Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

PEER-REVIEW REPORT

Name of journal: *World Journal of Meta-Analysis*

Manuscript NO: 73425

Title: The uses of knockout, knockdown, and transgenic models in the studies of glucose transporter 4

Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 02446101
Position: Editorial Board
Academic degree: MD, PhD
Professional title: Professor, Surgeon
Reviewer's Country/Territory: China
Author's Country/Territory: United States

Manuscript submission date: 2021-11-21

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-11-29 14:56

Reviewer performed review: 2021-11-29 15:22

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [Y] Grade D: Fair [ ] Grade E: Do not publish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

Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

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

SPECIFIC COMMENTS TO AUTHORS

In this manuscript, the authors summarized the recombinant DNA technologies that have been used to study expression profiles and functions of GLUT4 in tissues and cells. This paper is logical, hierarchical and easy to understand. It has certain reference value for the young scholars or students. However, there're two issues which should be addressed. 1. As a review, progress instead of basic knowledges should be focused. All the basic knowledges should be deleted. For example, all the second part named as "Recombinant DNA techniques for the studies of gene and protein functions" should be deleted. In addition, the introduction is too cumbersome, it is recommended to delete most of its content. 2. Considering that the content of the manuscript has little relation with the theme of the journal (Meta-Analysis), whether it is suitable for the journal needs to be decided by the editor. So, revision should be recommended for this manuscript.

Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

PEER-REVIEW REPORT

Name of journal: *World Journal of Meta-Analysis*

Manuscript NO: 73425

Title: The uses of knockout, knockdown, and transgenic models in the studies of glucose transporter 4

Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 04089095
Position: Editorial Board
Academic degree: PhD
Professional title: Professor
Reviewer's Country/Territory: China
Author's Country/Territory: United States

Manuscript submission date: 2021-11-21

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-12-01 06:28

Reviewer performed review: 2021-12-07 12:19

Review time: 6 Days and 5 Hours

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
Re-review	[Y] Yes [ ] No

Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

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

SPECIFIC COMMENTS TO AUTHORS

In the muscle and adipose, glucose transporter 4 (GLUT4) is considered as the key player for the insulin-stimulated glucose transport . Study the physiological function of GLUT4 helped to understand the blood glucose regulation mechanism better. The author sums up the methods used in Slc2a4 gene knockout, GLUT4 knockdown and overexpression in the whole body and tissue specific manner, and an updated research method, CRISPR, is proposed and may be used by later researchers.The content of the article is comprehensive and logical. Based on the review comments made by the previous review experts, the author made more comprehensive and reasonable revisions, which better explained the issues raised by the previous experts. In summary, I agree that the magazine will accept this article.The final decision must be based on the editor's opinion.