A pulse vaccination strategy at variable times depending on incidence

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This work presents a new pulse vaccination strategy for a SIS (susceptibleinfectivesusceptible) disease in an endemic context. Here, given a time of vaccination, the instant of the next one is not predetermined, but it is a function of the present incidence and this function allows us to obtain an epidemic threshold ensuring the convergence of infectives toward the disease-free scenario. Numerical results show that our condition is sufficient but not necessary and that the convergence is faster compared with fixed time vaccination strategies.