Table1 Raw data and descriptive statistics

Levels of cleaved PARP (absorbance at 450 nm in 100 mg protein)

Bone marrow						Lung						Testis					
Radiation dose (Gy)	Animal ID	Levels of cleaved PARP	Median dose	Mean cleaved PARP	S.E.	Radiation dose (Gy)	Animal ID	Levels of cleaved PARP	Median dose	Mean cleaved PARP	S.E.	Radiation dose (Gy)	Animal ID	Levels of cleaved PARP	Median dose	Mean cleaved PARP	S.E.
0	1	0.10215				0	1	0.10215				0	1	0.0745			
	2	0.09515					2	0.09015					2	0.07825			
	3	0.1044					3	0.1044					3	0.06545			
	4	0.11375					4	0.11375					4	0.10535			
	5	0.11275					5	0.09515					5	0.1033			
			0.1044	0.1056	0.003				0.10215	0.1011	0.004				0.0783	0.0854	0.008
0.05	6	0.10315				0.05	6	0.10315				0.05	6	0.07495			
	7	0.08455					7	0.08955					7	0.09935			
	8	0.10245					8	0.10245					8	0.082			
	9	0.1091					9	0.10315					9	0.10075			
	10	0.08905					10	0.08905					10	0.10685			
			0.10245	0.0977	0.005				0.10245	0.0975	0.0033				0.0994	0.0928	0.006
0.1	11	0.10175				0.1	11	0.10175				0.1	11	0.1113			
	12	0.1098					12	0.1098					12	0.08585			
	13	0.1067					13	0.1067					13	0.0969			
	14	0.13085					14	0.1284					14	0.1043			
	15	0.13325					15	0.13325					15	0.10215			
			0.1098	0.1165	0.006				0.1098	0.116	0.0062				0.1022	0.1001	0.004
1	16	0.1159				1	16	0.1166				1	16	0.10655			
	17	0.11065					17	0.11065					17	0.1101			
	18	0.1302					18	0.1308					18	0.09935			
	19	0.13275					19	0.13275					19	0.09715			

20	0.1308	0.1302	0.1241	0.005

20	0.1308	0.1308	0.1243	0.0045

20	0.09185	0.0994	0.101	0.003

Levels of activated NF-κB (absorbance at 450 nm in 100 mg protein)

Bone marrow Lung

Testis

Radiation Animal Levels of Median Mean S.E. Mea S.E. Radiation Animal Levels of Median Mean S.E.
Radiation Animal Levels of Median n
dose dose ID activated
ID activated dose activated
(Gy) NF- (Gy) NF-κB
κB (Gy) ID NF-κB

0	1	0.75375	0 Gy	1	0.44625	0	1	0.50375		
	2	0.3825		2	0.61125		2	0.53		
	3	0.3775		3	0.6875		3	0.50375		
	4	0.60875		4	0.60125		4	0.32625		
	5	0.2725		5	0.795		5	0.57		
					0.(				0.5038	0.4868	0.042
0.05	6	0.56625	0.05 Gy	6	0.44875	0.05	6	0.34625		
	7	0.50625		7	0.54375		7	0.2		
	8	0.5175		8	0.56125		8	0.325		
	9	0.67625		9	0.59		9	0.35375		
	10	0.735		10	0.76625		10	0.6325		
					0.5				0.3463	0.3715	0.071
0.1	11	1.58	0.1	11	0.68125	0.1	11	1.08375		
	12	1.56125		12	1.1		12	0.8725		
	13	1.75		13	1.0275		13	0.94125		
	14	1.9825		14	1.08		14	0.75625		
	15	2.05875		15	1.17375		15	1.1		
					1				0.9413	0.9508	0.065
1.0	16	2.46375	1 .0	16	1.0825	1.0	16	1.055		
	17	2.38875		17	1.245		17	0.98625		
	18	2.6125		18	1.265		18	1.01625		
	19	2.70625		19	1.18		19	0.89625		
	20	3.01375		20	1.3975		20	1.305		
					1				1.0163	1.0518	0.069

Levels of TNF-α (in 100 mg protein)

