

Phenotypic Baseline Data on Transgenic Mouse Models

Parameter	Units	rasH2 Hemizygous Males	rasH2 Hemizygous Females	rasH2 - W (non-tg) Males	rasH2 - W (non-tg) Females	p53N5 Heterozygous Males	p53N5 Heterozygous Females	p53N5 WildType Males	p53N5 WildType Females	mdr1a Homozygous Males	mdr1a Homozygous Females	TG.AC Hemizygous Males	TG.AC Hemizygous Females	FVB Males	FVB Females	B6 Males	B6 Females	
		n=10	n=10	n=10	n=10	n=10	n=10	n=10	n=8	n=10	n=10	n=10	n=10	n=10	n=10	n=10	n=10	
Serum Chemistry																		
Calcium	mg/dL	11.3 ± 0.4	10.9 ± 0.1	10.9 ± 0.3	10.6 ± 0.1	11.3 ± 0.4	10.1 ± 0.7	10.8 ± 0.2	11.1 ± 0.3	10.9 ± 0.2	10.5 ± 0.3	10.5 ± 1.1	9.9 ± 1.1	11.0 ± 0.5	10.7 ± 0.3	10.4 ± 0.8	10.3 ± 0.5	
Phosphorous	mg/dL	10.6 ± 1.0	9.1 ± 0.9	10.7 ± 1.7	8.6 ± 0.8	10.5 ± 2.0	9.9 ± 1.4	8.9 ± 2.0	9.4 ± 1.4	10.4 ± 1.3	8.7 ± 0.9	10.4 ± 1.3	9.1 ± 1.3	10.5 ± 1.5	10.3 ± 1.9	10.5 ± 1.1	10.2 ± 1.2	
Glucose	mg/dL	124 ± 26	98 ± 7	118 ± 21	117 ± 16	144 ± 17	110 ± 16	154 ± 51	192 ± 18	179 ± 15	134 ± 22	158 ± 31	130 ± 25	192 ± 25	156 ± 20	167 ± 29	155 ± 15	
Creatinine	mg/dL	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.2 ± 0.1	0.2 ± 0	0.2 ± 0.1	0.1 ± 0.1	0.2 ± 0.1	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.2 ± 0.1	0.1 ± 0	0.1 ± 0	N/A	N/A	
BUN	mg/dL	26 ± 5	17 ± 3	23 ± 4	23 ± 5	26 ± 6	21 ± 4	23 ± 3	24 ± 2	22 ± 3	21 ± 3	25.6 ± 1.5	18.9 ± 4.5	22 ± 2	19 ± 4	25 ± 4	25 ± 4	
Total Bilirubin	mg/dL	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0.1	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0	0.1 ± 0	N/A	N/A	
ALK	U/L	167 ± 20	185 ± 13	175 ± 32	208 ± 21	145 ± 16	207 ± 25	129 ± 10	149 ± 10	174 ± 22	166 ± 12	84 ± 23	196 ± 42	175 ± 12	248 ± 56	165 ± 17	259 ± 58	
ALT	U/L	24 ± 6	32 ± 23	30 ± 5	25 ± 5	22 ± 5	16 ± 3	26 ± 6	27 ± 3	48 ± 10	44 ± 7	38 ± 6	44 ± 33	35 ± 12	47 ± 51	86 ± 160	90 ± 150	
Total Protein	g/dL	6.3 ± 0.2	6.0 ± 0.1	6.3 ± 0.2	6.0 ± 0.2	6.6 ± 0.3	6.2 ± 0.5	6.3 ± 0.2	6.3 ± 0.3	5.7 ± 0.7	5.6 ± 0.2	5.7 ± 0.7	5.5 ± 0.6	5.9 ± 0.1	5.6 ± 0.2	6.1 ± 0.4	6.2 ± 0.3	
Blood Counts																		
Erythron																		
