

Historical Control Data on Non-Neoplastic Findings in Wistar Rats from 2-year Bioassays (Planned Sacrifice Schedule: after 103 weeks)

Appendix: Statistics

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Brain

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3697					
Epidermoid cyst	0	0.00	0.00	0.00	0.00	0.00
Cyst(s)	2	0.05	0.06	0.31	0.00	2.00
Ventricular dilation	226	6.11	5.88	8.82	0.00	31.43
Hydrocephalus	9	0.24	0.25	1.09	0.00	6.67
Compression	504	13.63	14.04	13.04	0.00	40.00
Congestion	7	0.19	0.21	1.24	0.00	8.57
Hemorrhage	13	0.35	0.36	1.15	0.00	6.00
Angiectasis	1	0.03	0.02	0.14	0.00	1.00
Pigment deposition	5	0.14	0.11	0.48	0.00	3.00
Basophilic bodies	5	0.14	0.13	0.58	0.00	2.86
Mineralization	39	1.05	1.03	5.10	0.00	34.29
Osseous metaplasia	1	0.03	0.02	0.14	0.00	1.00
Vacuolation	1	0.03	0.02	0.14	0.00	1.00
Nerve fiber degeneration	28	0.76	1.12	7.92	0.00	56.00
Perivascular cuffing	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	4	0.11	0.08	0.44	0.00	3.00
Gliosis	25	0.68	0.51	2.61	0.00	17.17
Necrosis	13	0.35	0.37	0.69	0.00	2.00
Abscess	1	0.03	0.02	0.14	0.00	1.00
Inflammation	8	0.22	0.24	0.78	0.00	4.00
Granular cell foci	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3686					
Epidermoid cyst	1	0.03	0.04	0.28	0.00	2.00
Cyst(s)	1	0.03	0.02	0.14	0.00	1.01
Ventricular dilation	390	10.58	10.19	13.80	0.00	62.63
Hydrocephalus	7	0.19	0.18	0.91	0.00	5.08
Compression	921	24.99	25.65	21.75	0.00	67.68
Congestion	2	0.05	0.06	0.40	0.00	2.86
Hemorrhage	24	0.65	0.76	1.50	0.00	6.67
Angiectasis	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	6	0.16	0.12	0.86	0.00	6.06
Basophilic bodies	1	0.03	0.02	0.14	0.00	1.00
Mineralization	6	0.16	0.15	0.85	0.00	5.71
Osseous metaplasia	0	0.00	0.00	0.00	0.00	0.00
Vacuolation	0	0.00	0.00	0.00	0.00	0.00
Nerve fiber degeneration	16	0.43	0.63	4.33	0.00	30.61
Perivascular cuffing	1	0.03	0.03	0.20	0.00	1.43
Mononuclear cell foci	0	0.00	0.00	0.00	0.00	0.00
Gliosis	43	1.17	0.88	5.39	0.00	37.76
Necrosis	20	0.54	0.46	1.65	0.00	11.00
Abscess	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00
Granular cell foci	0	0.00	0.00	0.00	0.00	0.00

Cerebellum

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1608					
Distended ventricle	2	0.12	0.10	0.44	0.00	2.00
Pressure atrophy	22	1.37	1.24	2.77	0.00	9.00
Congestion	2	0.12	0.19	0.60	0.00	2.00
Hemorrhage	1	0.06	0.05	0.22	0.00	1.00
Microabscess (es)	1	0.06	0.05	0.22	0.00	1.00
Inflammation	1	0.06	0.05	0.22	0.00	1.00
Malacia	4	0.25	0.19	0.87	0.00	4.00
Meningeal hyperplasia	1	0.06	0.10	0.44	0.00	2.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1600					
Distended ventricle	5	0.31	0.24	1.09	0.00	5.00
Pressure atrophy	49	3.06	2.72	5.35	0.00	18.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Microabscess (es)	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00
Malacia	0	0.00	0.00	0.00	0.00	0.00
Meningeal hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Cerebrum

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1608					
Ventricular dilation	73	4.54	4.02	8.02	0.00	27.00
Hydrocephalus	12	0.75	0.76	2.41	0.00	8.00
Bacterial colonies	1	0.06	0.07	0.30	0.00	1.39
Pressure atrophy	128	7.96	7.45	11.88	0.00	41.67
Congestion	2	0.12	0.16	0.52	0.00	2.00
Hemorrhage	2	0.12	0.10	0.44	0.00	2.00
Hemosiderin	0	0.00	0.00	0.00	0.00	0.00
Mineralization	1	0.06	0.04	0.20	0.00	0.93
Mononuclear cell foci	1	0.06	0.07	0.30	0.00	1.39
Microabscess(es)	1	0.06	0.05	0.22	0.00	1.00
Inflammation	1	0.06	0.05	0.22	0.00	1.00
Malacia	9	0.56	0.43	1.96	0.00	9.00
Gliosis	2	0.12	0.10	0.44	0.00	2.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1600					
Ventricular dilation	83	5.19	4.60	11.66	0.00	48.00
Hydrocephalus	21	1.31	1.19	3.46	0.00	14.00
Bacterial colonies	0	0.00	0.00	0.00	0.00	0.00
Pressure atrophy	182	11.38	10.45	15.98	0.00	48.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	1	0.06	0.07	0.34	0.00	1.56
Hemosiderin	1	0.06	0.07	0.34	0.00	1.56
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	0	0.00	0.00	0.00	0.00	0.00
Microabscess(es)	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00
Malacia	4	0.25	0.24	0.63	0.00	2.00
Gliosis	0	0.00	0.00	0.00	0.00	0.00