Bone marrow **Lung** **Testis**

Radiation dose (Gy)	Animal ID	Levels of Median TNF-α	Mean	S.E.	Radiation dose (Gy)	Animal ID	Levels of Median TNF-α	Mean	S.E.	Radiation dose (Gy)	Animal ID	Levels of Median TNF-α	Mean	S.E.
0	1	3.248031			0	1	0.92127			0	1	0.896486		
	2	3.561126				2	1.00065				2	1.088909		
	3	3.779808				3	0.9786				3	1.148879		
	4	3.421875				4	1.10129				4	0.888805		
	5	3.187356				5	1.07719				5	0.99663		
			3.42188	3.4396 0.1075				1.00065	1.0158 0.0329				0.9966	1.0039 0.052
0.05	6	3.561222			0.05	6	1.10407			0.05	6	0.986924		
	7	3.558649				7	1.17062				7	1.175316		
	8	3.584254				8	1.12553				8	0.983863		
	9	3.178789				9	0.82755				9	1.151918		
	10	3.681429				10	1.09568				10	1.063526		
			3.56122	3.5129 0.0865				1.10407	1.0647 0.0607				1.0635	1.0723 0.04
0.1	11	5.188774			0.1	11	0.97262			0.1	11	1.655264		
	12	5.309698				12	1.09118				12	1.547562		
	13	4.697782				13	1.2287				13	1.589497		
	14	3.660192				14	1.64134				14	1.548698		
	15	3.605889				15	1.59189				15	1.472571		
			4.69778	4.4925 0.3656				1.2287	1.3051 0.0837				1.5487	1.5627 0.03
1.0	16	4.639923			1.0	16	1.50867			1.0	16	1.717194		
	17	4.926402				17	1.5292				17	1.663149		
	18	5.219689				18	1.53782				18	1.5021		
	19	4.687104				19	1.51642				19	1.542832		
	20	4.373916				20	1.245				20	1.465178		
			4.6871	4.7694 0.1427				1.51642	1.4674 0.0558				1.5428	1.5781 0.048

Levels of IL-1b (in 100 µg protein)

Bone marrow

Radiation dose (Gy)	Animal ID	Levels of IL-1β	Median	Mean	S.E.
0	1	18.16848	0	1	5.696
	2	17.56352	2	5.465	

Lung

Radiation dose (Gy)	Animal ID	Levels of IL-1β	Median	Mean	S.E.
0	1	7.436252			
	2	9.359853	3	20.81019	
	3	6.678	3	9.7693	
	4	15.52928			
	1	5.111	4	7.555218	

Testis

Radiation dose (Gy)	Animal ID	Levels of IL-1β	Median	Mean	S.E.

	5	18.04335					5	5.046					5	8.320809			
			18.0433	18.023	0.843				5.465	5.5992	0.2947				8.3208	8.4883	0.469
0.05	6	17.4162				0.05	6	4.567				0.05	6	9.438469			
	7	18.60992					7	5.393					7	8.265636			
	8	18.41502					8	6.364					8	8.122265			
	9	23.12425					9	6.541					9	8.560396			
	10	15.18769					10	5.068					10	8.712832			
			18.415	18.551	1.295				5.393	5.5866	0.3783				8.5604	8.6199	0.23
0.1	11	20.50616				0.1	11	8.287				0.1	11	10.79046			
	12	22.24324					12	6.722					12	13.74511			
	13	21.57652					13	8.304					13	13.03131			
	14	21.15966					14	10.416					14	10.38243			
	15	23.67021					15	6.865					15	11.49638			
			21.5765	21.831	0.54				8.287	8.1188	0.6656				11.496	11.889	0.647
1.0	16	28.23766				1.0	16	9.785				1.0	16	11.67602			
	17	36.91976					17	7.754					17	11.93812			
	18	32.54425					18	10.066					18	14.03133			
	19	26.78788					19	8.227					19	10.74961			
	20	27.27389					20	9.164					20	13.33751			
			28.2377	30.353	1.931				9.164	8.9992	0.4433				11.938	12.347	0.591

Levels of IL-6 (in 100 mg protein)

Bone marrow

Radiation dose (Gy)	Animal ID	Levels of IL-6	Median	Mean	S.E.

Lung

Radiation dose (Gy)	Animal ID	Levels of IL-6	Median	Mean	S.E.
0	1	.37956			

Testis

Radiation dose (Gy)	Animal ID	Levels of IL-6	Median	Mean	S.E.

