${\bf Table~S1~Hypercube~parameters~and~step-size}.$

Parameter	\min	max	step size
$\beta_0 \text{ (weeks}^{-1)}$	2	6	0.4
$\beta_1 \text{ (weeks}^{-1}\text{)}$	2	6	0.4
R_0	0.74	2.2	0.15^{*}
R^*	0.74	2.2	0.15^{*}
t_1 (weeks)	1	15	1
$\Delta t \text{ (weeks)}$	0	8	1
baseline noise, ϕ_N	1	10	1

^{*} Although the algorithm steps through β , since T_g is a constant, this is equivalent to stepping through R. Hence, we report both here.