

**Supplemental Table 1.** Kinetic parameter estimates of model C.

Parameter	Notes	Final Value	Clearance, L/hr	Half-life, hr
$k_{1fT}$	TCE→TCA formation	0.0271	-	-□
$k_{Te}$	TCA elimination	0.0563	0.00336	12.3
$V_{mT}$	Volume of distribution for TCA	0.0598	-	-
$k_{TfD}$	TCA→ DCA formation	$1.53 \times 10^{-6}$	-	-
$K_{1fD}$	TCE→DCA formation	$7.96 \times 10^{-8}$	-	-
$k_{De}$	DCA elimination	8.65	0.00050	0.080
$V_{MD}$	Volume of distribution for DCA	$5.79 \times 10^{-5}$	-	-
$k_{1fG}$	TCE→DCVG formation	$4.39 \times 10^{-6}$	-	-
$k_{GfC}$	DCVG→DCVC formation	0.492	0.0178	1.41
$V_{mG}$	Volume of distribution for DCVG	0.0361	-	-
$k_{Ce}$	DCVC elimination	0.603	0.187	1.15
$V_{mC}$	Volume of distribution for DCVC	0.309	-	-□
$k_{1fT}$	TCE→TCA formation	0.0271	-□	-□

Clearance is the product between elimination constant and volume of distribution of each metabolite, reflecting systemic clearance. Units of the reaction constants and volume of distributions are  $\text{hr}^{-1}$  and liter, respectively. Parameter estimates of parent compound can be found in Table 4.