

Disposition of Radioactivity 24 Hours Following Intravenous Administration of 1 mg/kg [^{14}C]L-BMAA to Male Harlan Sprague Dawley Rats (Group E)^a

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	Volatile Organics CPDE	CO ₂ CPDE	GI Content	Total CPDE
4	1.37 $\pm$ 0.42	1.07 $\pm$ 0.73	–	0.0143 $\pm$ 0.0036	45.9 $\pm$ 2.8	–	48.4
8	5.12 $\pm$ 1.37	2.52 $\pm$ 1.26	–	0.0331 $\pm$ 0.0066	68.4 $\pm$ 2.2	–	76.0
12	6.51 $\pm$ 1.35	3.09 $\pm$ 1.39	–	0.0381 $\pm$ 0.0083	77.0 $\pm$ 2.0	–	86.6
24 ^c	8.18 $\pm$ 1.26	3.53 $\pm$ 1.47	0.881 $\pm$ 0.329	0.144 $\pm$ 0.140	83.7 $\pm$ 2.1	0.849 $\pm$ 0.070	97.4

Disposition in Tissues

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR ^d Mean	TBR SD	% Recovery Mean	% Recovery SD
Blood ^d	2.14	0.20	unity	–	1.66	0.17
Adipose ^d	1.25	0.33	0.590	0.196	0.911	0.238
Muscle ^d	2.07	0.52	0.972	0.261	8.71	2.19
Skin ^d	3.48	0.91	1.65	0.51	6.91	1.79
Brain	1.84	0.78	0.852	0.338	0.128	0.054
Heart	2.48	2.41	1.16	1.07	0.0811	0.0778
Kidneys	5.20	0.90	2.42	0.35	0.381	0.057
Liver	8.77	1.30	4.09	0.52	4.02	0.81
Lung	2.71	0.61	1.27	0.28	0.136	0.032
Spleen	2.22	1.53	1.03	0.67	0.0612	0.0439
Adrenals	4.58	0.69	2.16	0.44	0.00798	0.00176
Thymus	2.12	1.18	1.02	0.63	0.0414	0.0238
Thyroid	4.04	0.92	1.90	0.46	0.0123	0.0011
Urinary Bladder	3.61	2.05	1.68	0.90	0.00808	0.00552
Pancreas	2.74	1.57	1.30	0.72	0.130	0.071
Testes	0.688	0.266	0.323	0.126	0.0862	0.0403
Cecum	2.39	0.41	1.11	0.11	0.0644	0.0186
Large Intestine	2.07	0.66	0.969	0.288	0.109	0.035
Small Intestine	4.42	0.45	2.07	0.19	0.883	0.195
Stomach	3.38	0.92	1.57	0.35	0.185	0.053
Tail	0.189	0.035	0.0890	0.0184	0.444	0.118

Disposition Summary (Dose Recovered [%])

Sample	% Recovered Mean	% Recovered SD
Urine + Cage Rinse	11.7	1.9
Urine	8.18	1.26
Cage Rinse	3.53	1.47
Feces	0.881	0.329
Volatile Organics	0.144	0.140
CO ₂	83.7	2.1
GI Content	0.849	0.070
Carcass	0.00	0.00
Tissues	25.0	4.0
Total Recovered	122	6

^aAll values expressed as mean $\pm$ standard deviation (SD) (N = 5). The target dose was 1 mg L-BMAA/kg. The actual dose delivered was 1.19 $\pm$ 0.03 mg/kg (34.1 $\pm$ 1.0 μCi).

^bCPDE = Cumulative percent dose excreted

^c24 Hours (h) urine collection includes urine present in the urinary bladder at study termination.

^dTissue weights for the dispersed tissues were calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994). TBR = tissue to blood ratio.