

Table S. Pharmacokinetic Equations Used to Determine Tobramycin Pharmacokinetic Characteristics

PK Parameter	Equation
K_e	$K_e = \ln(C_1 - C_2)/\Delta \text{ time}$
$T_{1/2}$	$T_{1/2} = 0.693/K_e$
C_{\max}	$C_{\max} = C_1 \times e^{(t_1 - t_i) \times K_e}$
C_{\min}	$C_{\min} = C_2 \times e^{(t_2 - t_i) \times K_e}$
Vd	$Vd = \text{Dose}/C_{\max}$
CL	$CL = Vd \times K_e/0.06$
AUC	$AUC = [(C_{\max} - C_{\min})/(K_e + t_i/2)] \times 24/\tau$
Dose*	$\text{Dose} = [(C_{\max} - C_{\min})/(K_e + C_{\max} \times t_i/2)] \times 24/\tau$

AUC, area under the curve; C_1 , concentration 1; C_2 , concentration 2; Δ time, time between tobramycin serum concentrations; K_e , elimination constant; PK, pharmacokinetics; $T_{1/2}$, half-life; t_i , time of C_1 draw; t_2 , time of C_2 draw; τ , dosing interval; t_i , infusion time; Vd, volume of distribution

* Dose (milligrams per kilogram per day) calculated based on patient's specific PK to achieve an AUC of 100 mg-hr/L.