Additional file 3

Mean absorbed dose per unit injected activity in examined tissues of young and adult male and female rats

Mean absorbed dose per unit injected activity, $D/A_{inj}(t)$, expressed as mGy/MBq, calculated for examined organs and tissues of male and female Sprague–Dawley rats exposed to ^{131}I at 5 or 17 weeks of age. Absorbed doses are presented from time of injection to each termination time point (1 h to 6 days), as well as extrapolated to infinity.

Data are based on measured activity concentrations and include contributions from emitted electrons and photons. “nd” indicates that D/A_{inj} was not calculated at the corresponding time point, as the first termination point with tissue collection was at 6 h.

Table S3: Mean absorbed dose per unit injected activity, $D/A_{inj}(t)$, to examined organs and tissues in male and female rats exposed at an age of 5 weeks. The values are given from time of injection to the 6 termination points (from 1 hour to 6 days) as well as infinity.

	$D/A_{inj}(t)$ [mGy/MBq]						
Tissue	1 hour	6 hours	18 hours	24 hours	3 days	6 days	∞
Male, Youngs							
Blood	4.7	6.8	8.5	8.8	9.9	11	11
Bone marrow	0.23	1.5	2.4	2.6	3.3	3.8	4.1
Brain	0.081	0.40	0.75	0.84	1.3	1.7	2.2
Carcass	nd	1.0	2.7	3.1	4.5	5.7	6.8
Gonads	0.39	2.2	3.0	3.1	3.8	4.4	5.1
Heart	0.18	1.1	1.8	2.0	2.7	3.2	3.6
Kidney	0.30	1.9	3.0	3.3	4.3	5.1	5.7
Large Intestine	0.25	1.7	2.9	3.2	4.1	4.7	5.1
Liver	0.20	1.3	2.3	2.6	3.6	4.5	5.2
Lungs	0.23	1.5	2.8	3.0	3.9	4.6	5.0
Muscle	0.15	0.91	1.6	1.8	2.4	2.9	3.3
Salivary gland	0.25	1.6	2.7	2.9	3.7	4.3	4.8
Small intestine	0.29	2.1	4.2	4.7	6.0	6.5	6.9
Spleen	0.22	1.4	2.4	2.6	3.3	3.7	4.1
Stomach	1.3	9.6	18	19	22	23	24
Thyroid	59	1100	6000	8600	25000	40000	56000
Female, Youngs							
Blood	5.7	8.1	10	10	11	12	12
Bone marrow	0.29	1.9	3.7	4.2	5.8	6.5	7.2
Brain	0.093	0.45	0.87	1.0	1.9	2.5	3.3
Carcass	nd	1.1	2.7	3.1	6.1	8.7	12
Gonads	0.35	2.3	4.0	4.4	6.3	7.2	7.9
Heart	0.22	1.3	2.2	2.4	3.4	4.1	4.9
Kidney	0.34	2.1	3.4	3.7	5.1	6.2	7.2
Large Intestine	0.38	2.3	3.6	3.9	5.1	5.9	6.7
Liver	0.25	1.6	2.9	3.2	4.9	6.2	7.5
Lungs	0.28	1.8	3.2	3.5	4.7	5.6	6.5
Muscle	0.18	1.0	1.9	2.2	3.3	4.0	4.7
Salivary gland	0.29	1.9	3.2	3.5	4.6	5.5	6.4
Small intestine	0.36	2.5	4.7	5.2	6.7	7.7	8.6
Spleen	0.25	1.6	2.8	3.0	4.0	4.7	5.4
Stomach	1.8	13	21	22	24	25	26
Thyroid	88	1700	7800	11000	38000	65000	100000

nd indicates that D/A_{inj} was not calculated at this time point, as the first termination point with tissue collection was at 6 h.

Table S4: Mean absorbed dose per unit injected activity, $D/A_{inj}(t)$, to examined organs and tissues in male and female rats exposed at an age of 17 weeks. The absorbed doses are displayed for the 6 termination points ranging from 1 hour to 6 days, as well as infinity.

	$D/A_{inj}(t)$ [mGy/MBq]						
Tissue	1 hour	6 hours	18 hours	24 hours	3 days	6 days	∞
Male, Adults							
Blood	3.6	4.3	5.1	5.3	5.8	6.1	6.3
Bone marrow	0.28	0.81	1.3	1.4	1.8	2.2	2.6
Brain	0.075	0.20	0.38	0.43	0.68	0.90	1.2
Carcass	nd	0.31	0.82	1.0	1.5	2.1	3.1
Gonads	nd	0.26	0.67	0.85	1.0	1.3	1.5
Heart	0.14	0.41	0.78	0.86	1.2	1.4	1.6
Kidney	0.22	0.67	1.3	1.4	2.0	2.4	2.7
Large Intestine	0.24	0.74	1.4	1.5	2.0	2.3	2.6
Liver	0.16	0.49	0.95	1.1	1.7	2.2	2.7
Lungs	0.60	1.4	1.8	1.9	2.4	2.7	2.9
Muscle	0.10	0.29	0.58	0.65	0.93	1.1	1.3
Salivary gland	0.17	0.51	1.0	1.1	1.6	1.8	2.0
Small intestine	0.21	0.65	1.3	1.4	1.9	2.2	2.4
Spleen	0.18	0.54	1.0	1.1	1.5	1.7	1.9
Stomach	1.1	3.5	6.4	6.9	7.8	8.1	8.2
Thyroid	73	620	3500	4700	11000	16000	23000
Female, Adults							
Blood	4.3	6.7	9.1	9.5	11	12	12
Bone marrow	0.36	2.0	4.0	4.4	5.7	6.2	6.7
Brain	0.071	0.36	0.73	0.84	1.4	2.0	3.2
Carcass	nd	0.80	1.8	2.1	3.5	4.8	6.1
Gonads	nd	0.93	2.0	2.2	3.4	4.3	5.0
Heart	0.21	1.1	2.1	2.3	3.1	3.8	4.4
Kidney	0.35	1.9	3.5	3.9	5.4	6.5	7.6
Large Intestine	0.32	1.8	3.6	4.0	5.3	6.0	6.7
Liver	0.30	1.6	2.9	3.2	4.9	6.5	8.4
Lungs	0.35	1.9	3.6	4	5.3	6.2	6.9
Muscle	0.15	0.79	1.6	1.7	2.4	2.9	3.4
Salivary gland	0.33	1.7	3.1	3.3	4.4	5.3	6.1
Small intestine	0.50	2.7	5.0	5.4	6.7	7.4	8.0
Spleen	0.27	1.5	2.8	3.1	4.2	4.8	5.4
Stomach	1.3	7.6	16	18	21	22	23
Thyroid	27	1,00	7000	11000	39000	62000	83000

nd indicates that D/A_{inj} was not calculated at this time point, as the first termination point with tissue collection was at 6 h.