

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 59150

Title: Vanadium-dependent activation of glucose transport in adipocytes by catecholamines is not mediated via adrenoceptor stimulation or monoamine oxidase activity

Reviewer's code: 02885976

Position: Editorial Board

Academic degree: MD, MSc, PhD

Professional title: Doctor, Medical Assistant, Professor, Research Scientist, Teacher

Reviewer's Country/Territory: Argentina

Author's Country/Territory: France

Manuscript submission date: 2020-08-31

Reviewer chosen by: Ya-Juan Ma

Reviewer accepted review: 2020-09-16 16:45

Reviewer performed review: 2020-09-25 17:41

Review time: 9 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 Grade E: Do not publish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 checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

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

SPECIFIC COMMENTS TO AUTHORS

The results of the present study confirm the role of vanadium as a potential anti-hyperglycemic agent. The authors demonstrate, through different well-carried out experiments, that some amines at certain concentrations are capable to stimulate glucose uptake in the adipose tissue only in the presence of vanadium, and that this mechanism could be due to a possible salvage pathway to regulate or prevent the excess of lipotoxicity. The present work represents an advance in the field of searching new agents that counteract the deleterious effects of chronic hyperglycemia and disorders associated with the excessive release of fatty acids. The studies were well designed and the proposal led to very interesting results that allow us to better understand the anti-hyperglycemic mechanisms of vanadium. I only have some minor concerns: Statistical analyses Please indicate the value of p and the post-hoc test employed. Material and methods: The authors indicate a total n=53. Did the authors use the same animal to test the 25 amines? How was distributed the 53 animals for the different experiments?