Recovery of Radioactivity 72 Hours Following Single Intravenous Administration of 3 mg/kg [14C]Dicyclohexylcarbodiimide to Male Fischer 344 Rats – Study H

Dose Recovered in Excreta (%)[a]

End of Collection Period (h)	Urine[b] CPDE[c]	Cage Rinse[d] CPDE	Feces CPDE	Volatile Organics[e] CPDE	CO_2[e] CPDE	Total CPDE
8	34.5 ± 2.2	NC[f]	NC	0.04 ± 0.02	0.08 ± 0.01	31.3 ± 7.1
24	49.5 ± 4.2	NC	16.5 ± 1.5	0.08 ± 0.03	0.14 ± 0.02	66.2 ± 5.2
48	52.4 ± 4.5	NC	20.5 ± 0.9	0.11 ± 0.05	0.16 ± 0.02	73.1 ± 5.4
72	53.7 ± 4.7	0.4 ± 0.2	21.6 ± 1.4	0.12 ± 0.05	0.17 ± 0.02	75.9 ± 6.1

Distribution in Tissues (72 hours)[g]

Tissue	ng-eq per g tissue Mean	ng-eq per g tissue SD	TBR[h] Mean	TBR SD	% Dose in Total Tissue[i] Mean	% Dose in Total Tissue SD
Blood	24.6	3.1	unity	–	0.044	0.005
Brain	523.0	23.2	21.4	2.4	0.15	0.01
Heart	1400.0	60.0	57.3	7.5	0.14	0.01
Kidney	934.0	78.1	38.1	2.9	0.25	0.02
Liver	231.0	4.4	9.5	1.1	0.4	0.1
Lung	285.0	35.7	11.8	3.1	0.037	0.005
Carcass[j]	NA[k]	–	NA	–	11.5	0.9

[a]All values expressed as mean ± standard deviation (SD) (N = 6). The target dose was 3 mg dicyclohexylcarbodiimide/kg body weight. The actual dose delivered was 3.0 ± 0.4 mg/kg (12.1 ± 1.6 μCi/animal). At all intravenous (iv) dose levels, signs of toxicity were evident (tremor, convulsions, lethargy, piloerection, etc.), but no mortality was associated with any of the iv dose levels studied. Tissue (N = 3 rats) and urine (N = 2 rats) samples from some of these animals were used for macromolecular binding studies.
[b]Includes methanol rinse of the urine flask (except for 72 hours).
[c]CPDE = Cumulative percent dose excreted.
[d]Values are mean ± SD for three rats.
[e]Volatile organics and CO_2 in exhaled breath.
[f]NC = not collected. No collection was scheduled for this time interval.
[g]All values expressed as mean ± standard deviation (SD) (N = 3). Dosing same as above (a).
[h]TBR = Tissue/Blood ratio.
[i]Percent Dose was calculated using the following values for the mass of total tissue, expressed as percent of body weight: adipose, 7.0%; blood, 5.2%; muscle, 48%; and skin, 17%.
[j]Carcass values are based on the residual digested carcass after the removal of the listed tissues (i.e., percent dose measured in skin, adipose, muscle (Studies C and D), and blood was subtracted from the total percent dose measured in the carcass).
[k]NA = not applicable