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* You should state whether an appropriate sample size was computed when the study was being designed
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Our study is theoretical and we did not have experimental samples. The sample size we use in stochastic simulations can be found in Appendix 1.

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Our study is theoretical and we did not have experiments. We did not discard any simulation results.

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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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* Where provided, these should be in the most useful format, and they can be uploaded as “Source data” files linked to a main figure or table
* 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:

The code of our model, simulation results, and the analysis code are publicly available on github repository: https://github.com/YuanxiaoGao/Evolution-of-irreversible-somatic-differentiation