

This document certifies that the manuscript

Causal association between 26 musculoskeletal disorders and gut microbiota: a Mendelian randomization analysis with Bayesian validation

prepared by the authors

Yunhao Wang, Huimin Li, Lue Huang, Hao Li, Yujin Ying, Yiping Yuan, Hongxing Liao

was edited for proper English language, grammar, punctuation, spelling, and overall style by one or more of the highly qualified native English speaking editors at SNAS.

This certificate was issued on **April 12, 2024** and may be verified on the [SNAS website](#) using the verification code **FE8D-F4D9-74E5-B339-753E**.

Neither the research content nor the authors' intentions were altered in any way during the editing process. Documents receiving this certification should be English-ready for publication; however, the author has the ability to accept or reject our suggestions and changes. To verify the final

SNAS edited version, please visit our verification page at secure.authorservices.springernature.com/certificate/verify.

If you have any questions or concerns about this edited document, please contact SNAS at support@as.springernature.com.