

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 41790

Title: Effects of glucose-lowering agents on cardiorespiratory fitness

Reviewer's code: 00000663

Reviewer's country: Italy

Science editor: Fang-Fang Ji

Date sent for review: 2018-08-27

Date reviewed: 2018-08-30

Review time: 3 Days

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input checked="" type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input checked="" type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The study addresses the relevant issue of the effects of novel anti-hyperglycemic agents on cardiorespiratory fitness. Although several data are available on the effects of metformin, the effects of other agents are poorly detailed, and possibly related more to the effects of water retention, also affecting heart failure. The term "cardiorespiratory



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fitness" has a well defined significance, and should not be confused with heart failure. I have a few comments to improve manuscript reading. 1. Whereas the effects of metformin have been extensively reported – and two tables are produced to summarize the results – the effects of other agents are very briefly discussed, and it is not even clear if and how much they relate to cardiorespiratory fitness. I would suggest produce similar tables also for other agents – if data are at all available. 2. This would also help reduce the long, detailed presentation of individual studies, largely reproducing the data reported in the tables, and discuss data beyond the mere reporting. 3. A few words should be used with caution. The term "hypoglycemic agents" might be properly changed into "anti-hyperglycemic" or "glucose-lowering", although pharmacology also uses the term "antidiabetic", which I dislike. 4. It is not clear the reason to include in the introduction a paragraph including ACE-inhibitors, ARBs, and also statins. Is there any evidence that these drugs affect cardiorespiratory fitness. Obviously, they have effects on cardiovascular mortality, but what is the relation with fitness? 5. Introduction: "Angiotensin II receptor blockers are" not "Angiotensin II receptor blocker is 6. Metformin dose: ".... increased every second day to a maximum of 2000 mg/day." Please correct 7. There are several minor printing errors that should be corrected

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:



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[Y] No

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 41790

Title: Effects of glucose-lowering agents on cardiorespiratory fitness

Reviewer's code: 03909861

Reviewer's country: United States

Science editor: Fang-Fang Ji

Date sent for review: 2018-08-27

Date reviewed: 2018-09-04

Review time: 7 Days

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

This is a review article that summarized the current evidence regarding hypoglycemic medications on cardiorespiratory fitness. This is an important area for a review article and the manuscript has a clear structure and writing style in general. However, the language needs to be polished, preferably by a Native speaker. In addition, I have the

following concerns that need to be addressed: 1. Introduction: “Exercise is medicine”. This sentence is incorrect and reads out of place in the first paragraph. 2. Introduction: page 4-5: The focus of this review is on 9 different hypoglycemic agents. However, a number of the sentences at the end of the first paragraph of the Introduction discussed anti-hypertensives agents and statins that are not hypoglycemic agents. Those sentences seem to be irrelevant and should be deleted. 3. Table 1: Table 1 is an important table that nicely summarizes the effects of metformin on cardiorespiratory fitness in healthy individuals. However, this table was not mentioned anywhere in the narrative part of this review. 4. Thiazolidinediones and cardiorespiratory fitness: It’ll be helpful if the authors summarize the studies relevant to this topic in a table. 5. SGLT2 inhibitors and cardiorespiratory fitness: Similarly, it’ll be helpful if the authors summarize the studies relevant to this topic in a table. 6. Page 15: the section title related to DPP-4 inhibitors seems to be missing on this page.

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PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 41790

Title: Effects of glucose-lowering agents on cardiorespiratory fitness

Reviewer's code: 00506276

Reviewer's country: Poland

Science editor: Fang-Fang Ji

Date sent for review: 2018-09-11

Date reviewed: 2018-09-17

Review time: 6 Days

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
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			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The aim of this review is to describe the current knowledge about the effect of antidiabetic medications currently used in clinical practice on cardiorespiratory fitness. The topic is of interest and very important from the clinical point of view. The paper is in general well-written and supported by huge body of literature. However, there are also

some concerns which should be addressed. In particular, the manuscript requires some style/language revision. 1) Page 2, the sentence: “drugs are usually needed to intensively ameliorate glycemic control” needs revision. “Ameliorating glycemic control” suggest worse control of glucose level. Drugs are used to improve glycemic control. 2) Page 4, the phrase: “nine different hypoglycemic agents are available” is not strictly correct. First, there are nine groups of drugs, not nine individual drugs. Second, “hypoglycemic agents” should better sound “glucose-lowering” or “antidiabetic” agents. Drugs are not used to induce hypoglycemia but to reduce glucose from supra- to physiological level, although of course hypoglycemia may be the adverse effect. 3) Page 8, paragraph 2, the sentence: “What can be said of the interaction...” should be corrected to: “What can be said about the interaction...” 4) Page 11: it is suggested that thiazolidinediones may increase body weigh by inducing fluid retention whereas in fact fluid retention and body weight gain are two separate effects; weight gain results from stimulatory effect on adipogenesis and adipose tissue accumulation.

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[Y] No

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 41790

Title: Effects of glucose-lowering agents on cardiorespiratory fitness

Reviewer's code: 00506397

Reviewer's country: United States

Science editor: Fang-Fang Ji

Date sent for review: 2018-09-11

Date reviewed: 2018-09-17

Review time: 6 Days

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
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SPECIFIC COMMENTS TO AUTHORS

Hamasaki has provided a review of literature dealing with effects of hypoglycemic agents on cardiorespiratory fitness. This timely review is generally well written. I have a number of suggestions with a goal to fix minor correction of English language as follows: 1. I believe that TABLES 1, 2 and 3 unnecessarily REPEAT the information



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contained in the TEXT of the Review. I strongly suggest to remove these Tables.. 2. Coprescribe should be hyphenated to Co-prescribe 3 Nonesterified should be hyphenated to read Non-esterified 4 On Page 10the exercise only group had improve VO2peak, should be corrected to read "the exercise only group had improved VO2peak"4. 5. On Page 14 Eighty one should be hyphenated to read Eighty-one 6. On Page 17 "This review cannot mention the optimal combination of exercise and hypoglycemic agents" should be corrected to "This review cannot RECOMMEND the optimal combination of exercise and hypoglycemic agents"

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