Disposition of Radioactivity 24 Hours Following 5 Days of Oral Gavage Administration of 1 mg/kg [^{14}C]L-BMAA to Male Harlan Sprague Dawley Rats (Study F)[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	0.226 ± 0.161	0.137 ± 0.082	–	0.017 ± 0.082	27.1 ± 5.95	–	27.5
8	0.712 ± 0.133	0.227 ± 0.095	–	0.034 ± 0.095	41.6 ± 6.38	–	42.6
12	0.899 ± 0.112	0.305 ± 0.118	–	0.054 ± 0.118	47.9 ± 5.97	–	49.2
24	1.23 ± 0.066	0.340 ± 0.117	1.16 ± 0.296	0.073 ± 0.117	52.8 ± 4.98	–	55.6
48	2.40 ± 0.271	0.426 ± 0.134	1.78 ± 0.368	0.048 ± 0.134	54.7 ± 3.08	–	59.3
72	3.54 ± 0.175	0.547 ± 0.087	3.02 ± 0.821	0.038 ± 0.087	53.3 ± 3.75	–	60.4
96	4.74 ± 0.301	0.709 ± 0.128	4.46 ± 1.41	0.034 ± 0.128	53.2 ± 3.83	–	63.2
120	6.07 ± 0.327	1.072 ± 0.078	6.22 ± 1.34	0.032 ± 0.078	52.6 ± 3.48	0.455 ± 0.362	66.5

Disposition in Tissues

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR Mean	TBR SD	% Recovery Mean	% Recovery SD
Blood[d]	3.30	0.293	unity	–	0.568	0.036
Adipose[d]	2.86	0.671	0.869	0.207	0.466	0.105
Muscle[d]	2.73	0.466	0.825	0.110	2.56	0.379
Skin[d]	5.25	0.792	1.59	0.196	2.32	0.290
Brain	1.77	0.261	0.539	0.046	0.027	0.004
Heart	3.63	1.059	1.10	0.203	0.027	0.009
Kidneys	7.93	0.462	2.43	0.101	0.122	0.007
Liver	15.00	1.823	4.59	0.270	1.20	0.120
Lung	4.35	0.340	1.33	0.052	0.049	0.004
Spleen	4.34	0.527	1.34	0.203	0.025	0.003
Adrenals	9.96	2.095	3.03	0.659	0.003	0.001
Thymus	5.54	0.921	1.72	0.380	0.025	0.008
Thyroid	10.53	6.858	4.02	1.151	0.000	0.000
Urinary Bladder	5.61	1.268	1.71	0.342	0.003	0.000
Pancreas	4.99	1.343	1.55	0.443	0.031	0.010
Testes	2.10	0.316	0.640	0.050	0.059	0.013
Cecum	4.51	0.751	1.38	0.193	0.018	0.004
Large Intestine	4.53	0.798	1.39	0.217	0.041	0.006
Small Intestine	5.36	0.616	1.64	0.138	0.159	0.033
Stomach	4.39	0.607	1.34	0.144	0.054	0.005

Disposition Summary (Dose Recovered [%])

Sample	% Recovered Mean	% Recovered SD
Urine + Cage Rinse	7.14	0.328
Urine	6.07	0.405
Cage Rinse	1.07	0.078
Feces	6.22	1.35
Volatile Organics	0.032	0.005
CO_2	52.6	3.48
GI Content	0.455	0.362
Carcass	0.277	0.284
Tissues	8.04	0.675
Total Recovered	**74.8**	**3.52**

[a]All values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 1 mg L-BMAA/kg. The actual dose delivered was 0.994 ± 0.017 mg/kg (41.4 ± 0.75 µCi).

[b] CPDE = Cumulative percent dose excreted

[c]120 hours (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).
TBR = Tissue to blood ratio. Rats were dosed daily for 5 days with sacrifice 24 hours post last dose.