This spread sheet will demonstrate the effects of changes in Vd on serum levels.
Vd and Cl are independent parameters. K is calculated from Vd and Cl.

	Normal		
Cl(L/hr)	4	4	4
Vd(L)	**40**	**20**	**80**
K(1/hours)	0.1	0.2	0.05
T1/2(hours)	6.93	3.465	13.86
Dose(mg)	1000	1000	1000
Interval(hours)	8	8	8
T'(hours)	2	2	2
Accumulation factor - 1-exp(-Ktau)	0.550671	0.798103	0.329679954
Fraction of Steady State Achieved During Infusion - 1-exp(-KT')	0.181269	0.32968	0.095162582

	Hour	0	8	16	24	32
Normal Vd	Dose	1	2	3	4	5
Cpmax(mg/L)		22.7	32.8	37.4	39.5	40.4
Cpmin(mg/L)		12.4	18.0	20.5	21.7	22.2
If Vd is 50% of normal						
Cpmax(mg/L)		41.2	49.5	51.2	51.5	51.6
Cpmin(mg/L)		12.4	14.9	15.4	15.5	15.5
If Vd is 2 x normal						
Cpmax(mg/L)		11.9	19.9	25.2	28.8	31.2
Cpmin(mg/L)		8.8	14.7	18.7	21.3	23.1