Brain Stem

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	769					
Pressure atrophy	41	5.33	4.37	8.69	0.00	20.37
Area of compression	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Vacuolation	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	761					
Pressure atrophy	58	7.62	6.21	12.35	0.00	29.63
Area of compression	6	0.79	1.04	3.13	0.00	9.38
Hemorrhage	1	0.13	0.17	0.52	0.00	1.56
Vacuolation	1	0.13	0.22	0.67	0.00	2.00

Pons

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1017					
Pressure atrophy	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1019					
Pressure atrophy	1	0.10	0.08	0.27	0.00	0.93
Hemorrhage	1	0.10	0.07	0.26	0.00	0.89

Medulla Oblongata

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1528					
Pressure atrophy	1	0.07	0.10	0.45	0.00	2.00
Congestion	1	0.07	0.10	0.45	0.00	2.00
Hemorrhage	2	0.13	0.20	0.89	0.00	4.00
Nerve fiber degeneration	134	8.77	9.57	20.31	0.00	60.00
Malacia	3	0.20	0.15	0.67	0.00	3.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1521					
Pressure atrophy	3	0.20	0.15	0.67	0.00	3.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Nerve fiber degeneration	166	10.91	12.51	26.49	0.00	86.00
Malacia	0	0.00	0.00	0.00	0.00	0.00

Spinal Cord

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3676					
Radiculoneuropathy	672	18.28	20.00	28.81	0.00	98.57
Gliosis	5	0.14	0.13	0.39	0.00	1.43
Hyaline neuropathy	29	0.79	0.83	5.74	0.00	40.58
Cyst(s)	1	0.03	0.02	0.15	0.00	1.09
Cholesterol clefts	8	0.22	0.23	1.27	0.00	8.57
Dilated central canal	0	0.00	0.00	0.00	0.00	0.00
Intervertebral disc protrusion	2	0.05	0.06	0.40	0.00	2.86
Hemorrhage	6	0.16	0.19	0.61	0.00	2.86
Compression	3	0.08	0.08	0.33	0.00	1.67
Vacuolation	40	1.09	1.14	8.08	0.00	57.14
Pigment deposition	0	0.00	0.00	0.00	0.00	0.00
Mineralization	2	0.05	0.05	0.25	0.00	1.45
Dural ossification	5	0.14	0.10	0.71	0.00	5.00
Necrosis	1	0.03	0.03	0.20	0.00	1.43
Inflammation	2	0.05	0.06	0.31	0.00	2.00
Fibroplasia, meningeal	1	0.03	0.02	0.14	0.00	1.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3635					
Radiculoneuropathy	615	16.92	18.01	28.63	0.00	100.00
Gliosis	0	0.00	0.00	0.00	0.00	0.00
Hyaline neuropathy	15	0.41	0.53	3.72	0.00	26.32
Cyst(s)	0	0.00	0.00	0.00	0.00	0.00
Cholesterol clefts	3	0.08	0.10	0.53	0.00	3.51
Dilated central canal	2	0.06	0.06	0.28	0.00	1.43
Intervertebral disc protrusion	2	0.06	0.05	0.23	0.00	1.43
Hemorrhage	3	0.08	0.08	0.40	0.00	2.04
Compression	2	0.06	0.05	0.23	0.00	1.43
Vacuolation	39	1.07	1.11	7.88	0.00	55.71
Pigment deposition	1	0.03	0.04	0.28	0.00	2.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Dural ossification	0	0.00	0.00	0.00	0.00	0.00
Necrosis	4	0.11	0.11	0.44	0.00	2.02
Inflammation	0	0.00	0.00	0.00	0.00	0.00
Fibroplasia, meningeal	0	0.00	0.00	0.00	0.00	0.00

Sciatic Nerve

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3538					
Mineralization	3	0.08	0.08	0.32	0.00	1.43
Single fiber degeneration	1509	42.65	44.77	35.40	0.00	98.00
Mononuclear cell foci	8	0.23	0.24	1.01	0.00	5.80
Inflammatory cell foci	1	0.03	0.03	0.24	0.00	1.69
Perineuritis	1	0.03	0.03	0.24	0.00	1.69
Inflammaion	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3503					
Mineralization	1	0.03	0.03	0.24	0.00	1.69
Single fiber degeneration	1415	40.39	42.25	32.96	0.00	96.61
Mononuclear cell foci	3	0.09	0.08	0.32	0.00	1.43
Inflammatory cell foci	1	0.03	0.04	0.29	0.00	2.00
Perineuritis	0	0.00	0.00	0.00	0.00	0.00
Inflammaion	2	0.06	0.09	0.60	0.00	4.17