0	1	1.036801			
	2				
		1.066063	3		
		1.049396	4		
		1.038786			
	5	1.262299			
			1.0494	1.0907	0.043

2	0.43835	3			
	0.40507	4			
	0.29298				
5	0.39317				
		0.39317	0.3818	0.0243	

0	1	0.31604			
	2	0.16148			
	3	0.217018			
	4	0.31604			
	5	0.16148			
			0.21702	0.23151	0.0452

0.05	6	1.177584			
			7	0.961952	

0.05	6	0.41545			
			7	0.41613	

0.05	6	0.192116			
			7		0.148481

	8	1.276626					8	0.44879							8			0.21776	
	9	1.083655					9	0.31996							9			0.305549	
	10	1.147111					10	0.38315							10			0.21776	
			1.14711	1.1294	0.052				0.41545	0.3967	0.0218								0.21776
0.1	11	1.433885				0.1	11	0.72643				0.1	11	0.403751					
	12	1.326063					12	0.91235					12	0.410299					
	13	1.472685					13	0.8966					13	0.283828					
	14	1.410591					14	1.0568					14	0.394667					
	15	1.230746					15	0.67273					15	0.394667					
			1.41059	1.3748	0.043				0.8966	0.853	0.0691				0.39467	0.37314	0.0299		
1.0	16	1.421346				1.0	16	0.94383				1.0	16	0.520817					
	17	1.604037					17	0.67249					17	0.377456					
	18	1.403161					18	1.13158					18	0.581067					
	19	1.609673					19	1.38166					19	0.710339					
	20	1.407105					20	0.94238					20	0.358911					
			1.42135	1.4891	0.0482				0.94383	1.01439	0.1174				0.52082	0.50972	0.0655		

Level of global 5mC (%)

Bone marrow

Radiation dose (Gy)	Animal ID	Levels of global 5mC	Median	Mean	S.E.
0	1	0.589			
	2	0.4095			
	3	0.43			
	4	0.4785			
	5	0.3145			
			0.43	0.4443	0.045
0.1	11	1.433885			
	12	1.326063			
	13	1.472685			
	14	1.410591			
	15	1.230746			
			1.41059	1.3748	0.043
1.0	16	1.421346			
	17	1.604037			
	18	1.403161			
	19	1.609673			
	20	1.407105			
			1.42135	1.4891	0.0482

Lung

Radiation dose (Gy)	Animal ID	Levels of global 5mC	Median	Mean	S.E.
0	1	1.18515			
	2	0.85665			
	3	1.0521			
	4	1.0653			
	5	1.2288			
			1.0653	1.0776	0.0648
0.1	11	0.72643			
	12	0.91235			
	13	0.8966			
	14	1.0568			
	15	0.67273			
			0.8966	0.853	0.0691
1.0	16	0.94383			
	17	0.67249			
	18	1.13158			
	19	1.38166			
	20	0.94238			
			0.94383	1.01439	0.1174

Testis

Radiation dose (Gy)	Animal ID	Levels of global 5mC	Median	Mean	S.E.
0	1	0.5535			
	2	0.703			
	3	0.794			
	4	0.417			
	5	0.3175			
			0.5535	0.557	0.038
0.1	11	0.403751			
	12	0.410299			
	13	0.283828			
	14	0.394667			
	15	0.394667			
			0.39467	0.37314	0.0299
1.0	16	0.520817			
	17	0.377456			
	18	0.581067			
	19	0.710339			
	20	0.358911			
			0.52082	0.50972	0.0655

0.05	6	0.4615			0.05	6	1.06875				0.05	6	0.5515	
	7	0.419				7	0.9066					7	0.89	
	8	0.488				8	1.17525					8	0.6245	
	9	0.324				9	1.1385					9	0.3145	
	10	0.564				10	1.23375					10	0.3735	
	0.4615	0.4513	0.04			1.1385	1.1046	0.0563			0.5515	0.5508	0.032	

0.1	11	0.5785			
	12	0.553			
	13	0.5255			
	14	0.464			
	15	0.4205			
			0.5255	0.5083	0.029
1.0	16	0.651			
	17	0.5995			
	18	0.5945			
	19	0.4295			
	20	0.5745			
			0.5945	0.5298	0.057

0.1	11	1.24935			
	12	1.2474			
	13	1.21215			
	14	0.99255			
	15	0.8475			
			1.21215	1.1098	0.0811
1.0	16	1.29485			
	17	1.2011			
	18	1.31385			
	19	1.0014			
	20	1.2654			
			1.2654	1.2654	0.0568

0.1	11	0.5395			
	12	0.377			
	13	0.685			
	14	0.743			
	15	0.718			
			0.685	0.6125	0.059
1.0	16	0.8105			
	17	0.781			
	18	0.815			
	19	0.394			
	20	0.416			
			0.781	0.6433	0.06

Levels of IL-10 (in 100 mg protein)

