

**Table S4: Model comparisons when  $X_0$  is varied 1/2 and 2 times its set point estimate used in Table 1 in the main text. Median log-likelihood values, BIC and DIC values for all models considered are reported.**

Model	Log-likelihood	BIC	DIC
Low value: $X_0 = 5 \times 10^6$ cells/ml			
0	-2452	4938	4909
1	-2376	4793	4758
$OAS_1$	-2377	4801	4760
$OAS_2$	-2376	4806	4760
$ADE$	-2376	4800	4759
$SS_\beta$	-2362	4778	4731
$SS_q$	-2376	4806	4760
$SS_{qT}$	-2366	4787	4740
$SS_{\beta ADE}$	-2364	4803	4737
High value: $X_0 = 2 \times 10^7$ cells/ml			
0	-2393	4821	4792
1	-2336	4714	4678
$OAS_1$	-2337	4722	4680
$OAS_2$	-2337	4728	4679
$ADE$	-2336	4721	4679
$SS_\beta$	-2324	4703	4655
$SS_q$	-2334	4724	4677
$SS_{qT}$	-2326	4708	4661
$SS_{\beta ADE}$	-2326	4727	4660