Optic Nerve

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2671					
Edema	0	0.00	0.00	0.00	0.00	0.00
Mineralization	10	0.37	0.26	1.62	0.00	10.10
Single fiber degeneration	16	0.60	0.53	1.24	0.00	5.05
Inflammatory cell foci	1	0.04	0.04	0.23	0.00	1.43
Necrosis	1	0.04	0.04	0.24	0.00	1.47
Inflammation	1	0.04	0.03	0.16	0.00	1.01

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2669					
Edema	1	0.04	0.13	0.80	0.00	5.00
Mineralization	1	0.04	0.03	0.16	0.00	1.02
Single fiber degeneration	29	1.09	0.99	2.32	0.00	12.24
Inflammatory cell foci	2	0.07	0.07	0.46	0.00	2.90
Necrosis	2	0.07	0.07	0.46	0.00	2.86
Inflammation	1	0.04	0.06	0.35	0.00	2.17

Eyes

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3632					
Cyst's	0	0.00	0.00	0.00	0.00	0.00
Glaucoma	1	0.03	0.02	0.12	0.00	0.83
Congestion	3	0.08	0.07	0.27	0.00	1.43
Edema	1	0.03	0.03	0.24	0.00	1.67
Hemorrhage	204	5.62	5.11	10.83	0.00	63.00
Hyphema	2	0.06	0.04	0.20	0.00	1.00
Synechia	13	0.36	0.31	1.07	0.00	7.00
Hemosiderin	1	0.03	0.04	0.29	0.00	2.04
Lenticular mineralization	11	0.30	0.31	0.79	0.00	3.39
Vascular mineralization	8	0.22	0.18	1.02	0.00	7.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Corneal mineralization	42	1.16	0.93	4.42	0.00	31.00
Pigment deposition	1	0.03	0.02	0.14	0.00	1.00
Osseous metaplasia	2	0.06	0.04	0.28	0.00	2.00
Corneal vascularization	3	0.08	0.08	0.32	0.00	1.49
Corneal degeneration	7	0.19	0.14	0.99	0.00	7.00
Corneal hyperkeratosis	5	0.14	0.11	0.44	0.00	2.00
Corneal hyperplasia	10	0.28	0.20	1.41	0.00	10.00
Lenticular degeneration	136	3.74	3.56	5.16	0.00	22.00
Retinal degeneration	166	4.57	4.52	6.13	0.00	29.00
Corneal ulceration	3	0.08	0.09	0.34	0.00	1.45
Keratitis	100	2.75	2.69	2.74	0.00	10.87
Keratoconjunctivitis	1	0.03	0.02	0.12	0.00	0.83
Scleritis	12	0.33	0.31	1.23	0.00	6.00
Iritis	51	1.40	1.15	5.57	0.00	39.00
Uveitis	4	0.11	0.12	0.57	0.00	2.90
Retinitis	4	0.11	0.09	0.39	0.00	2.00
Iridocyclitis	14	0.39	0.34	1.06	0.00	6.32
Retrolbulbar Inflammation	36	0.99	1.14	3.43	0.00	14.00
Conjunctivitis	3	0.08	0.11	0.54	0.00	3.33
Blepharitis	12	0.33	0.26	1.65	0.00	11.58
Hypopyon	32	0.88	0.91	2.91	0.00	18.84
Panophthalmitis	32	0.88	0.92	1.79	0.00	10.00
Phthisis bulbi	33	0.91	0.78	1.66	0.00	8.00
Fibrosis retro-orbital	12	0.33	0.44	1.52	0.00	8.00

