**Figure 3-source data 3.** Population 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. RSE: relative standard error. Empty fields represent a standard deviation of random effects, $σ\_{ψ}$, fixed to zero. Values of $\overbar{ψ}$for $K\_{p},N\left(t\_{0}\right),S\left(t\_{0}\right),M\left(t\_{0}\right),$ 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). Red values represent an RSE greater than 100% implying that the number of data points may not be enough to estimate the respective parameter.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | $$\overbar{ψ}$$ | $$σ\_{ψ}$$ | **%RSE for:** |
| $$\overbar{ψ}$$ | $$σ\_{ψ}$$ |
| $$\hat{r}\_{p}$$ | 0.05 (0.04) | 0.39 (0.47) | 20 (21) | 23 (23) |
| $$\hat{r}\_{s}$$ | 0.11 (0.1) | 0.41 (0.39) | 10 (10) | 18 (19) |
| $$\hat{r}\_{m}$$ | 0.03 (0.03) |  | 51 (55) |  |
| $$\hat{r}\_{e}$$ | 0.08 (0.07) | 0.56 (0.49) | 15 (14) | 18 (20) |
| $$\hat{d}\_{n}$$ | 8.2 (5.38) |  | 36 (37) |  |
| $$λ\_{e}=λ\_{f}$$ | 0.003 (0.004) |  | 43 (39) |  |
| $$λ\_{s}$$ | 0.014 (0.015) | 0.2 (0.32) | 24 (25) | 130 (59) |
| $$λ\_{n}$$ | 0.003 (0.004) | 0.27 (0.27) | 27 (24) | 40 (42) |
| $$λ\_{m}$$ | 0.07 (0.08) |  | 27 (24) |  |
| $$K\_{p}$$ | 3.2 (3.2) | 0.23 (0.23) | 1 (1) | 16 (16) |
| $$K\_{s}$$ | 0.13 (0.18) |  | 21 (19) |  |
| $$K\_{m}$$ | 0.75 (0.77) | 0.28 (0.29) | 28 (29) | 22 (21) |
| $$K\_{e}$$ | 0.15 (0.2) |  | 19 (17) |  |
| $N(t\_{0})$ | 1.9 (1.8) | 0.13 (0.15) | 1 (1) | 27 (24) |
| $S(t\_{0})$ | 0.64 (0.64) | 0.27 (0.28) | 1 (1) | 23 (23) |
| $M(t\_{0})$ | 1.0 (1.0) | 0.14 (0.18) | 2 (2) | 73 (58) |
| $E(t\_{0})$ | 1.3 (1.4) | 0.4 (0.34) | 2 (1) | 21 (22) |
|  | **Parameter value** | **%RSE** |
| $corr(\hat{r}\_{s}$**,**$ \hat{r}\_{e})$ | 0.87 (0.82) | 9 (13) |
| $corr(N\_{0}$**,**$E\_{0})$ | 0.99 (0.99) | 14 (12) |
| $corr(K\_{p}$**,**$E\_{0})$ | 0.8 (0.73) | 15.5 (22) |
| $corr(N\_{0}$**,**$K\_{p})$ | 0.74 (0.6) | 26 (35) |
| $$σ\_{N}$$ | 0.2 (0.2) | 4 (4) |
| $$σ\_{S}$$ | 0.16 (0.16) | 4 (4) |
| $$σ\_{C}$$ | 0.19 (0.19) | 4 (4) |
| $$σ\_{E}$$ | 0.18 (0.19) | 11 (11) |
| $$σ\_{M}$$ | 0.21 (0.21) | 12 (12) |