Journal title: World Journal of Diabetes

Manuscript NO: 87566

Title: Recent therapeutic targets for the prevention and management of diabetic complications

Authors: Md Shahidul Islam, Lu Cai and Michael Horowitz

Reviewer #1: This editorial presents the recent therapeutic targets used in diabetic complications. The article is well-written and requires minor grammar revisions. I also recommend updating some of the bibliographic sources used. • R42: You could add some new publications to the topic of oxidative stress and diabetes complications such as: (Darenskaya MA, Kolesnikova LI, Kolesnikov SI. Oxidative Stress: Pathogenetic Role in Diabetes Mellitus and Its Complications and Therapeutic Approaches to Correction. Bull Exp Biol Med. 2021 May;171(2):179-189. doi: 10.1007/s10517-021-05191-7) • R47: Regarding the role of curcumin in diabetic complications, search for recent publications such as: (Tang C, Liu Y, Liu S, Yang C, Chen L, Tang F, Wang F, Zhan L, Deng H, Zhou W, Lin Y, Yuan X. Curcumin and Its Analogs as Potential Epigenetic Modulators: Prevention of Diabetes and Its Complications. Pharmacology. 2022;107(1-2):1-13) • R93 provide the year of the publication

Reply to reviewer #1

Thank you very much for your kind complements. Suggested references have been incorporated in the revised version of manuscript. Please refer to the reference numbers 8 and 12 in the revised version of manuscript for more details. The missing year (2020) has been supplied for the reference, which is currently showing as reference number 10 in the revised version of manuscript.

Reviewer #2: Islam et al. provided a comprehensive overview of recent therapeutic targets for the prevention and management of diabetic complications. The editorial covers a range of potential approaches, from oxidative stress reduction to the targeting of specific molecular pathways and epigenetic factors. Here are some comments and suggestions that may help further improve the editorial:

Reply to reviewer #1

First of all, thank you very much for your intensive review of our manuscript and we believe that your comments and suggestions improved the quality of our editorial significantly. Please note that the manuscript has been revised according to the comments as described below for respective sections.

Introduction: Begin the editorial with a concise introduction that highlights the significance of diabetic complications and the need for novel therapeutic approaches. The authors could also briefly mention the challenges associated with managing hyperglycemia and the high prevalence of diabetic complications.

A concise introduction has been provided above the section of our original introduction with maintaining and link between them in order to keep the flow of the manuscript. The challenges in managing hyperglycemia as well as the prevalence of diabetic complications are discussed in this section. **Please refer to the lines 22 – 31 and 40-52 of the revised version of manuscript for more details.**

When discussing therapeutic targets like SIRT1 and FOXOs, provide a bit more detail about how they function and interact with other molecules or pathways. This will help readers understand the rationale behind targeting these molecules for diabetic complication management.

While the functions of SIRT1 and FOXOs were already provided in the original version of our manuscript, there links with other pathways are now highlighted in the revised version of the manuscript. **Please refer to the lines 80-81 of the revised version of manuscript for more details**.

In the conclusion, the authors mention looking forward to the outcomes of these studies and their translation into clinical practice. Expand on this point by discussing potential challenges and considerations for translating these findings into real-world treatments. Consider adding a section that outlines potential future directions in this field of research. Are there any emerging technologies, methodologies, or collaborations that could significantly impact the development of these therapeutic strategies?

First of all, in order to keep our conclusion as concise as possible, we added an additional sentence as per your above-mentioned suggestions. **Please refer to the line 109-110 of the revised version of manuscript for more details.**

Please note that there are a number of novel therapies and emerging technologies are proposed in such as pancreas transplant or pancreatic islets transplant, stem cell therapy, gene therapy, islets encapsulation and immunotherapy, however, these therapies are not in line with the content of our current manuscript, so we did not include them in our editorial. We have a plan to develop another editorial including these approaches in near future. We anticipate your kind understanding in this regard.