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Competing interests declaration

We declare that none of the authors have competing financial or non-financial interests as defined by Nature Portfolio.

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We have provided an "Inclusion & Ethics" statement.

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All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
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We have provided a full data availability statement in the manuscript.

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Confirm that all relevant data are deposited into a public repository and that accession codes are provided.

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Code availability statement

For all studies using custom code or mathematical algorithm that is deemed central to the conclusions, the manuscript must include a statement under the heading "Code availability" describing how readers can access the code, including any access restrictions. Code availability statements should be provided as a separate section after the data availability statement but before the References.

We have provided a full code availability statement in the manuscript

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For all data presented in a plot, chart or other visual representation confirm that:

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| n/a | Confirmed |
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| <input type="checkbox"/> | <input checked="" type="checkbox"/> The format shows data distribution clearly (e.g. dot plots, box-and-whisker plots) |
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I certify that all the above information is complete and correct.

Typed signature Wan Xiang Shen; Yu Zong Chen

Date Jun 25, 2023

