PEER-REVIEW REPORT

Name of journal: *World Journal of Diabetes*

Manuscript NO: 86099

Title: Advances in cardiovascular-related biomarkers to predict diabetic peripheral neuropathy

Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06313495

Position: Peer Reviewer

Academic degree: PhD

Professional title: Assistant Professor

Reviewer's Country/Territory: Indonesia

Author's Country/Territory: China

Manuscript submission date: 2023-05-31

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-05-31 20:40

Reviewer performed review: 2023-06-01 17:23

Review time: 20 Hours

Scientific quality	[Y] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[Y] Grade A: Excellent [ ] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[Y] Grade A: Excellent [ ] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No creativity or innovation

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Scientific significance of the conclusion in this manuscript	[Y] Grade A: Excellent [ ] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[Y] Grade A: Priority publishing [ ] 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 statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

In this paper, the authors review the association between major traditional and nontraditional cardiovascular-related biomarkers and diabetic peripheral neuropathy (DPN) and assess the evidence for early risk factor-based. Some comments given below.

1. Line 64, Page 3, In the introduction section, the authors need to explain the urgency of clinical study for investigated disease. For this purpose, please refer the relevant reference as follows: https://doi.org/10.3390/bioengineering9040157 and https://doi.org/10.3390/bioengineering9020048 2. Line 68, page 3, other relevant statistic data in encouraged to support the statement. 3. Line 122, page 4, please reprhase the literature objective to become more easily understood. 4. It is unclear whether the author's something new in this work. According to the evaluation, several published literature by other researchers in the past adequately explain the issues you made in the present paper. Please be careful to highlight in the introduction section anything really innovative in this work. 5. To underline the submitted article gaps that the newest works tries to fill, it is crucial to explain the merits, novelty, and limits of earlier studies in the introduction. 6. The authors urged readers to discuss future research that might use in

silico or computer simulation. When opposed to clinical/in or ex testing, which was used in the current study, it offers various advantages, including reduced cost and quicker findings. Please include the following references for this purpose: https://doi.org/10.3390/biomedicines11030951, https://doi.org/10.1038/s41598-023-30725-6, and https://jurnaltribologi.mytribos.org/v33/JT-33-31-38.pdf 7. In keeping with earlier remarks, in silico/computational simulation would serve as a preliminary investigation before conducting an in vivo investigation or as evidence for an in vivo investigation's findings. Give the following extra explanation and cite the appropriate reference: https://doi.org/10.1016/j.heliyon.2022.e12050, https://doi.org/10.3390/su142013413, and https://doi.org/10.3390/ma14247554

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Peer-review model: Single blind

Reviewer's code: 05769914

Position: Peer Reviewer

Academic degree: PhD, MD

Professional title: Professor, Researcher, Doctor

Reviewer's Country/Territory: Mexico

Author's Country/Territory: China

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Reviewer accepted review: 2023-06-03 17:44

Reviewer performed review: 2023-06-05 20:32

Review time: 2 Days and 2 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No scientific significance
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 statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Here my comments related to manuscript from Cheng et al. titled "Advances in cardiovascular-related biomarkers to predict diabetic peripheral neuropathy" -In the abstract section, the authors should add the main consolidate biomarkers to predict diabetic peripheral neuropathy. -In the page 3, line 66-68: please correct the phrase because it described results for the data 2021, but we are actually in 2023. "The International Diabetes Federation (IDF) estimates that approximately 536.6 million adults worldwide will have diabetes in 2021, and the number is predicted to increase to 783.2 million by 20451." -Table 1 needs a figure legend with acronym definitions. -In the markers of myocardial injury section, I recommended the next reference (PMID: 32621046) related with myocardial damage-associated obesity, which express increased troponin I levels. -The following phrase needs a reference at the end (page 5, line 132-134: "Troponin is a marker of myocardial injury, and its abnormal values indicate structural damage to the myocardium." Please also add if troponin is expressed with high or low levels in myocardial injury, because abnormal values are confusing. -In page 5, line 135-138: Simultaneously, microvascular circulation disorders may partly

affect the blood supply to the myocardium, leading to myocardial damage, thereby affecting the content of troponin in the body. Please add the appropriate reference. -In page 6, line 170-172: "Natriuretic peptides bind to receptors located in adipose tissue to induce lipolysis in adipocytes and regulate fat distribution while regulating oxygen and glucose uptake in adipocytes21,22". The authors should be clearer if natriuretic peptides increase or decrease oxygen and glucose uptake in adipocytes. -Please add the necessary reference to the end of the following three phrases: page 7, line 186-188, "High-sensitivity C-reactive protein (hs-CRP) predicts the …… patients with acute coronary syndromes." Page 8, line 211-212, "It is also an inflammatory factor in coronary artery disease." Page 8, line 212-214, "It can promote the formation of lesions in acute coronary syndrome and affect the stability of atherosclerotic plaques." Page 8, line 214-215, "Additionally, it can be used to predict the risk of recent myocardial infarction in patients with coronary heart disease." Page 8, line 220-221, "thus aggravating oxidative stress and inflammation." -In the next phrase (page 8-9, line 240-242: "The potential mechanism was associated with increased homocysteine-induced oxidative stress and vascular endothelial growth factor (VEGF) 31." The reference 31 does not have information on vascular endothelial growth factor (VEGF). Please add the appropriate reference. -Please write Gonzalez R. et al. instead of Ricardo et al.34.   -In the conclusions section, the authors should add the main consolidate biomarkers to diagnostic diabetic peripheral neuropathy. -I suggest a figure related to the biomarkers considered in this manuscript that indicate their effects on biological processes and diabetic peripheral neuropathy.

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

SPECIFIC COMMENTS TO AUTHORS

i am recommending the manuscript for publication.