 [] Grade A: Priority publishing [Y] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	 [] Accept (High priority) [] Accept (General priority) [] Minor revision [Y] Major revision [] Rejection
Re-review	[Y]Yes []No



Peer-reviewer	Peer-Review: [Y] Anonymous [] Onymous
statements	Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This paper mainly discussed that TXNIP participates in regulating sterile inflammation including obesity and many microvascular diseases. Furthermore, some potential therapeutic drugs for targeting TXNIP expression were reviewed. Overall, the authors focused on examining the contribution of TXNIP to expression and activation of NLRP3inflammasome resulting in initiation or exacerbation of the disease state. This paper nicely showed the potential for TXNIP as a therapeutic target. However, there are several points to be clarified. Major points: 1: The logicality need to miprove, focusing on how TXNIP function as the swith between oxidative stress and sterile inflammation according to the title. 2: This manuscript mainly described sterile inflammation, authors should explain in detail the types of inflammation and define 'sterile inflammation'. The msnuscript only focused on some types of sterile inflammation. 3: The link between TXNIP expression and other miRNAs expression is not described except for miR-17-5p. Here needs a reasonable transition. 4: Although the paper described that obesity can lead to many microvascular diseases, it did not elaborate how these diseases are related to NLRP3 activation and the role of TXNIP. It will be nice to add detailed explanation. 5: There are many inconsistencies in spelling, such as IL-1b, miR17-5p and mir17-5p. The language in the manuscript also needs to polish.



RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Diabetes Manuscript NO: 69391 Title: Thioredoxin interacting protein, a key molecular switch between oxidative stress and sterile inflammation in cellular response Provenance and peer review: Invited Manuscript; Externally peer reviewed Peer-review model: Single blind **Reviewer's code:** 05338743 **Position:** Peer Reviewer Academic degree: Doctor, PhD Professional title: Doctor, Professor Reviewer's Country/Territory: China Author's Country/Territory: United States Manuscript submission date: 2021-06-30 Reviewer chosen by: Man Liu Reviewer accepted review: 2021-11-04 08:48 Reviewer performed review: 2021-11-04 09:02 Review time: 1 Hour

Scientific quality	[] Grade A: Excellent [Y] Grade B: Very good [] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	[Y] Accept (High priority) [] Accept (General priority) [] Minor revision [] Major revision [] Rejection
Peer-reviewer	Peer-Review: [Y] Anonymous [] Onymous





statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

All my issues have been addressed. It is acceptable now.