Eyes

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3643					
Cyst's	1	0.03	0.04	0.28	0.00	2.00
Glaucoma	2	0.05	0.06	0.31	0.00	2.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Edema	1	0.03	0.02	0.14	0.00	1.00
Hemorrhage	177	4.86	4.35	10.38	0.00	63.00
Hyphema	2	0.05	0.05	0.28	0.00	1.72
Synechia	15	0.41	0.35	1.39	0.00	9.00
Hemosiderin	0	0.00	0.00	0.00	0.00	0.00
Lenticular mineralization	11	0.30	0.27	0.80	0.00	4.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Mineralization	1	0.03	0.02	0.15	0.00	1.09
Corneal mineralization	35	0.96	0.81	3.92	0.00	24.00
Pigment deposition	0	0.00	0.00	0.00	0.00	0.00
Osseous metaplasia	0	0.00	0.00	0.00	0.00	0.00
Corneal vascularization	4	0.11	0.14	0.64	0.00	4.00
Corneal degeneration	1	0.03	0.03	0.24	0.00	1.67
Corneal hyperkeratosis	6	0.16	0.16	0.65	0.00	4.00
Corneal hyperplasia	3	0.08	0.06	0.34	0.00	2.17
Lenticular degeneration	147	4.04	3.81	5.17	0.00	28.00
Retinal degeneration	195	5.35	5.60	7.64	0.00	38.33
Corneal ulceration	0	0.00	0.00	0.00	0.00	0.00
Keratitis	52	1.43	1.37	1.64	0.00	6.00
Keratoconjunctivitis	1	0.03	0.04	0.28	0.00	2.00
Scleritis	9	0.25	0.16	0.96	0.00	6.67
Iritis	27	0.74	0.55	3.13	0.00	22.00
Uveitis	2	0.05	0.06	0.28	0.00	1.43
Retinitis	0	0.00	0.00	0.00	0.00	0.00
Iridocyclitis	12	0.33	0.31	1.17	0.00	6.00
Retrobular Inflammation	35	0.96	1.14	3.11	0.00	17.02
Conjunctivitis	0	0.00	0.00	0.00	0.00	0.00
Blepharitis	1	0.03	0.02	0.15	0.00	1.09
Hypopyon	26	0.71	0.70	2.12	0.00	12.86
Panophthalmitis	22	0.60	0.64	1.03	0.00	4.00
Phthisis bulbi	20	0.55	0.45	1.34	0.00	8.00
Fibrosis retro-orbital	4	0.11	0.17	0.94	0.00	6.38

Harderian Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3424					
Cyst(s)	6	0.18	0.24	0.87	0.00	4.00
Dilated cystic glands	72	2.10	1.67	7.92	0.00	54.00
Congestion	2	0.06	0.06	0.41	0.00	2.86
Hemorrhage	24	0.70	0.94	3.96	0.00	27.08
Edema	1	0.03	0.03	0.21	0.00	1.47
Porphyrin deposition	1274	37.21	37.84	43.73	0.00	100.00
Hemosiderin	0	0.00	0.00	0.00	0.00	0.00
Atrophy	51	1.49	1.52	3.24	0.00	14.00
Mononuclear cell foci	363	10.60	10.76	15.20	0.00	58.59
Necrosis	7	0.20	0.26	1.05	0.00	6.00
Granulomas	145	4.23	4.56	15.26	0.00	76.47
Periarthritis/arteritis	1	0.03	0.03	0.20	0.00	1.43
Inflammation	745	21.76	24.63	25.90	0.00	100.00
Fibrosis	16	0.47	0.42	1.64	0.00	10.31
Angiopathy	1	0.03	0.02	0.14	0.00	1.00
Hypertrophy	3	0.09	0.10	0.40	0.00	2.00
Hyperplasia	61	1.78	1.78	3.67	0.00	16.46

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3412					
Cyst(s)	1	0.03	0.04	0.29	0.00	2.00
Dilated cystic glands	67	1.96	1.49	6.95	0.00	48.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	15	0.44	0.57	1.73	0.00	10.00
Edema	0	0.00	0.00	0.00	0.00	0.00
Porphyrin deposition	1039	30.45	32.46	42.54	0.00	100.00
Hemosiderin	1	0.03	0.03	0.21	0.00	1.49
Atrophy	50	1.47	1.47	3.68	0.00	16.33
Mononuclear cell foci	404	11.84	12.54	15.82	0.00	49.00
Necrosis	2	0.06	0.06	0.31	0.00	2.04
Granulomas	122	3.58	3.76	10.04	0.00	44.00
Periarthritis/arteritis	2	0.06	0.06	0.29	0.00	1.45
Inflammation	720	21.10	24.69	24.09	0.00	100.00
Fibrosis	39	1.14	1.06	3.23	0.00	16.00
Angiopathy	0	0.00	0.00	0.00	0.00	0.00
Hypertrophy	0	0.00	0.00	0.00	0.00	0.00
Hyperplasia	19	0.56	0.53	1.07	0.00	5.00

Exorbital Lacrimal Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2122					
Inspissated secretion	34	1.60	2.02	9.23	0.00	47.50
Glandular ectasia	92	4.34	6.37	23.53	0.00	100.00
Ductal ectasia	49	2.31	5.19	21.50	0.00	100.00
Congestion	5	0.24	0.23	0.90	0.00	4.41
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	212	9.99	10.78	25.45	0.00	94.59
Hemosiderin	2	0.09	0.05	0.35	0.00	2.30
Harderian alteration	1167	55.00	48.13	45.16	0.00	100.00
Cytoplasmic vacuolation	135	6.36	11.13	30.92	0.00	100.00
Atrophy	179	8.44	11.33	23.99	0.00	100.00
Basophilic focus	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	32	1.51	2.08	6.78	0.00	30.00
Mononuclear cell foci	538	25.35	28.37	34.06	0.00	98.28
Necrosis	42	1.98	2.22	14.40	0.00	93.33
Inflammation	840	39.59	43.72	37.92	0.00	100.00
Alveolar hypertrophy	50	2.36	3.19	14.27	0.00	67.57
Ductal proliferation	42	1.98	2.64	15.02	0.00	97.44
Hyperplasia	2	0.09	0.23	1.06	0.00	5.88

