Results of nonlinear regression analysis by fitting Eq. 1 to the data in Fig. 1

Global fitting with parameters shared between all curves (Software:GraphPad Prism)

Parameter	Best fit values	Std. error	95% CI (profile likelihood)	Hougaard's skewness	Covariance Matrix		Dependency		No constraints	
k_2	49.96	0.3342	49.29 to 50.66	-0.006187	k_2 & β	-0.2189	k_2	0.9181	k_2	$k_2 > 0$ and shared
β	0.3358	0.01483	0.3044 to 0.3662	0.07779	k_2 & α	-0.669	β	0.9128	β	$\beta > 0$ and shared
α	2.229	0.1338	1.973 to 2.524	-0.07571	k_2 & K_x	0.3087	α	0.6752	α	$\alpha > 0$ and shared
K_x	47.98	2.215	43.66 to 52.87	-0.04379	k_2 & K_m	0.8879	K_x	0.9508	K_x	$K_x > 0$ and shared
K_m	86.62	1.748	83.1 to 90.28	-0.04554	β & α	0.352	K_m	0.9313	K_m	$K_m > 0$ and shared
					β & K_x	-0.9049				
					β & K_m	-0.3726				
					α & K_x	-0.5378				
					α & K_m	-0.6859				
					K_x & K_m	0.56				

Parameter	Best fit values	Std. error	95% CI (profile likelihood)	Hougaard's skewness	Covariance Matrix		Dependency		Two parameters constrained	
k_2	49.7	0.3043	49.08 to 50.33	0.002028	k_2 & K_x	-0.1171	k_2	0.85	k_2	$k_2 > 0$ and shared
β					k_2 & K_m	0.8014			β	constrained = 0.4
α					K_x & K_m	0.38			α	constrained = 2.4
K_x	40.16	0.8959	38.39 to 42	0.01315			K_x	0.6412	K_x	$K_x > 0$ and shared
K_m	84.15	1.522	81.1 to 87.32	-0.03751			K_m	0.8698	K_m	$K_m > 0$ and shared