



**FIGURE 4** Comparison of strategies lowering the endemic equilibrium. Chosen functions are  $v : I \mapsto v_0 I / (I + 100)$ , with  $v_0 = 0.8$  (blue),  $v_0 = 0.5$  (orange) and  $v_0 = 0.3$  (purple). Parameters values are  $\beta = 1.2$ ,  $k = 0.2$ ,  $\alpha = 0.5$  and  $\gamma = 1/200$ . The initial condition is  $I(0) = 300$  per 100,000 individuals. (a) comparison of functions  $v$  and  $\hat{v}$ , with stable endemic equilibria (solid circles), and an unstable DFE (empty circle). (b) evolution of the number of active cases  $I$  per 100,000 individuals.