Supplemental Figure S4: Predicted CD8$^+$ naive T-cell and TREC-content dynamics if HIV increases T-cell division and loss rates with acute changes. Simulation results of naive T-cell counts (in black) and average TREC contents (in red) for an individual infected by HIV at the age of 30, assuming that the naive T-cell division rate increased according to the constraint described in Supplemental Methods. The left panel shows the short-term dynamics while the right panel shows the long-term dynamics. Parameters: before infection $\sigma_0=1.09 \times 10^{10}$ cells/year, $h=1.5 \times 10^{11}$ cells, $d=0.109$/year, $c=0.25$ and $\nu=0.05$/year; after infection: $d=1.314$/year and $p=1.300$/year. Both $d$ and $p$ are 5-fold higher during the first 6 months of infection.