

# Evolutionary vaccination dynamics

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In this work, we consider a vaccination game where people have to choose between to vaccinate or not to vaccinate, depending on the morbidity risks from the vaccine and the morbidity risks 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 vaccination scares can be much higher and much more persistent than in the SIR model.