CORRECTION

Open Access

Correction: Insights into the complex relationship between triglyceride glucosewaist height ratio index, mean arterial pressure, and cardiovascular disease: a nationwide prospective cohort study



Jie Xu^{1†}, Dihui Cai^{1†}, Yuheng Jiao^{1†}, Yingying Liao¹, Yinyin Shen¹, Yunli Shen^{1,2*} and Wei Han^{1,2*}

Correction to: Cardiovascular Diabetology (2025) 24:93https://doi.org/10.1186/s12933-025-02657-0

In the original publication of this article [1], Figs. 1 and 2 were inadvertently duplicated and Figs. 3, 4, 5, and 6 contained incorrect images. For completeness and transparency, the correct version of Figs. 1-6 are displayed below:

The original article has been corrected.

⁺Jie Xu, Dihui Cai and Yuheng Jiao contributed equally to this work.

The original article can be found online at https://doi.org/10.1186/s1 2933-025-02657-0.

*Correspondence: Yunli Shen shenyunli2011@163.com Wei Han 2100504@tongji.edu.cn ¹Department of Cardiology, Shanghai East Hospital, School of Medicine, Tongji University, Shanghai, China ²State Key Laboratory of Cardiology and Medical Innovation Center, Shanghai East Hospital, School of Medicine, Tongji University, Shanghai, China



© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.



Fig. 1 Flowchart of the study population



Fig. 2 The RCS analysis between the TyG-WHtR, age and CVD risk. The model was adjusted for Age, Gender, HGB, PLT, BUN, Scr, UA, TC, HDL-c, LDL-c, Diabetes, Cancer, Lung disease, Liver disease, Education level, Marital status, Depression, Sleep problems, Smoking statues, Drinking statues



Fig. 3 KM plot of CVD based on TyG-WHtR index and MAP

Time-dependent ROC Curves



Fig. 4 Time-Dependent ROC curves for CVD Prediction

Subgroup	HR (95% CI)	P-value P for interaction
	1101	0.001
Age		0.001
To White creation 2 MAD > modion	1 000 (1 110 0 000)	-0.001
TyG-WHR < median & MAP ≥ median	1.822 (1.412-2.350)	<0.001
Tyg-white 2 median & MAP < median	1.091 (1.300-2.189)	<0.001
I yo-write z median & MAP z median	2.455 (1.930-3.122)	×0.001
2 60 years	4 000 /0 000 4 000	
TyG-WHR < median & MAP 2 median	1.263 (0.996-1.602)	0.054
Tyg-write 2 median & MAP < median	1.385 (1.071-1.790)	0.013
TyG-WHTR 2 median & MAP 2 median	1.618 (1.284-2.038)	<0.001
Gender		0.185
Male		
TyG-WHtR < median & MAP ≥ median	1.624 (1.284-2.053)	<0.001
TyG-WHtR ≥ median & MAP < median	1.411 (1.035-1.924)	0.03
TyG-WHtR ≥ median & MAP ≥ median	2.157 (1.682-2.766)	<0.001
Female		
TyG-WHtR < median & MAP ≥ median	1.347 (1.035-1.753)	0.027
TyG-WHtR ≥ median & MAP < median	1.520 (1.205-1.916)	<0.001
TyG-WHtR ≥ median & MAP ≥ median	1.782 (1.423-2.232)	<0.001
Diabetes		0.943
Yes		
TyG-WHtR < median & MAP ≥ median ►	1.458 (0.377-5.638)	0.584
TyG-WHtR ≥ median & MAP < median ►	1.195 (0.376-3.793)	0.763
TyG-WHtR ≥ median & MAP ≥ median	1.563 (0.505-4.840)	0.439
No		
TyG-WHtR < median & MAP ≥ median	1.491 (1.251-1.778)	<0.001
TyG-WHtR≥ median & MAP < median	1.564 (1.298-1.884)	<0.001
TyG-WHTR 2 median & MAP 2 median	1.960 (1.654-2.323)	<0.001
Smoking status		0.696
Never		
TyG-WHR < median & MAP 2 median	1.303 (1.018-1.667)	0.036
TyG-WHTR ≥ median & MAP < median	1,480 (1,181-1,855)	<0.001
TyG-WHTR 2 median & MAP 2 median	1.821 (1.469-2.257)	<0.001
Que		
TyG-WHtR < median & MAP ≥ median	1.382 (0.800-2.386)	0.246
TyG-WHtR≥ median & MAP < median	1.378 (0.758-2.505)	0.293
TyG-WHtR ≥ median & MAP ≥ median	1.990 (1.188-3.333)	0.009
	4 040 (4 000 0 000)	-0.001
TyG-WHR < median & MAP 2 median	1.810 (1.366-2.399)	<0.001
TyG-WHER 2 median & MAP < median	1.670 (1.151-2.424)	0.007
Dei-Idea atatua	2.188 (1.600-2.992)	<0.001
Drinking status		0.403
Never		
TyG-WHR < median & MAP ≥ median	1.351 (1.066-1.713)	0.013
TyG-WHTR ≥ median & MAP < median	1.575 (1.258-1.972)	<0.001
TyG-WHtR ≥ median & MAP ≥ median	1.932 (1.563-2.389)	<0.001
I yG-Witter < median & MAP ≥ median	1.906 (1.125-3.228)	0.016
TyG-White 2 median & MAP < median	1.066 (0.563-2.021)	0.844
ryG-white 2 median & MAP 2 median	1.679 (0.968-2.914)	0.065
	1 PAL 11 194 P	0.000
T C MULE > modian & MAP 2 modian	1.591 (1.179-2.146)	0.002
I yo-write 2 median & MAP < median	1.536 (1.063-2.218)	0.022
I yo-write 2 median & MAP 2 median	1.986 (1.446-2.728)	<0.001
50 1 1.5 2 2.5 0 5.5 4 The estimates	12 0 03	

Fig. 5 Subgroup analyses of the association of the TyG-WHtR and MAP with the risk of CVD. Age, Gender, HGB, PLT, BUN, Scr, UA, TC, HDL-c, Diabetes, Education level, Marital status, Depression, Sleep problems, Smoking statues, Drinking statues were adjusted, if not stratifed



Fig. 6 Mediation effects of TyG-WHtR index and MAP in the incidence of CVD. Adjusted for Age, Gender, HGB, PLT, BUN, Scr, UA, TC, HDL-c, Diabetes, Cancer, Lung disease, Liver disease, Education level, Marital status, Depression, Sleep problems, Smoking statues, Drinking statues

Published online: 15 May 2025

Reference

1. Xu J, Cai D, Jiao Y, et al. Insights into the complex relationship between triglyceride glucose-waist height ratio index, mean arterial pressure, and

cardiovascular disease: a nationwide prospective cohort study. Cardiovasc Diabetol. 2025;24:93.

Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.