Bone marrow

Radiation dose (Gy)	Animal ID	Levels of IL-10	Median	Mean	S.E.
0	1	4.713			
	2	4.986			
	3	6.091			
	4	4.96			
	5	6.281			
			4.986	5.4059	0.323

Lung

Radiation dose (Gy)	Animal ID	Levels of IL-10	Median	Mean	S.E.
0	1	6.57775			
	2	7.34176			
	3	6.81845			
	4	6.71338			
	5	6.5961			
			6.71338	6.8095	0.14
0.05	6	10.6737			

Testis

Radiation Le dose (Gy)	Animal ID	/els of IL-10	Median	Mean	S.E.
0	1	8.923536			
	2	10.24895			
	3	13.47465			
	4	10.60873			
	5	10.96967			
			10.609	10.845	0.743

0.05	6	9.328			
	7	6.138			
	8	6.768			
	9	9.091			
	10	5.998			
			6.768	7.4645	0.725

7	10.0685			
8	8.76816 9			
	10.6287			
10	8.6559			
		10.0685	9.759	0.4409

0.05	6	17.9129			
	7	13.35477 8			
	15.9712				
	9	13.24734			
	10	12.31075			
			13.355	14.559	1.036

0.1	11	3.538	0.1	11	6.43242	0.1	11	10.73268	12	4.092	12	5.88784	12	12.29926
	13	4.548	13	7.60433	13	13.40989								
	14	5.989	14	8.33731	14	10.62683								
	15	5.032	15	6.41224	15	12.40095								

Radiation dose (Gy)	Animal ID	Levels	Median	Mean	S.E.
			4.548	4.9154	0.406
1.0	16	4.453			
	17	4.504			
	18	5.03			
	19	7.421			
	20	5.578			
			5.03	5.3974	0.546

Radiation dose (Gy)	Animal ID	Levels	Median	Mean	S.E.
			6.43242	6.9348	0.4493
1.0	16	6.81875			
	17	6.46066			
	18	6.56455			
	19	5.9834			
	20	7.34			
			6.56455	6.6335	0.2225

Radiation dose (Gy)	Animal ID	Levels	Median	Mean	S.E.
			12.299	11.894	0.533
1.0	16	9.517884			
	17	9.2756			
	18	11.8389			
	19	9.842398			
	20	10.70568			
			9.8424	10.236	0.468

Levels of global 5hmC (%)

Bone marrow

Radiation dose (Gy)	Animal ID	Levels of global 5hmC	Median	Mean	S.E.
0	1	0.075			
	2	0.0925			
	3	0.0675			
	4	0.0825			
	5	0.0565			
			0.075	0.0748	0.002
0.05	6	0.0735			
	7	0.0695			
	8	0.0745			
	9	0.0785			
	10	0.044			
			0.0735	0.068	0.003
0.1	11	0.059			
	12	0.0805			
	13	0.0645			
	14	0.046			

Lung

Radiation dose (Gy)	Animal ID	Levels of global 5hmC	Median	Mean	S.E.
0	1	0.419			
	2	0.413			
	3	0.3645			
	4	0.3845			
	5	0.511			
			0.413	0.4184	0.0252
0.05	6	0.409			
	7	0.3875			
	8	0.401			
	9	0.39			
	10	0.4295			
			0.401	0.4034	0.0276
0.1	11	0.3505			
	12	0.3475			
	13	0.308			

Testis

Radiation dose (Gy)	Animal ID	Levels of global 5hmC	Median	Mean	S.E.
0	1	0.1555			
	2	0.1465			
	3	0.1255			
	4	0.133			
	5	0.0795			
			0.133	0.128	0.003
0.05	6	0.0955			
	7	0.157			
	8	0.092			
	9	0.1555			
	10	0.092			
			0.0955	0.1184	0.004
0.1	11	0.09			
	12	0.0965			
	13	0.0865			
	14	0.067			

	15	0.0435			
			0.059	0.0587	0.005

1.0	16	0.063
	17	0.054

	14	0.249			
	15	0.274			
			0.308	0.3058	0.02

1.0	16	0.3295
	17	0.3055

	15	0.0595			
			0.0865	0.0799	0.004

1.0	16	0.068
	17	0.096

18	0.0405			
19	0.0395			
20	0.027			
		0.0405	0.0448	0.005

18	0.334			
19	0.194			
20	0.213			
		0.3055	0.2752	0.0298

18	0.081			
19	0.0545			
20	0.065			
		0.068	0.0729	0.005