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1044					
Inspissated secretion	0	0.00	0.00	0.00	0.00	0.00
Glandular ectasia	8	0.77	3.81	15.70	0.00	66.67
Ductal ectasia	3	0.29	4.76	20.04	0.00	100.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	1	0.10	0.03	0.15	0.00	0.91
Pigment deposition	3	0.29	2.86	12.45	0.00	66.67
Hemosiderin	0	0.00	0.00	0.00	0.00	0.00
Harderian alteration	147	14.08	24.65	37.13	0.00	100.00
Cytoplasmic vacuolation	15	1.44	10.48	30.00	0.00	100.00
Atrophy	18	1.72	3.44	16.86	0.00	100.00
Basophilic focus	1	0.10	0.06	0.34	0.00	2.00
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	93	8.91	15.16	32.09	0.00	100.00
Necrosis	2	0.19	1.43	8.45	0.00	50.00
Inflammation	95	9.10	18.94	32.69	0.00	100.00
Alveolar hypertrophy	0	0.00	0.00	0.00	0.00	0.00
Ductal proliferation	0	0.00	0.00	0.00	0.00	0.00
Hyperplasia	1	0.10	0.03	0.17	0.00	1.00

Zymbal's Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	560					
Squamous Cyst	1	0.18	0.16	0.42	0.00	1.12
Cystic change	25	4.46	5.25	13.90	0.00	36.76
Ductal ectasia	51	9.11	9.06	11.35	0.00	22.47
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Inflammation	3	0.54	0.63	1.67	0.00	4.41
Ductal hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Sebaceous hyperplasia	1	0.18	0.21	0.56	0.00	1.47

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	537					
Squamous Cyst	0	0.00	0.00	0.00	0.00	0.00
Cystic change	30	5.59	6.12	16.20	0.00	42.86
Ductal ectasia	52	9.68	10.54	13.38	0.00	27.87
Granuloma	1	0.19	0.22	0.58	0.00	1.54
Inflammation	3	0.56	0.63	1.14	0.00	2.86
Ductal hyperplasia	1	0.19	0.22	0.58	0.00	1.54
Sebaceous hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Aorta

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3283					
Dilation	11	0.34	2.35	14.41	0.00	100.00
Hemorrhage	1	0.03	0.04	0.24	0.00	1.69
Cartilaginous metaplasia	1	0.03	0.03	0.21	0.00	1.43
Mineralization	95	2.89	3.78	8.90	0.00	60.00
Mononuclear cell foci	1	0.03	0.04	0.29	0.00	2.00
Mediastinal inflammation	1	0.03	0.02	0.12	0.00	0.83
Inflammation	9	0.27	0.29	0.70	0.00	2.86

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3266					
Dilation	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	1	0.03	0.04	0.25	0.00	1.67
Cartilaginous metaplasia	1	0.03	0.04	0.30	0.00	2.04
Mineralization	7	0.21	0.23	0.58	0.00	2.04
Mononuclear cell foci	1	0.03	0.04	0.30	0.00	2.04
Mediastinal inflammation	0	0.00	0.00	0.00	0.00	0.00
Inflammation	2	0.06	0.04	0.21	0.00	1.00

Other Blood Vessels

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	11					
Mineralization	8	72.73	60.42	38.30	33.33	87.50
Periarthritis/arteritis	8	72.73	70.83	5.89	66.67	75.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1					
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Periarthritis/arteritis	1	100.00	100.00	0.00	100.00	100.00