Red Blood Cells	X10 ⁶ /uL	11.27 ± 0.42	11.04 ± 0.18	10.86 ± 0.52	10.65 ± 0.27	10.8 ± 0.2	10.44 ± 0.29	10.6 ± 0.34	10.5 ± 0.4	9.61 ± 0.55	9.70 ± 0.37	9.55 ± 0.45	10.06 ± 0.35	10.32 ± 0.34	9.89 ± 0.44	8.364 ± 0.610	9.894 ± 0.436	
Nucleated RBC	X10 ⁶ /uL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 ± 0	0 ± 0	
Hemoglobin	g/dL	18.1 ± 0.6	17.6 ± 0.4	17.6 ± 0.8	17.0 ± 0.3	16.6 ± 0.3	16.5 ± 0.5	16.5 ± 0.3	16.4 ± 0.6	15.5 ± 0.7	15.7 ± 0.4	14.1 ± 0.7	15.1 ± 0.5	15.7 ± 0.5	15.6 ± 0.7	13.1 ± 0.9	15.2 ± 0.6	
Hematocrit	%	53.7 ± 1.9	51.0 ± 1.1	50.4 ± 2.4	48.1 ± 0.8	51.0 ± 0.3	50.2 ± 1.3	50.5 ± 1.2	48.7 ± 1.6	48.2 ± 2.4	48.4 ± 1.7	47.1 ± 2.1	48.8 ± 1.7	50.2 ± 1.3	50.4 ± 2.2	41.8 ± 3.3	48.8 ± 1.8	
MCV	fL	48 ± 1	46 ± 0	47 ± 1	45 ± 1	48 ± 0	47 ± 1	47 ± 1	47 ± 1	50 ± 1	50 ± 0	49.3 ± 0.5	48.5 ± 0.5	49 ± 1	51 ± 1	50 ± 2	49 ± 1	
MCH	pg	16.1 ± 0.2	15.9 ± 0.2	16.2 ± 0.3	16.0 ± 0.3	15.4 ± 0.2	15.8 ± 0.3	15.5 ± 0.3	15.6 ± 0.3	16.0 ± 0.2	16.1 ± 0.2	14.7 ± 0.2	15.1 ± 0.3	15.2 ± 0.5	15.8 ± 0.2	15.7 ± 0.3	15.4 ± 0.3	
MCHC	%	33.7 ± 0.5	34.4 ± 0.3	34.9 ± 0.9	35.4 ± 0.4	32.5 ± 0.5	32.9 ± 0.7	32.7 ± 0.5	33.6 ± 0.5	32.1 ± 0.4	32.3 ± 0.4	29.9 ± 0.4	31.0 ± 0.4	31.3 ± 1	31.0 ± 0.4	31.5 ± 0.7	31.2 ± 0.4	
Platelets																		
Platelets	X10 ³ /uL	1365 ± 150	1265 ± 211	1497 ± 133	1256 ± 119	1568 ± 113	1228 ± 212	1493 ± 84	1393 ± 89	1336 ± 59	1267 ± 152	1919 ± 134	1544 ± 106	1442 ± 124	1616 ± 184	1775 ± 171	1336 ± 82	
Leukogram																		
White Blood Cells	X10 ³ /uL	5.00 ± 1.46	4.723 ± 0.894	5.30 ± 2.75	4.78 ± 1.97	3.46 ± 1.16	3.474 ± 1.858	4.11 ± 1.2	4.0 ± 1.3	6.44 ± 1.81	9.30 ± 2.51	7.30 ± 1.29	5.526 ± 1.759	5.28 ± 1.32	6.97 ± 2.37	6.614 ± 2.626	4.543 ± 1.837	
Neutrophils	X10 ³ /uL	0.674 ± 0.234	0.487 ± 0.076	0.498 ± 0.209	0.542 ± 0.320	0.422 ± 0.513	0.271 ± 0.326	0.479 ± 0.224	0.692 ± 0.313	0.870 ± 0.580	0.770 ± 0.365	2.386 ± 0.803	0.537 ± 0.337	0.495 ± 0.315	0.673 ± 0.446	1.276 ± 0.639	0.407 ± 0.255	
Bands	X10 ³ /uL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 ± 0	0 ± 0	
Lymphocytes	X10 ³ /uL	3.793 ± 1.424	4.033 ± 0.871	4.573 ± 2.650	4.030 ± 1.734	3.002 ± 0.718	3.170 ± 1.640	3.596 ± 1.043	3.240 ± 1.174	5.424 ± 1.324	8.215 ± 2.205	4.845 ± 0.997	4.911 ± 1.740	4.709 ± 1.209	6.115 ± 2.043	5.182 ± 2.081	4.082 ± 1.622	
