

## SUPPLEMENTARY TABLES

**Supplementary Table 1. Order of deaths in lifespan study.**

Age (days)	Animal	Cause of death	Age (days)	Animal	Cause of death
183	599, 2 (M), Brown	Timepoint 7 months	444	508, 5 (M), Brown	Timepoint 15 months
207	387, 1 (M), Black,	Timepoint 7 months	444	153, 1 (F), Brown	Timepoint 15 months
207	388, 1 (M), Brown	Timepoint 7 months	444	154, 2 (F), Brown	Timepoint 15 months
207	392, 5 (M), Brown	Timepoint 7 months	444	156, 2 (F), Albino	Timepoint 15 months
207	226, 2 (F), Brown	Timepoint 7 months	444	157, 3 (F), Albino	Timepoint 15 months
207	228, 4 (F), Brown	Timepoint 7 months	444	163, 3 (F), Brown	Timepoint 15 months
207	230, 1 (F), Albino	Timepoint 7 months	444	165, 5 (F), Brown	Timepoint 15 months
207	231, 2 (F), Albino	Timepoint 7 months	444	271, 2 (F), Brown	Timepoint 15 months
207	341, 1 (F), Brown	Timepoint 7 months	444	273, 4 (F), Brown	Timepoint 15 months
207	342, 2 (F), Brown	Timepoint 7 months	444	274, 5 (F), Brown	Timepoint 15 months
207	406, 6 (F), Brown	Timepoint 7 months	444	281, 4 (F), Albino	Timepoint 15 months
207	384, 7 (F), Brown	Timepoint 7 months	445	169, 3 (M), Brown	Timepoint 15 months
207	459, 10 (F), Brown	Timepoint 7 months	445	174, 3 (M), Albino	Timepoint 15 months
208	184, 1 (M), Brown	Timepoint 7 months	445	175, 1 (F), Black	Timepoint 15 months
208	185, 2 (M), Brown	Timepoint 7 months	445	176, 2 (F), Black	Timepoint 15 months
208	187, 4 (M), Brown	Timepoint 7 months	499	411, 3 (M), Brown	Removed: skinny, wound
208	419, 5 (F), Albino	Timepoint 7 months	560	420, 1 (F), Black	Natural death
308	507, 4 (M), Brown	Removed: testicular tumor	570	243, 3 (F), Brown	Removed: skinny
311	530, 5 (M), Brown	Natural death	570	220, 4 (M), Brown	Removed: abdominal tumor
312	532, 2 (M), Albino	Natural death	584	365, 2 (F), Albino	Removed: ovarian tumor
322	171, 5 (M), Brown	Removed: skinny, dehydrated	608	471, 8 (M), Brown	Removed: large spleen
352	192, 2 (F), Brown	Natural death	613	610, 3 (M), Brown	Natural death
401	288, 4 (F), Brown	Removed: enlarged spleen	620	539, 3 (M), Brown	Natural death
406	321, 3 (F), Brown	Natural death	626	376, 1 (F), Black	Natural death
442	246, 1 (M), Brown	Removed: enlarged spleen	626	383, 6 (F), Brown	Removed: tumor eye
431	564, 1 (M), Brown	Timepoint 15 months	626	462, 3 (F), Albino	Removed: skinny
435	524, 1 (M), Black	Timepoint 15 months	626	474, 3 (M), Albino	Removed: testicular tumor
435	525, 2 (M), Black	Timepoint 15 months	627	216, 2 (F), Albino	Removed: very skinny
444	527, 2 (M), Brown	Timepoint 15 months	627	252, 1 (F), Brown	Natural death
444	347, 1 (M), Brown	Timepoint 15 months	637	247, 2 (M), Brown	Removed: skinny
444	349, 3 (M), Brown	Timepoint 15 months	646	540, 4 (M), Brown	Removed: large spleen
444	505, 2 (M), Brown	Timepoint 15 months	647	538, 2 (M), Brown	Natural death

653	573, 2 (M), Brown	Timepoint 23 months	667	213, 1 (F), Brown	Timepoint 23 months
656	537, 1 (M), Brown	Timepoint 23 months	667	200, 2 (F), Brown	Removed: impaired activity
656	542, 6 (M), Brown	Timepoint 23 months	667	201, 3 (F), Brown	Removed: enlarged abdomen, large spleen
656	543, 7 (M), Brown	Timepoint 23 months	671	622, 4 (M), Brown	Timepoint 23 months
658	473, 2 (M), Albino	Removed	713	191, 1 (F), Brown	Removed: ovarian tumor
659	409, 1 (M), Brown	Removed: large spleen	751	181, 5 (F), Brown	Natural death
666	257, 2 (M), Brown	Timepoint 23 months	819	566, 3 (M), Brown	Natural death
666	259, 4 (M), Brown	Timepoint 23 months	860	591, 4 (M), Brown	Removed
666	261, 6 (M), Brown	Timepoint 23 months	888	319, 1 (F), Brown	Natural death
666	232, 3 (F), Albino	Timepoint 23 months	889	287, 3 (F), Brown	Natural death
666	239, 1 (F), Black	Timepoint 23 months	911	368, 1 (M), Brown	Removed: skinny, impaired activity
666	514, 2 (F), Black,	Timepoint 23 months	919	608, 1 (M), Brown	Natural death
666	522, 1 (F), Albino	Timepoint 23 months	923	385, 1 (F), Albino	Natural death
667	195, 1 (M), Brown	Timepoint 23 months	936	523, 2 (F), Albino	Natural death
667	248, 3 (M), Brown	Timepoint 23 months	966	285, 1 (F), Brown	Natural death
667	407, 1 (M), Black	Timepoint 23 months	1001	179, 3 (F), Brown	Natural death
667	200, 2 (F), Brown	Timepoint 23 months	1051	499, 1 (F), Brown	Natural death
667	201, 3 (F), Brown	Timepoint 23 months			

