**Appendix**

We assumed that the city lockdown was advanced by 3 days, 5 days, 7 days, 9 days, and 11 days. When the city lockdown is implemented n days in advance, we assume that the contact rate on the x day is the real contact rate on the (x+n) days. The results are shown in Figure S1.

**Figure S1**

Simulation results of the number of infected patients when delaying the implementation of movement-restricting measures in Italy

