

Disposition of Radioactivity 24 Hours Following Last Dose of 10 Days of Oral Gavage Administration of 1 mg/kg [14 C]L-BMAA to Male Harlan Sprague Dawley Rats (Study G)^a

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine ^b	Cage Rinse ^b	Feces ^b	CO ₂ ^b	GI Content	Total ^b
24	6.15 $\pm$ 1.20	0.417 $\pm$ 0.207	1.44 $\pm$ 0.30	55.9 $\pm$ 3.3	—	63.9
48	6.59 $\pm$ 1.56	0.363 $\pm$ 0.188	1.88 $\pm$ 0.70	59.4 $\pm$ 3.6	—	68.3
72	6.85 $\pm$ 1.53	0.311 $\pm$ 0.167	2.71 $\pm$ 1.72	57.1 $\pm$ 4.9	—	67.0
96	7.29 $\pm$ 1.66	0.297 $\pm$ 0.154	2.79 $\pm$ 1.55	57.6 $\pm$ 3.8	—	68.0
120	6.91 $\pm$ 1.93	0.278 $\pm$ 0.151	2.77 $\pm$ 1.37	57.9 $\pm$ 3.8	—	67.9
144	7.00 $\pm$ 2.02	0.284 $\pm$ 0.150	2.74 $\pm$ 1.07	56.6 $\pm$ 4.1	—	66.7
168	7.23 $\pm$ 2.12	0.299 $\pm$ 0.171	3.69 $\pm$ 2.01	56.7 $\pm$ 4.3	—	67.9
192	7.16 $\pm$ 2.17	0.319 $\pm$ 0.161	3.77 $\pm$ 1.68	56.1 $\pm$ 4.8	—	67.3
216	7.03 $\pm$ 2.36	0.340 $\pm$ 0.173	3.68 $\pm$ 1.45	54.5 $\pm$ 5.3	—	65.5
240 ^c	7.07 $\pm$ 2.45	0.468 $\pm$ 0.180	3.63 $\pm$ 1.32	54.4 $\pm$ 5.2	0.148 $\pm$ 0.036	65.6

Disposition in Tissue

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR ^e Mean	TBR SD	% Recovery Mean	% Recovery SD
Blood ^d	4.32	0.70	unity	—	0.414	0.067
Adipose ^d	19.0	10.6	4.82	3.57	1.72	0.93
Muscle ^d	4.85	0.68	1.16	0.35	2.54	0.39
Skin ^d	8.90	0.75	2.10	0.39	2.19	0.24
Brain	2.67	0.32	0.630	0.111	0.0210	0.0027
Heart	5.09	0.57	1.19	0.17	0.0210	0.0028
Kidneys	10.3	1.0	2.43	0.45	0.0904	0.0113
Liver	22.5	2.5	5.31	0.91	1.19	0.13
Lung	5.72	0.74	1.33	0.07	0.0361	0.0056
Spleen	6.37	0.61	1.49	0.15	0.0209	0.0028
Adrenals	15.5	0.65	3.67	0.58	0.00249	0.00033
Thymus	7.95	1.02	1.85	0.13	0.0133	0.0027
Thyroid	7.84	1.17	1.84	0.34	0.00319	0.00023
Urinary Bladder	7.22	1.04	1.70	0.35	0.00295	0.00057
Pancreas	8.98	1.51	2.14	0.62	0.0551	0.0245
Testes	3.05	0.43	0.709	0.064	0.0514	0.0079
Cecum	6.96	0.93	1.67	0.49	0.0226	0.0056
Large Intestine	6.34	0.70	1.50	0.30	0.0448	0.0048
Small Intestine	7.30	1.17	1.70	0.21	0.145	0.022
Stomach	6.68	1.04	1.57	0.28	0.0443	0.0072

Disposition Summary (Dose Recovered [%])

Sample	% Recovered Mean	% Recovered SD
Urine + Cage Rinse	7.53	2.62
Urine	7.07	2.45
Cage Rinse	0.468	0.180
Feces	3.63	1.32
CO ₂	54.4	5.3
GI Content	0.148	0.036
Carcass	0.0164	0.0367
Tissues	8.65	1.34
Total Recovered	74.4	5.8

^aAll values expressed as mean $\pm$ standard deviation (SD) (N = 5). The target dose was 1 mg L-BMAA/kg. The average dose delivered after 10 consecutive days of dosing was 1.00 $\pm$ 0.02 mg/kg (47.9 $\pm$ 4.5 μ Ci).

Rats were dosed daily for 10 days with sacrifice 24 hours post last dose.

^bData derived by summing the total accumulated radioactivity and dividing by total dose.

^c240 hour (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).

^eTBR = tissue to blood ratio.