Monocytes	X10 ³ /uL	0.156 ± 0.081	0.155 ± 0.069	0.160 ± 0.095	0.084 ± 0.049	0.032 ± 0.039	0.029 ± 0.053	0.034 ± 0.067	0.073 ± 0.037	0.097 ± 0.061	0.205 ± 0.086	0.054 ± 0.074	0.030 ± 0.081	0.067 ± 0.076	0.135 ± 0.125	0.156 ± 0.178	0.054 ± 0.082	
Eosinophils	X10 ³ /uL	0.078 ± 0.073	0.048 ± 0.040	0.064 ± 0.078	0.056 ± 0.047	0.003 ± 0.009	0.004 ± 0.012	0.005 ± 0.011	0	0.049 ± 0.041	0.106 ± 0.089	0.006 ± 0.019	0.048 ± 0.106	0.013 ± 0.027	0.047 ± 0.046	0 ± 0	0 ± 0	
Basophils	X10 ³ /uL	0	0	0	0	0	0	0	0	0	0	0.006 ± 0.019	0	0	0	0 ± 0	0 ± 0	
Others	X10 ³ /uL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 ± 0	0 ± 0	
Organ Weights																		
Body Weight (post-n)		21.6 ± 2.5	17.2 ± 1.1	22.3 ± 2.0	17.8 ± 1.0	19.63 ± 1.7	14.7 ± 0.79	23.56 ± 1.42	17.588 ± 0.86	21.6 ± 2.5	17.2 ± 1.1	21.1 ± 1.3	17.5 ± 1.2	22.3 ± 1.6	15.3 ± 12.1	12.8 ± 0.87	13.8 ± 0.88	
Gastrointestinal																		
Stomach	g	0.194 ± 0.026	0.154 ± 0.026	0.177 ± 0.039	0.186 ± 0.036	0.130 ± 0.01	0.189 ± 0.03	0.160 ± 0.02	0.170 ± 0.02	0.232 ± 0.06	0.230 ± 0.044	0.245 ± 0.024	0.207 ± 0.026	0.278 ± 0.028	0.243 ± 0.026	0.209 ± 0.049	0.169 ± 0.028	
Ileum	g	0.626 ± 0.108	0.589 ± 0.095	0.655 ± 0.156	0.649 ± 0.114	0.550 ± 0.08	0.433 ± 0.32	0.598 ± 0.08	0.630 ± 0.04	1.155 ± 0.164	1.246 ± 0.210	0.925 ± 0.089	0.967 ± 0.094	0.972 ± 0.136	0.811 ± 0.086	0.608 ± 0.080	0.587 ± 0.056	
Respiratory																		
Lungs	g	0.229 ± 0.035	0.172 ± 0.028	0.214 ± 0.068	0.190 ± 0.045	0.147 ± 0.02	0.178 ± 0.01	0.195 ± 0.03	0.179 ± 0.04	0.224 ± 0.038	0.220 ± 0.019	0.228 ± 0.040	0.214 ± 0.036	0.246 ± 0.041	0.181 ± 0.019	0.169 ± 0.025	0.180 ± 0.021	
Hematological																		
Heart	g	0.179 ± 0.036	0.135 ± 0.010	0.180 ± 0.030	0.139 ± 0.017	0.150 ± 0.0	0.150 ± 0.02	0.185 ± 0.04	0.146 ± 0.02	0.174 ± 0.031	0.151 ± 0.012	0.153 ± 0.019	0.131 ± 0.023	0.157 ± 0.028	0.116 ± 0.017	0.108 ± 0.015	0.111 ± 0.014	
Liver	g	1.181 ± 0.121	0.893 ± 0.070	1.089 ± 0.198	0.937 ± 0.077	0.971 ± 0.02	0.850 ± 0.14	1.188 ± 0.12	0.868 ± 0.11	1.163 ± 0.137	1.058 ± 0.088	1.390 ± 0.080	1.050 ± 0.072	1.286 ± 0.085	0.968 ± 0.147	0.924 ± 0.067	0.834 ± 0.088	
