



**FIGURE 3** Comparison of constant control strategies:  $v = 0.8$  (blue),  $v = 0.5$  (orange),  $v = 0.3$  (purple),  $v = 0.2$  (green). Parameters values are  $\beta = 1.2$ ,  $k = 0.2$ ,  $\alpha = 0.5$  and  $\gamma = 1/200$ ,  $N = 50,000,000$ . The initial condition is  $I(0)=300$  per 100,000. (a) comparison of functions  $v$  and  $\hat{v}$ , with stable (solid circles) and unstable (empty circles) equilibria. (b) evolution of the number of active cases  $I$ . An insert show the details of the region  $0 < t < 50$ . (c) Evolution of the number of cumulative cases.