Heart

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3641					
Valvular cyst(s)	2	0.05	0.06	0.29	0.00	1.47
Ventricular dilation	53	1.46	1.25	3.99	0.00	25.00
Round heart	3	0.08	0.05	0.35	0.00	2.50
Bacterial emboli	2	0.05	0.06	0.29	0.00	1.47
Congestion	39	1.07	1.17	3.98	0.00	20.00
Angiectasis	1	0.03	0.03	0.22	0.00	1.56
Hemorrhage	7	0.19	0.22	0.57	0.00	2.00
Hemosiderin	1	0.03	0.03	0.21	0.00	1.47
Pigment macrophages	0	0.00	0.00	0.00	0.00	0.00
Thrombosis	13	0.36	0.35	0.83	0.00	2.86
Embolus	3	0.08	0.08	0.31	0.00	1.43
Vacuolization	4	0.11	0.11	0.62	0.00	4.29
Myocardial lipodosis	3	0.08	0.12	0.85	0.00	6.00
Mineralization	88	2.42	2.20	3.53	0.00	16.00
Aortic mineralization	3	0.08	0.09	0.46	0.00	2.86
Vascular mineralization	23	0.63	0.62	1.46	0.00	5.71
Cartilaginous metaplasia	21	0.58	0.54	1.76	0.00	9.00
Osseous metaplasia	8	0.22	0.29	1.45	0.00	10.00
Angiopathy	1	0.03	0.04	0.28	0.00	2.00
Valvular endocardiosis	27	0.74	0.71	4.11	0.00	28.57
Valvulopathy	1	0.03	0.02	0.12	0.00	0.83
Perivascular fibrosis	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	479	13.16	13.87	29.03	0.00	96.67
Inflammatory cell foci	0	0.00	0.00	0.00	0.00	0.00
Subendocardial fibrosis	1	0.03	0.03	0.20	0.00	1.43
Myofibrosis/necrosis	1461	40.13	43.53	39.21	0.00	100.00
Myocardial Hypertrophy	16	0.44	0.40	1.12	0.00	6.00
Abscess	1	0.03	0.02	0.12	0.00	0.83
Endocarditis	3	0.08	0.07	0.28	0.00	1.47
Valvulitis	0	0.00	0.00	0.00	0.00	0.00
Myocarditis	185	5.08	4.24	16.78	0.00	85.00
Epicarditis	9	0.25	0.24	0.79	0.00	4.29
Periarthritis/arteritis	24	0.66	0.62	1.48	0.00	8.57
Aortitis/Periaortitis	1	0.03	0.03	0.20	0.00	1.43
Inflammation	5	0.14	0.13	0.46	0.00	2.00
Epicardial fibrosis	3	0.08	0.06	0.42	0.00	3.00
Chronic cardiopathy	1028	28.23	27.53	35.90	0.00	100.00
Epi-/Pericarditis	5	0.14	0.15	0.66	0.00	4.00
Pericarditis	1	0.03	0.02	0.14	0.00	1.00
Endocardial hyperplasia	5	0.14	0.15	0.48	0.00	2.00
Endocardial disease	7	0.19	0.18	0.65	0.00	3.03

Heart

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3596					
Valvular cyst(s)	1	0.03	0.04	0.29	0.00	2.00
Ventricular dilation	33	0.92	0.72	2.12	0.00	9.82
Round heart	0	0.00	0.00	0.00	0.00	0.00
Bacterial emboli	0	0.00	0.00	0.00	0.00	0.00
Congestion	10	0.28	0.30	1.03	0.00	5.80
Angiectasis	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Hemosiderin	2	0.06	0.08	0.37	0.00	2.00
Pigment macrophages	2	0.06	0.06	0.41	0.00	2.86
Thrombosis	2	0.06	0.06	0.32	0.00	2.00
Embolus	0	0.00	0.00	0.00	0.00	0.00
Vacuolization	0	0.00	0.00	0.00	0.00	0.00
Myocardial lipoidosis	0	0.00	0.00	0.00	0.00	0.00
Mineralization	14	0.39	0.40	1.05	0.00	6.06
Aortic mineralization	0	0.00	0.00	0.00	0.00	0.00
Vascular mineralization	3	0.08	0.11	0.45	0.00	2.08
Cartilaginous metaplasia	18	0.50	0.54	1.89	0.00	11.67
Osseous metaplasia	2	0.06	0.07	0.37	0.00	2.00
Angiopathy	2	0.06	0.06	0.31	0.00	1.67
Valvular endocardiosis	26	0.72	0.71	4.33	0.00	30.00
Valvulopathy	0	0.00	0.00	0.00	0.00	0.00
Perivascular fibrosis	2	0.06	0.06	0.41	0.00	2.86
Mononuclear cell foci	304	8.45	8.94	16.56	0.00	67.80
Inflammatory cell foci	14	0.39	0.45	3.13	0.00	21.88
Subendocardial fibrosis	3	0.08	0.09	0.61	0.00	4.29
Myofibrosis/necrosis	832	23.14	24.44	24.90	0.00	94.00
Myocardial Hypertrophy	5	0.14	0.09	0.64	0.00	4.46
Abscess	0	0.00	0.00	0.00	0.00	0.00
Endocarditis	4	0.11	0.14	0.48	0.00	2.00
Valvulitis	2	0.06	0.05	0.25	0.00	1.43
Myocarditis	152	4.23	3.38	14.00	0.00	79.17
Epicarditis	4	0.11	0.11	0.40	0.00	2.00
Periarthritis/arteritis	3	0.08	0.08	0.32	0.00	1.45
Aortitis/Periaortitis	3	0.08	0.11	0.61	0.00	4.08
Inflammation	2	0.06	0.06	0.32	0.00	2.00
Epicardial fibrosis	0	0.00	0.00	0.00	0.00	0.00
Chronic cardiopathy	443	12.32	12.55	18.35	0.00	59.18
Epi-/Pericarditis	2	0.06	0.06	0.32	0.00	2.08
Pericarditis	1	0.03	0.02	0.15	0.00	1.02
Endocardial hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Endocardial disease	1	0.03	0.03	0.21	0.00	1.45

