Evolutionary dynamics of vaccination games

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In this work, we consider a vaccination game where people choose between to vaccinate or not to vaccinate, depending on the perceived morbidity risks from the vaccine and from the infection. We introduce the evolutionary vaccination dynamics for the reinfection SIRI model and we prove that it is bistable. The bistability of the evolutionary dynamics indicates that the damage provoked by false scares on the vaccination perceived morbidity risks can be much higher and much more persistent than in the SIR model.