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Competing interests declaration

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- ☒ We declare that one or more of the authors have a competing interest as defined by Nature Portfolio.

JG, CV and DAL have been named inventors in a patent application for JNJ-2901 and JNJ-4052 compounds. CAP, CV, JG, MC, JE, NL, BS, JMB, VC, LBallell, BB, AK, ASP and DAL were/are all full-time employees of Janssen, a Johnson & Johnson company, and/or potential stockholders of Johnson & Johnson. The other authors declare no competing interests.

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Policy information about Authorship: inclusion & ethics in global research

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- 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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- ☐ All relevant accession codes are provided ☐ Accession codes will be available before publication ☒ No data with mandated deposition

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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.

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

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- ☐ ☒ The format shows data distribution clearly (e.g. dot plots, box-and-whisker plots)
- ☒ ☐ Box-plot elements are defined (e.g. center line, median; box limits, upper and lower quartiles; whiskers, 1.5x interquartile range; points, outliers)
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Policy information about [studies involving animals](#); [ARRIVE guidelines](#) recommended for reporting animal research

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- ☒ We have disclosed the name(s) of the board and institution that approved the study protocol in the manuscript.

I certify that all the above information is complete and correct.

Typed signature Clara Aguilar Perez

Date Oct 28, 2024

