PEER-REVIEW REPORT

Name of journal: *World Journal of Diabetes*

Manuscript NO: 76715

Title: Effectiveness and safety of COVID-19 vaccines in patients with diabetes as factors for vaccine hesitancy

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05483101

Position: Editorial Board

Academic degree: FIAC, MD

Professional title: Assistant Professor

Reviewer's Country/Territory: Malaysia

Author's Country/Territory: Bulgaria

Manuscript submission date: 2022-03-27

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-29 11:44

Reviewer performed review: 2022-04-01 14:17

Review time: 3 Days and 2 Hours

Scientific quality	[ ] Grade A: Excellent　[ ] Grade B: Very good　[Y] Grade C: Good [ ] Grade D: Fair　[ ] Grade E: Do not publish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	[ ] Yes　[Y] No

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

SPECIFIC COMMENTS TO AUTHORS

The authors described in their review the safety and efficacy of COVID-19 vaccination in patients with diabetes mellitus. Here's some points I would like to raise for improvements: 1. Routine vaccine for diabetes patients (page 6 & 7) may be out of scope for this review. Suggest to remove the entire section. 2. Similarly,   autoimmune diseases (page 8 & 9) are too general, potentially out of scope for this review. Unless there is explanation for that, suggest to remove it too. 3.   Suggest to add in a section to explain why and how diabetes mellitus affects the immune system, with figures. And how immunodeficient state could potentially affect the efficacy of a vaccine, particularly COVID-19 vaccine in this context. 4.   It would be interesting to include also a summary of the numbers of diabetic patients contracted with COVID-19 after vaccination – to see the real efficacy of the vaccination. 5.   Will the severity of diabetes mellitus affect the selection, efficacy, effectiveness, side effects etc of a COVID-19 vaccine? Discuss that. 6. The authors mentioned about the strict glycaemic control could increase the efficacy of COVID-19 vaccine. Explain this works at cellular level. 7.   "Patients with diabetes are more prone to have pronounced side effects of COVID-19 vaccination than healthy people". This phrase needs a reference. 8. The review is a bit too wordy. Suggest to include one or two figures to summarise part of / entire review. 9. Lastly, there are many reviews on efficacy of COVID-19 vaccine on diabetes patients published in the English literature. I just wonder, what additional information/ novelty in this review add up to the existing knowledge in this area. Please explain further.

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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 brings an extensive review about the effectiveness of the Covid-19 vaccines for diabetes patients. The authors discuss important issues related to the potential causes of hesitancy for vaccination in this particular group of patients, i.e., diabetic population.

In overall, the paper is well-written, and it flows logically. Technically, the authors provide a complete review concerning the benefits of the available immunizers for diabetes patients, which includes the investigation of the vaccine adverse effects. Despite the good analyzes and review process, I believe that the topic "Vaccine hesitancy" could be improved, by presenting a deeper review on this subject since vaccine hesitancy is one of the most interesting topics in this paper.