

Table S2 **Population parameter estimates of the final model describing *P. falciparum* growth during blood-stage following liver-stage infection in volunteers based on the placebo volunteers in the spz HuCh studies (10,11) and the published studies in Coffeng *et al.* 2017 (13) (see Text S1 – Step 2).**

| PARAMETER | UNIT | VALUE | RSE | SHRINKAGE |
|-------------------------------------|----------|---------|-------|-----------|
| Typical parameters | | | | |
| $\ln(P_B(t = 0))^a$ | ln(p/mL) | -5.98 | 5.32% | - |
| GR_B | 1/hr | 0.0624 | 3.05% | - |
| Inter-individual variability | | | | |
| ω_{GR_B} | - | 0.118 | 10.3% | 6.2% |
| $\omega_{\ln(P_B(t=0))}$ | - | 0 (FIX) | - | - |
| Residual Variability | | | | |
| $error_{ADD1}$ | ln(p/mL) | 1.39 | 3.69% | - |
| Objective function | | 1917 | - | - |
| AIC | | 1925 | - | - |
| BIC | | 1934 | - | - |

Significant digits: 3 (Objective function rounded to closest integer value)

Omega values reported as standard deviation.

^a Parameter for fit purpose as the parasite is not in the blood at $t = 0$ (*i.e.* no biological meaning). The goal was to estimate GR_B .