

Table S2: Estimates for the aCC-model given multiple foci using different fixed values for the assumed number of neighbors per cell, k .

Parameter	$k = 4$	$k = 6$	$k = 8$	$k = 15$
β_c ($\times 10^{-6} \text{h}^{-1} \text{cell}^{-1}$)	1.72 [1.70, 1.73]	1.72 [1.70, 1.74]	1.72 [1.70, 1.73]	1.71 [1.70, 1.72]
θ	2.73[2.66, 2.78]	1.78 [1.70, 1.86]	1.32 [1.29, 1.37]	0.69 [0.67, 0.71]
z (cells)	2.44[0.22, 4.80]	2.19 (0, 6.61]	1.12 (0, 8.55]	10^{-5} (0, 15.05]
AICc	75.7	75.3	75.2	75.6

Data were simulated using $k = 6$. Numbers in brackets represent 95%-confidence intervals for estimates based on 10^4 individual fits. Corrected AIC-values indicate model performance. Parameters include the cell-to-cell transmission rate, β_c , the number of infected cells over which the transition term for the smooth approximation spans, z , and the parameter θ scaling for irregular foci growth (see also Text S1 for a detailed explanation of the parameters). The results show that the estimates for the cell-to-cell transmission rate β_c are robust for deviations in the assumed underlying neighbor-distribution k .