

PKPD model

Intravenous bolus – One compartment – Indirect response model- Parallel study design

Model	OFV	Population estimate (%SE)	Between subject variability (%SE)
	2819.75		
CL (L/hr)		1.06 (3.4)	27.2 % (15)
V (L)		9.54 (3.1)	30.5 % (12.5)
Residual variability			
Proportional error		6% (14.4)	
Additive error		1.0 ug/ml (6.9)	
PKPD model: Indirect response model (Inhibition of Kin)			
$\frac{dR}{dt} = k_{in} \cdot \left(1 - \frac{I_{max} \cdot C}{IC_{50} + C} \right) - k_{out} \cdot R$	1532.9		
Kin (ng/ml/hr)		9.3 (3.3)	29% (13.9)
kout (1/hr)		0.4 (5.0)	34% (20.3)
IC50 (ug/ml)		23.2 (4.2)	28% (16.4)
Residual variability			
proportional error		5.6% (8.0)	