Nasal Turbinates and Cavities

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	907					
Dilated glands	100	11.03	8.33	28.87	0.00	100.00
Congestion	2	0.22	0.17	0.58	0.00	2.00
Hyaline inclusions	25	2.76	2.25	6.63	0.00	23.00
Pulpitis	1	0.11	0.10	0.35	0.00	1.20
Periodontitis	1	0.11	0.10	0.35	0.00	1.20
Pus in Lumen	3	0.33	0.25	0.87	0.00	3.00
Inflammation	26	2.87	2.06	4.93	0.00	16.67
Osteomyelitis	2	0.22	0.14	0.48	0.00	1.67
Vomeronasal inflammation	4	0.44	0.28	0.96	0.00	3.33
Nasolacrimal duct inflammation	8	0.88	0.56	1.92	0.00	6.67
Vestibule inflammation	2	0.22	0.14	0.48	0.00	1.67
Submucosal inflammation	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	900					
Dilated glands	50	5.56	4.17	14.43	0.00	50.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hyaline inclusions	29	3.22	3.17	7.41	0.00	20.00
Pulpitis	0	0.00	0.00	0.00	0.00	0.00
Periodontitis	0	0.00	0.00	0.00	0.00	0.00
Pus in Lumen	0	0.00	0.00	0.00	0.00	0.00
Inflammation	4	0.44	0.28	0.96	0.00	3.33
Osteomyelitis	1	0.11	0.07	0.24	0.00	0.83
Vomeronasal inflammation	7	0.78	0.49	1.68	0.00	5.83
Nasolacrimal duct inflammation	1	0.11	0.07	0.24	0.00	0.83
Vestibule inflammation	0	0.00	0.00	0.00	0.00	0.00
Submucosal inflammation	2	0.22	0.14	0.48	0.00	1.67

Nasal Cavities, Level 1

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	522					
Goblet cell proliferation	76	14.56	14.13	19.69	0.00	42.00
Hyaline inclusions	9	1.72	1.38	1.77	0.00	5.00
Foreign bodies	0	0.00	0.00	0.00	0.00	0.00
Congestion	2	0.38	0.25	0.71	0.00	2.00
Secretion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	4	0.77	1.00	2.83	0.00	8.00
Pus in lumen	1	0.19	0.13	0.35	0.00	1.00
Osteosclerosis	1	0.19	12.50	35.36	0.00	100.00
Epithelial disorganization	1	0.19	0.13	0.35	0.00	1.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	469					
Goblet cell proliferation	41	8.74	11.28	14.06	0.00	34.69
Hyaline inclusions	8	1.71	2.35	2.35	0.00	6.00
Foreign bodies	1	0.21	0.34	0.83	0.00	2.04
Congestion	0	0.00	0.00	0.00	0.00	0.00
Secretion	2	0.43	0.51	0.85	0.00	2.04
Hemorrhage	5	1.07	1.35	2.47	0.00	6.12
Pus in lumen	0	0.00	0.00	0.00	0.00	0.00
Osteosclerosis	0	0.00	0.00	0.00	0.00	0.00
Epithelial disorganization	0	0.00	0.00	0.00	0.00	0.00

Nasal Cavities, Level 2

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	637					
Ectatic glands	1	0.16	0.29	0.76	0.00	2.00
Goblet cell proliferation	2	0.31	0.57	1.51	0.00	4.00
Dilated glands	14	2.20	4.26	11.26	0.00	29.79
Hyaline inclusions	48	7.54	8.61	8.60	0.00	22.00
Cystic/hemorrhagic change: mucosal glands	39	6.12	4.97	13.16	0.00	34.82
Hemorrhage in lumen	1	0.16	0.12	0.31	0.00	0.83
Secretion	0	0.00	0.00	0.00	0.00	0.00
Inflammation	15	2.35	3.99	8.60	0.00	23.40

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	589					
Ectatic glands	2	0.34	0.50	1.41	0.00	4.00
Goblet cell proliferation	1	0.17	0.26	0.72	0.00	2.04
Dilated glands	8	1.36	2.00	5.66	0.00	16.00
Hyaline inclusions	54	9.17	10.72	7.98	0.00	20.00
Cystic/hemorrhagic change: mucosal glands	2	0.34	0.22	0.63	0.00	1.79
Hemorrhage in lumen	2	0.34	0.21	0.59	0.00	1.67
Secretion	1	0.17	0.10	0.29	0.00	0.83
Inflammation	7	1.19	1.75	4.95	0.00	14.00

Nasal Cavities, Level 3

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	637					
Foreign bodies	1	0.16	0.10	0.29	0.00	0.83
Dilated glands	1	0.16	0.27	0.75	0.00	2.13
Hyaline inclusions	67	10.52	10.66	8.68	0.00	26.00
Hemorrhage	1	0.16	0.10	0.29	0.00	0.83
Cystic/hemorrhagic change: mucosal glands	3	0.47	0.33	0.95	0.00	2.68
Hyperplasia lymphoid	0	0.00	0.00	0.00	0.00	0.00
Epithelial dysorganization	2	0.31	0.35	0.73	0.00	2.00
Inflammation	7	1.10	1.04	1.55	0.00	4.00
Steno's gland inflammation	1	0.16	0.25	0.71	0.00	2.00
Epithelial hyperplasia	1	0.16	0.10	0.29	0.00	0.83
Fibrosis	2	0.31	0.53	1.50	0.00	4.26

