**Figure 3-source data 4.** Individual parameter estimates for the best fits of the model in **equation 2** in the main text(lowest AIC in **Figure 3-source data 2**) to the T cell reconstitution dynamics. Values obtained for $N\left(t\_{0}\right),S\left(t\_{0}\right),M\left(t\_{0}\right),$ and $E\left(t\_{0}\right)$ shown here are in log10 cell counts/ μL assuming a blood volume of of 3×105 μL (calculated assuming blood:weight ratio of 60mL/Kg and body weight of 5Kg). Initial values for the control group where obtained assuming steady state.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Control** | **WT-Transplant** | **ΔCCR5-Transplant** |
| **Par.****ID** | **Z09087** | **Z09106** | **Z09192** | **Z09204** | **A11201** | **Z09144** | **Z08214** | **A11200** | **Z09196** | **Z09125** | **A11219** | **T10187** | **R10159** | **T10173** | **Z11151** | **Z12420** | **R10155** | **Z12216** | **Z12037** | **Z12351** | **Z13133** | **Z12417** |
| $\hat{r}\_{p}^{j}$**(1/day)** | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.04 | 0.04 | 0.07 | 0.07 | 0.03 | 0.05 | 0.04 | 0.04 | 0.05 | 0.08 | 0.05 | 0.09 | 0.05 | 0.05 | 0.04 | 0.08 |
| $\hat{r}\_{s}^{j}$**(1/day)** | 0.10 | 0.10 | 0.10 | 0.07 | 0.11 | 0.12 | 0.14 | 0.07 | 0.20 | 0.07 | 0.12 | 0.12 | 0.14 | 0.19 | 0.07 | 0.09 | 0.09 | 0.08 | 0.22 | 0.06 | 0.14 | 0.14 |
| $\hat{r}\_{m}^{j}$ **(1/day)** | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| $\hat{r}\_{e}^{j}$**(1/day)** | 0.05 | 0.07 | 0.07 | 0.04 | 0.07 | 0.10 | 0.10 | 0.06 | 0.19 | 0.04 | 0.07 | 0.11 | 0.11 | 0.15 | 0.05 | 0.10 | 0.05 | 0.05 | 0.17 | 0.03 | 0.13 | 0.15 |
| $\hat{d}\_{n}^{j}$ **(1/day)** | 0.02 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.03 | 0.03 | 0.04 | 0.03 |
| $λ\_{e}^{j}$**(1/day)** | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| $λ\_{n}^{j}$**(1/day)** | 0.002 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.003 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 | 0.002 | 0.003 | 0.003 | 0.004 | 0.003 |
| $λ\_{s}^{j}$**(1/day)** | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |
| $λ\_{m}^{j}$ **(1/day)** | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| $$K\_{p}^{j}$$$\left(cells\right)$ | 108.9 | 108.8 | 109.0 | 108.8 | 108.7 | 108.6 | 108.7 | 108.7 | 108.5 | 108.7 | 108.5 | 108.7 | 108.8 | 108.5 | 108.8 | 108.5 | 108.9 | 108.8 | 108.0 | 108.4 | 108.2 | 108.7 |
| $K\_{s}^{j}$$\left(\frac{cells}{μL}\right)$ | 2134 | 1535 | 2350 | 1625 | 1274 | 923 | 1214 | 1173 | 739 | 1359 | 735 | 1117 | 1425 | 766 | 1636 | 779 | 1790 | 1654 | 275 | 650 | 407 | 1124 |
| $K\_{m}^{j}$$\left(\frac{cells}{μL}\right)$ | 678 | 718 | 862 | 277 | 439 | 56 | 398 | 315 | 233 | 307 | 112 | 225 | 327 | 113 | 289 | 154 | 404 | 367 | 52 | 126 | 112 | 281 |
| $K\_{e}^{j}$$\left(\frac{cells}{μL}\right)$ | 2033 | 1462 | 2239 | 1548 | 1214 | 880 | 1156 | 1117 | 704 | 1294 | 700 | 1065 | 1358 | 730 | 1559 | 742 | 1706 | 1576 | 262 | 620 | 388 | 1071 |
| $$N^{j}\left(t\_{0}\right) \left(\frac{cells}{μL}\right) $$ | 1452 | 621 | 1350 | 1253 | 832 | 65.6 | 58.6 | 94.6 | 54.5 | 83.4 | 58.2 | 76.3 | 80.1 | 80.0 | 89.0 | 53.4 | 81.8 | 116.9 | 33.9 | 54.8 | 56.8 | 61.9 |
| $$S^{j}\left(t\_{0}\right) \left(\frac{cells}{μL}\right) $$ | 109 | 82 | 135 | 164 | 69 | 2.7 | 1.9 | 8.3 | 1.6 | 2.7 | 3.5 | 6.8 | 7.4 | 8.5 | 6.3 | 4.5 | 3.6 | 10.2 | 2.2 | 6.3 | 4.3 | 3.5 |
| $M^{j}(t\_{0})$$\left(\frac{cells}{μL}\right)$ | 320 | 412 | 496 | 155 | 258 | 8.9 | 9.6 | 14.4 | 11.1 | 10.4 | 11.0 | 10.6 | 10.8 | 10.9 | 11.8 | 11.9 | 11.0 | 10.7 | 8.8 | 9.2 | 13.8 | 9.1 |
| $E^{j}(t\_{0})$$\left(\frac{cells}{μL}\right)$ | 1000 | 957 | 1191 | 621 | 561 | 16.3 | 12.7 | 48.4 | 9.1 | 35.3 | 11.0 | 26.1 | 31.9 | 27.1 | 44.3 | 8.7 | 35.8 | 95.6 | 1.9 | 9.0 | 8.8 | 14.5 |