

Supplementary table

Table S1. Comparison of different models.

Model number	Covariate	Model	BICc	-2LL
One-compartment without T_{lag}				
1	Base model	$k_a = \theta_{ka}$ $CL = \theta_{CL}$ $V = \theta_V$	441.89	418.37
One-compartment with T_{lag}				
2	Base model	$T_{lag} = \theta_{Tlag}$ $k_a = \theta_{ka}$ $CL = \theta_{CL}$ $V = \theta_V$	444.71	413.81
Two-compartment without T_{lag}				
3	Base model	$k_a = \theta_{ka}$ $CL = \theta_{CL}$ $V_1 = \theta_{V1}$ $Q_i (L/h) = \theta_Q$ $V_{2i} (L) = \theta_{V2}$	423.31	385.04
Two-compartment with T_{lag}				
4	Base model	$T_{lag} = \theta_{Tlag}$ $k_a = \theta_{ka}$ $CL = \theta_{CL}$ $V_1 = \theta_{V1}$ $Q_i (L/h) = \theta_Q$ $V_{2i} (L) = \theta_{V2}$	394.06	348.41
5	Body weight on CL	$T_{lag} = \theta_{Tlag}$ $k_a = \theta_{ka}$ $CL = \theta_{CL} \times (WT/25.1)^{\theta_{CL-WT}}$ $V_1 = \theta_{V1}$ $Q_i (L/h) = \theta_Q$ $V_{2i} (L) = \theta_{V2}$	381.63	332.98
6	Body height on CL	$T_{lag} = \theta_{Tlag}$ $k_a = \theta_{ka}$ $CL = \theta_{CL} \times (HT/123)^{\theta_{CL-HT}}$ $V_1 = \theta_{V1}$ $Q_i (L/h) = \theta_Q$ $V_{2i} (L) = \theta_{V2}$	373.61	324.96
7	Body height on CL and Concomitant cotrimoxazole (CTZ) on V_2	$T_{lag} = \theta_{Tlag}$ $k_a = \theta_{ka}$ $CL = \theta_{CL} \times (HT/123)^{\theta_{CL-HT}}$ $V_1 = \theta_{V1}$ $Q_i (L/h) = \theta_Q$ $V_{2i} (L) = \theta_{V2} \times e^{CTZ \times \theta_{V2-CTZ}}$	366.54	314.90

BICc: corrected Bayesian Information Criterion; -2LL: -2 log-likelihood.