TABLE I

Estimates (CI 95%) for Emin, Emax, ED50 (µg/kg), GSD, percentage of variance explained (R^2) and Hill coefficient (n) for different TCDD effects in line A, B and C rats.

	Rat line	Body weight change (% Initial body weight)		Relative thymus weight (% Body weight)		Liver EROD activity ((pmol/mg) × min)		Serum FFA levels (nM)		Serum bilirubin levels (µM)		Serum ASAT activity (U/l)		Incisor tooth defects	
Emin	A	104	(103-105)	0.13	(0.12 - 0.14)*	72	(0 - 390)	0.38	(0.30 - 0.45) *§	1.6	(1.1 - 2.1)	217	(102 - 330)	0.59	(0.33 – 0.85) §
	B	105	(104 - 107)	0.16	(0.12 - 0.20)	85	(0 - 250)	0.48	(0.41 - 0.55)	1.7	(1.2 - 2.1)	175	(140 - 210)	0.20	(0 – 0.45)
	C	104	(103 - 106)	0.15	(0.14 - 0.16)	88	(0 - 570)	0.54	(0.45 - 0.64)	1.9	(0.98 - 2.8)	203	(150 - 250)	0.46	(0.2 – 0.73)
Emax	A	95	(93 - 96) *§	0.050	(0.043 - 0.058)*	1170	(1000 - 1300)*	0.57	(0.47 - 0.66) *§	5.0	(0-14) *§	878	(0 - 2000)	2.6	(2.2 – 3.0)
	B	83	(80 - 86) *	0.026	(0 - 0.055)	1220	(1100 - 1400)	1.1	(0.84 - 1.3)	12	(11 - 14) *	668	(540 - 800) *	2.3	(1.9 – 2.7)
	C	78	(74 - 81)	0.038	(0.028 - 0.047)	1580	(1200 - 2000)	1.3	(1.0 - 1.5)	23	(18 - 28)	1620	(840 - 2400)	2.7	(2.0 – 3.3)
ED50 [a]	A	20	(9.1 - 46) *	1.8	(0.94 - 3.3)	0.15	(0.064 - 0.34)	32	(0 - 3000)	656	(0.0017 - 3000)	283	(0.37 - 3000)	35	(17 – 75) *
	B	21	(14 - 33) *	1.9	(0.44 - 8.5)	0.28	(0.17 - 0.47)	110	(39 - 310) *	95	(61 - 150) *	57	(25 - 130)	30	(0 - 3000)
	C	5.5	(3.7 - 8.4)	0.83	(0.54 - 1.3)	0.14	(0.053 - 0.35)	21	(11 - 40)	27	(18 - 40)	33	(9.2 - 120)	9.3	(4.4 – 20)
GSD	A	5.0	(1.7 - 15)	4.4	(1.9 - 10)	3.4	(1.1 - 11)	1.2	(0 - 50)	50	(0.012 - 50)	15	(0.063 - 50)	2.7	(0.96 – 7.3)
	B	2.8	(1.5 - 5.1)	34	(2.5 - 50)	2.9	(1.4 - 6.0)	3.1	(0.83 - 12)	3.6	(2.1 - 6.2)	5.1	(1.8 - 14)	1.0	(0 - 50)
	C	4.2	(2.5 - 7.2)	4.8	(2.6 - 8.7)	4.0	(0.92 - 17)	1.8	(0.90 - 3.6)	2.5	(1.5 - 4.2)	4.9	(1.8 - 13)	2.8	(1.0 – 7.5)
R^2	A	0.69		0.77		0.65		0.13		0.42		0.31		0.57	
	B	0.80		0.79		0.81		0.51		0.88		0.76		0.59	
	C	0.91		0.90		0.70		0.48		0.88		0.90		0.61	
Hill n [b]	A	1.1	(0.25 – 1.9)	1.1	(0.41 – 1.8)	1.3	(0 – 2.7)	5.0	(0 – 200)	0.31	(0 – 1.1)	0.75	(0 – 2.1)	1.8	(0 – 3.8)
	B	1.5	(0.55 – 2.5)	0.42	(0.068 – 0.78)	1.5	(0.34 – 2.7)	5.0	(0 – 40)	1.3	(0.71 – 1.9)	1.0	(0.33 – 1.6)	5.0	(0 – 74)
	C	1.1	(0.67 – 1.6)	1.0	(0.60 – 1.5)	1.1	(0 – 2.5)	2.8	(0 – 6.7)	1.8	(0.82 – 2.7)	0.94	(0.40 – 1.5)	1.6	(0 – 3.36)

[a] µg/kg TCDD

[b] Hill coefficients were derived from the Hill plot model for the same data.

* Significantly different from line C estimate.

§ Significantly different from line B estimate.

TABLE II

Efficacy ((Emax-Emin)/Emin), and line C relative efficacy and potency in line A, B and C.

	Rat line	Body weight change	Relative thymus weight	Liver EROD activity	Serum FFA levels	Serum bilirubin levels	Serum ASAT activity	Incisor tooth defects
Efficacy[a]	A	-0.093 *§	-0.60 *	15	0.5 *§	2.2 *	3.1	3.31
((Emax –	B	-0.21	-0.84	13	1.3	6.5	2.8	10.62
Emin)/Emin)	C	-0.25	-0.74	17	1.4	11	7.0	4.74
Efficacy relative	A	0.37	0.81	0.90	0.37	0.19	0.44	0.70
to line C	B	0.84	1.1	0.78	0.93	0.57	0.40	2.24
	C	1	1	1	1	1	1	1
Potency relative	A	0.27	0.47	0.93	0.66	0.041	0.12	0.26
to line C	B	0.26	0.43	0.48	0.19	0.28	0.58	0.31
	C	1	1	1	1	1	1	1

[a] Statistically significant ($P < 0.05$) differences are shown only for efficacy.

* Significantly different from line C estimate.

§ Significantly different from line B estimate.