Spleen	g	0.077 ± 0.024	0.071 ± 0.010	0.076 ± 0.011	0.078 ± 0.011	0.085 ± 0.01	0.058 ± 0.02	0.057 ± 0.0	0.054 ± 0.01	0.257 ± 0.042	0.271 ± 0.011	0.129 ± 0.021	0.091 ± 0.015	0.278 ± 0.030	0.206 ± 0.037	0.155 ± 0.024	0.165 ± 0.022	
Pancreas	g	0.113 ± 0.026	0.102 ± 0.021	0.119 ± 0.041	0.118 ± 0.042	0.048 ± 0.01	0.122 ± 0.04	0.103 ± 0.01	0.096 ± 0.01	a	a	0.164 ± 0.019	a	a	a	a	a	
Renal																		
Kidney (L)	g	0.206 ± 0.020	0.146 ± 0.011	0.204 ± 0.045	0.150 ± 0.012	0.143 ± 0.03	0.148 ± 0.01	0.177 ± 0.02	0.138 ± 0.01	0.189 ± 0.022	0.147 ± 0.013	0.223 ± 0.021	0.150 ± 0.012	0.176 ± 0.014	0.122 ± 0.011	0.106 ± 0.011	0.111 ± 0.011	
Kidney (R)	g	0.205 ± 0.018	0.154 ± 0.009	0.215 ± 0.042	0.159 ± 0.013	0.137 ± 0.03	0.158 ± 0.01	0.179 ± 0.01	0.144 ± 0.01	0.198 ± 0.020	0.146 ± 0.014	0.226 ± 0.015	0.145 ± 0.006	0.205 ± 0.059	0.127 ± 0.015	0.118 ± 0.011	0.114 ± 0.009	
Reproductive																		
Ovary (L)	g		0.010 ± 0.002		0.011 ± 0.003		0.017 ± 0.01		0.009 ± 0.0		0.019 ± 0.007		0.012 ± 0.006		0.009 ± 0.002		0.013 ± 0.003	
Ovary (R)	g		0.009 ± 0.004		0.024 ± 0.044		0.014 ± 0.01		0.008 ± 0.0		0.021 ± 0.006		0.011 ± 0.003		0.011 ± 0.004		0.015 ± 0.003	
Testes (L)	g	0.119 ± 0.010		0.120 ± 0.015		0.099 ± 0.02		0.083 ± 0.01		0.101 ± 0.014		0.095 ± 0.005		0.100 ± 0.008		0.057 ± 0.006		
Testes (R)	g	0.121 ± 0.009		0.124 ± 0.018		0.094 ± 0.01		0.077 ± 0.01		0.103 ± 0.012		0.094 ± 0.004		0.100 ± 0.008		0.056 ± 0.006		
Urinalysis																		
Glucose	g/dL	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	
Blood		Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg	
pH		6.6 ± 0.2	6.3 ± 0.4	6.9 ± 0.5	6.6 ± 0.2	7.5 ± 0.4	6.6 ± 0.3	6.6 ± 0.3	6.6 ± 0.9	6.1 ± 0.2	6.1 ± 0.2	6.1 ± 0.5	6.3 ± 0.3	6.1 ± 0.2	6.2 ± 0.4	6.1 ± 0.2	6.1 ± 0.2	
Specific Gravity		1.018 ± 0.005	1.013 ± 0.007	1.003 ± 0.005	1.018 ± 0.005	1.008 ± 0.00	1.019 ± 0.006	1.013 ± 0.00	1.015 ± 0.01	1.027 ± 0.002	1.024 ± 0.002	1.028 ± 0.003	1.022 ± 0.005	1.03 ± 0.00	1.02 ± 0.01	1.019 ± 0.003	1.026 ± 0.002	

Notes

(a) where weights are not reported for pancreas, the pancreas and spleen were collected as a single tissue mass.