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As our study was based purely on simulations that could be run arbitrarily many times, we did not need to calculate sample sizes when designing our study. All information about simulation repetitions is given in the Methods section of our manuscript.

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- You should report how often each experiment was performed
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As our study was based on simulations, full replication can be performed simply by rerunning our code. Sufficient specification of simulations and analysis is described in Methods, and a link to the full code base is provided at the end of the manuscript.
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- Statistical analysis methods should be described and justified
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We did not perform any biological experiments, but all information about simulation repetitions and statistics can be found in the Methods section of our manuscript. Important quantities are also repeated in the relevant figure legends.

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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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Our study was a pure modeling study, so we did not need to allocate samples across experimental groups.

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We have not included any additional source data files. All simulation data for figures and analyses can be recreated by running the Python code linked to in the manuscript.