**eLife’s transparent reporting form**

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- You should state whether an appropriate sample size was computed when the study was being designed
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- If no explicit power analysis was used, you should describe how you decided what sample (replicate) size (number) to use

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| No explicit power analysis was required. To compute statistical significance, we required at least three replicates in each group. We have explained this in the Materials & Methods section under Statistics. |

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- You should report how often each experiment was performed
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**Statistical reporting**

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• Report exact p-values wherever possible alongside the summary statistics and 95% confidence intervals. These should be reported for all key questions and not only when the p-value is less than 0.05.

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Detailed statistical information, including sample size, is provided in the Figure legends, figures, text, Materials and Methods, and Supplementary files.

(For large datasets, or papers with a very large number of statistical tests, you may upload a single table file with tests, Ns, etc., with reference to sections in the manuscript.)

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• Indicate how samples were allocated into experimental groups (in the case of clinical studies, please specify allocation to treatment method); if randomization was used, please also state if restricted randomization was applied
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• Include model definition files including the full list of parameters used
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Please indicate the figures or tables for which source data files have been provided:

Figure 1C
Figure 2A, 2B, and 2C
Figure 3F
Figure 4A
Figure 5A, 5B, 5C, and 5D
Figure 6B and 6C