Individual data of each mice in the lifespan analysis; age (days), animal number, sex, coat color and indication of death. The ages of the mice were exactly  $6.6-7.8 \pm 0.2$ ,  $14.5-15.6 \pm 0.1$  and  $21.8-22.5 \pm 0.2$  months  $\pm$ SD. Lifespan analysis:  $n_{\text{males}}=48$ ,  $n_{\text{females}}=51$ , including lifespan study:  $n_{\text{males}}=20$ ,  $n_{\text{females}}=22$  and behavioral timepoints:  $n_{M7}=7$ ,  $n_{M15}=10$ ,  $n_{M22}=10$ ,  $n_{F7}=9$ ,  $n_{F15}=12$ ,  $n_{F22}=7$ .

**Supplementary Table 2. Additional physiological parameters.**

		<b>BL</b>	<b>Body Temp</b>	<b>BMD</b>	<b>BMC</b>	<b>Fat mass</b>	<b>Lean mass</b>
		(cm)	(°C)	(mg/cm <sup>2</sup> )	(g)	(g)	(g)
MALES	7	10.8 ± 0.11 <sup>2</sup>	36.7 ± 0.18 <sup>1,2</sup>	56.5 ± 1.34	0.62 ± 0.03	9.4 ± 1.2 <sup>2</sup>	25.5 ± 0.83 <sup>1,2</sup>
	15	10.7 ± 0.11	37.2 ± 0.11 <sup>1,2</sup>	57.1 ± 1.05	0.65 ± 0.02 <sup>2</sup>	9.9 ± 1.2 <sup>2</sup>	25.4 ± 0.98 <sup>1,2</sup>
	22	10.8 ± 0.11	36.5 ± 0.13 <sup>1,2</sup>	56.3 ± 1.13	0.65 ± 0.02	9.9 ± 1.7	28.7 ± 0.46 <sup>1,2</sup>
FEMALES	7	10.3 ± 0.09 <sup>2</sup>	38.4 ± 0.16 <sup>1,2</sup>	56.8 ± 0.84	0.56 ± 0.02	11.0 ± 0.8 <sup>2</sup>	20.0 ± 0.59 <sup>1,2</sup>
	15	10.5 ± 0.11	37.6 ± 0.10 <sup>1,2</sup>	49.3 ± 4.58	0.51 ± 0.04 <sup>2</sup>	14.1 ± 1.8 <sup>2</sup>	20.7 ± 0.85 <sup>1,2</sup>
	22	11.0 ± 0.12	37.7 ± 0.18 <sup>1,2</sup>	56.8 ± 1.35	0.63 ± 0.04	10.6 ± 1.6	23.5 ± 1.02 <sup>1,2</sup>

Body composition and core temperatures were analyzed by DEXA and rectal thermometer. <sup>1</sup>Statistical significance within sex, <sup>2</sup>statistical significance between sexes. Body length <sup>2</sup>p<sub>M7-F7</sub>=0.0040, body temperature <sup>1</sup>p<sub>M7-15</sub>=0.055, p<sub>M7-15</sub>=0.0017, p<sub>M15-22</sub>=0.00072, p<sub>F15-22</sub>=0.017; <sup>2</sup>p<sub>M7-F7</sub>>0.0001, p<sub>M15-F15</sub>=0.0044, p<sub>M22-F22</sub>=0.00013, bone mineral density (BMD), bone mineral content (BMC) <sup>2</sup>p<sub>M15-F15</sub>=0.0060, fat mass <sup>2</sup>p<sub>M7-F7</sub>=0.0023, p<sub>M15-F15</sub>=0.0012 (Welch's t-test), and lean mass <sup>2</sup>p<sub>M7-F7</sub>=0.0002, p<sub>M15-F15</sub>=0.0006, p<sub>M22-F22</sub>=0.0007, <sup>1</sup>p<sub>M7-22</sub>=0.0061, p<sub>M15-22</sub>=0.0095, p<sub>F7-22</sub>=0.011, p<sub>F15-22</sub>=0.023 (Mann-Whitney). n<sub>M7</sub>=7 n<sub>M15</sub>=10 n<sub>M22</sub>=10 n<sub>F7</sub>=9 n<sub>F15</sub>=12 n<sub>F22</sub>=7 Mean ± SEM.

**Supplementary Table 3. Order of behavioral tests at 7-, 15-, and 22-month-old timepoints.**

MALES			FEMALES		
7	15	22	7	15	22
FST	OFT	DEXA	OFT	DEXA	OFT
OFT	DEXA	OFT	FST	FST	PAT
PAT	PAT	FST	PAT	PAT	DEXA
DEXA	FST	PAT	DEXA	OFT	FST

Behavioral and physiological analyses: forced swim test (FST), activity box – open field test (OFT), shuttle-box passive avoidance test (PAT), dual energy X-ray absorptiometry (DEXA). n=7-12 per group