Correspondence on caffeine intake interacts with asian gene variants in Parkinson's disease: a study in 4488 subjects



Yolanda Yong-Yan Tsai^a and James Cheng-Chung Wei^{a,b,c,*}

^aInstitute of Medicine, Chung Shan Medical University, Taichung, Taiwan

^bDepartment of Allergy, Immunology & Rheumatology, Chung Shan Medical, University Hospital, Taichung, Taiwan

^cGraduate Institute of Integrated Medicine, China Medical University, Taichung, Taiwan



We read with interest the publication titled "Caffeine Intake and Asian Genetic Variants in Parkinson's Disease Interaction: A Study of 4488 Participants." Without a doubt, this research has provided significant insights into the field. However, we believe there are certain areas that warrant deeper exploration for a comprehensive understanding.

Firstly, the study aptly highlighted the relationship between caffeine intake and the onset of Parkinson's disease among participants with specific genetic variants. We wonder if the authors could elucidate further on the potential mechanisms that might explain this interaction.¹⁻³

Moreover, considering the broad range of dietary habits in Asia, a more detailed segmentation of caffeine sources would be illuminating. Specifically, are there particular sources that yield a greater effect due to the discussed genetic variants? Additionally, the implications of this research on clinical practice are profound, especially concerning preventive measures for those deemed at risk. Practical recommendations based on the study's findings would greatly benefit the medical community.

We also note that the study, spanning only a year, might overlook subtle long—term associations related to Parkinson's, a chronic disease. From patterns of coffee consumption to the incidence of Parkinson's, annual fluctuations might skew the results for the entire year if

cyclical factors remain unaddressed. Transparency on these limitations can pave the way for clearer data interpretation.

For more robust findings, we recommend extending the duration of the study to cover broader implications and incorporate mechanisms to counteract potential seasonal biases. Comparing these findings with results from longer-term studies would also be beneficial.

In conclusion, as research methodologies continue to evolve, refining these approaches is imperative. This not only enhances our credibility but also upholds the integrity of our scientific pursuits.

Contributors

YT Conceptualization, Writing – original draft, Supervision, Investigation.

JW Conceptualization, Writing – review and editing, Supervision,
Resources.

Both authors reviewed the manuscript and contributed to the final editing. $\,$

Declaration of interests

No conflicts of interest.

References

- Ong YL, Deng X, Li HH, et al. Caffeine intake interacts with asian gene variants in Parkinson's disease: a study in 4488 subjects. Lancet Reg Health Western Pac. 2023;40:100877. https://doi.org/10. 1016/j.lanwpc.2023.100877.
- Ren X, Chen JF. Caffeine and Parkinson's disease: multiple benefits and emerging mechanisms. Front Neurosci. 2020;14:602697. https://doi.org/10.3389/fnins.2020.602697.
- 3 Verhoeff MC, Berendse HW, Lobbezoo F. The importance of a healthy mouth in Parkinson's disease. *Lancet*. 2023;402(10411):1419– 1420. https://doi.org/10.1016/S0140-6736(23)01466-6.



The Lancet Regional Health - Western Pacific 2024:42: 100993

Published Online xxx https://doi.org/10. 1016/j.lanwpc.2023. 100993

DOIs of original articles: https://doi.org/10.1016/j.lanwpc.2023.100877, https://doi.org/10.1016/j.lanwpc.2023.100994 *Corresponding author. Institute of Medicine, Chung Shan Medical University, Taichung, Taiwan.

E-mail address: jccwei@gmail.com (J. Cheng-Chung Wei).

^{© 2023} The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).