Disposition of Radioactivity 120 Hours Following a Single 10 mg/kg Oral Gavage Administration of [^{14}C]L-BMAA to Male Harlan Sprague Dawley Rats (Group I)[a]

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE[b]	Cage Rinse CPDE	Feces CPDE	CO_2 CPDE	GI Content	Total CPDE
4	0.66 ± 0.41	0.53 ± 0.30	–	–	–	1.19
8	2.23 ± 0.81	0.99 ± 0.24	–	–	–	3.22
12	3.21 ± 0.17	1.46 ± 0.16	–	–	–	4.67
24	4.30 ± 0.25	1.85 ± 0.12	1.46 ± 0.42	43.0 ± 3.36	–	50.6
48	4.90 ± 0.33	1.90 ± 0.12	1.85 ± 0.49	45.0 ± 3.45	–	53.6
72	5.12 ± 0.35	1.96 ± 0.10	2.01 ± 0.51	46.1 ± 3.56	–	55.2
96	5.22 ± 0.34	2.00 ± 0.11	2.07 ± 0.51	46.8 ± 3.57	–	56.1
120[c]	5.27 ± 0.35	2.05 ± 0.11	2.12 ± 0.51	47.4 ± 3.61	0.09 ± 0.02	56.8

Disposition in Tissues

Tissue	nmol-eq L-BMAA per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood[d]	5.40 ± 0.61	unity	0.496 ± 0.041
Adipose[d]	4.17 ± 0.82	0.77 ± 0.10	0.361 ± 0.062
Muscle[d]	6.05 ± 1.20	1.12 ± 0.22	3.038 ± 0.608
Skin[d]	12.90 ± 1.68	2.41 ± 0.40	3.050 ± 0.434
Brain	3.60 ± 1.03	0.65 ± 0.13	0.029 ± 0.009
Heart	5.84 ± 0.62	1.07 ± 0.02	0.023 ± 0.003
Kidneys	9.93 ± 0.73	1.83 ± 0.11	0.080 ± 0.004
Liver	14.80 ± 2.60	2.71 ± 0.25	0.717 ± 0.057
Lung	6.63 ± 0.52	1.22 ± 0.06	0.038 ± 0.004
Spleen	7.30 ± 0.71	1.34 ± 0.04	0.022 ± 0.003
Adrenals	11.89 ± 1.72	2.21 ± 0.32	0.003 ± 0.000
Thymus	8.40 ± 1.20	1.54 ± 0.06	0.021 ± 0.006
Thyroid	19.90 ± 6.84	3.65 ± 1.24	0.001 ± 0.000
Urinary Bladder	11.64 ± 3.48	2.15 ± 0.65	0.002 ± 0.000
Pancreas	6.04 ± 0.72	1.11 ± 0.06	0.016 ± 0.002
Testes	4.03 ± 1.08	0.73 ± 0.12	0.057 ± 0.025
Cecum	5.57 ± 0.75	1.03 ± 0.12	0.011 ± 0.002
Large Intestine	5.89 ± 0.78	1.08 ± 0.07	0.027 ± 0.005
Small Intestine	5.23 ± 0.54	0.96 ± 0.03	0.078 ± 0.015
Stomach	6.30 ± 0.46	1.17 ± 0.10	0.031 ± 0.004

Disposition Summary (Dose Recovered [%])

Sample	% Recovered Mean	% Recovered SD
Urine + Cage Rinse	7.33	0.42
Urine	5.27	0.35
Cage Rinse	2.05	0.11
Feces	2.12	0.51
Volatile Organics	NA	NA
CO_2	47.35	3.61
GI Content	0.09	0.02
Carcass	0.05	0.10
Tissues	8.15	1.02
Total Recovered	**64.95**	**4.41**

[a]All values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 10 mg L-BMAA/kg. The actual dose delivered was 10.0 ± 0.2 mg/kg (47.6 ± 0.8 µCi).

[b]Cumulative percent dose excreted.

[c]120 hour (h) urine collection includes urine present in the urinary bladder at study termination.

[d]Tissue 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).