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	588					
Foreign bodies	2	0.34	0.51	0.94	0.00	2.04
Dilated glands	0	0.00	0.00	0.00	0.00	0.00
Hyaline inclusions	80	13.61	14.09	10.08	0.00	26.53
Hemorrhage	3	0.51	0.31	0.88	0.00	2.50
Cystic/hemorrhagic change: mucosal glands	0	0.00	0.00	0.00	0.00	0.00
Hyperplasia lymphoid	1	0.17	0.25	0.71	0.00	2.00
Epithelial dysorganization	0	0.00	0.00	0.00	0.00	0.00
Inflammation	1	0.17	0.26	0.72	0.00	2.04
Steno's gland inflammation	0	0.00	0.00	0.00	0.00	0.00
Epithelial hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	0	0.00	0.00	0.00	0.00	0.00

Nasal Cavities, Level 4

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	432					
Foreign bodies	1	0.23	0.17	0.37	0.00	0.83
Hyaline inclusions	61	14.12	12.81	9.80	0.00	23.21
Hemorrhage	1	0.23	0.17	0.37	0.00	0.83
Steno's gland atrophy	3	0.69	0.76	1.04	0.00	2.00
Inflammatory secretion	1	0.23	0.17	0.37	0.00	0.83
Inflammation	2	0.46	0.35	0.47	0.00	0.89

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	431					
Foreign bodies	0	0.00	0.00	0.00	0.00	0.00
Hyaline inclusions	55	12.76	13.11	8.26	0.00	21.67
Hemorrhage	2	0.46	0.33	0.75	0.00	1.67
Steno's gland atrophy	1	0.23	0.40	0.89	0.00	2.00
Inflammatory secretion	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00

Nasal Cavity, Anterior

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	208					
Debris in lumen	5	2.40	2.50	3.54	0.00	5.00
Eosinophilic inclusion	0	0.00	0.00	0.00	0.00	0.00
Inflammation	6	2.88	2.89	0.16	2.78	3.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	207					
Debris in lumen	0	0.00	0.00	0.00	0.00	0.00
Eosinophilic inclusion	5	2.42	2.53	3.57	0.00	5.05
Inflammation	3	1.45	1.47	0.77	0.93	2.02

Nasal Cavity, Interior

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	208					
Debris in lumen	5	2.40	2.50	3.54	0.00	5.00
Eosinophilic inclusion: olfactory epithelium	5	2.40	2.46	2.17	0.93	4.00
Inflammation	5	2.40	2.43	0.81	1.85	3.00
Squamous cell metaplasia	1	0.48	0.50	0.71	0.00	1.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	207					
Debris in lumen	0	0.00	0.00	0.00	0.00	0.00
Eosinophilic inclusion: olfactory epithelium	15	7.25	7.24	0.24	7.07	7.41
Inflammation	1	0.48	0.46	0.65	0.00	0.93
Squamous cell metaplasia	0	0.00	0.00	0.00	0.00	0.00

Nasal Cavity, Posterior

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	207					
Debris in lumen	5	2.42	2.50	3.54	0.00	5.00
Eosinophilic inclusions	17	8.21	8.40	7.92	2.80	14.00
Inflammation	8	3.86	3.90	1.55	2.80	5.00
Squamous cell metaplasia	1	0.48	0.50	0.71	0.00	1.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	207					
Debris in lumen	1	0.48	0.51	0.71	0.00	1.01
Eosinophilic inclusions	41	19.81	19.78	0.83	19.19	20.37
Inflammation	1	0.48	0.46	0.65	0.00	0.93
Squamous cell metaplasia	0	0.00	0.00	0.00	0.00	0.00

Nasopharyngeal Duct

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	120					
Hemorrhage	22	18.33	18.33	0.00	18.33	18.33
Secretion	3	2.50	2.50	0.00	2.50	2.50

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	120					
Hemorrhage	6	5.00	5.00	0.00	5.00	5.00
Secretion	0	0.00	0.00	0.00	0.00	0.00

Larynx

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	604					
Hemorrhage in lumen	1	0.17	0.33	0.98	0.00	2.94
Food in Lumen	1	0.17	0.23	0.68	0.00	2.04
Cyst(s)	16	2.65	3.56	10.67	0.00	32.00
Glandular dilation	1	0.17	0.11	0.33	0.00	1.00
Mononuclear cell foci	1	0.17	0.23	0.68	0.00	2.04
Granuloma (s)	1	0.17	0.22	0.67	0.00	2.00
Inflammation	11	1.82	2.44	7.33	0.00	22.00
Mucous in lumen	4	0.66	0.33	0.98	0.00	2.94
Grandula ectasia	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	605					
Hemorrhage in lumen	0	0.00	0.00	0.00	0.00	0.00
Food in Lumen	1	0.17	0.10	0.30	0.00	0.91
Cyst(s)	8	1.32	1.81	5.44	0.00	16.33
Glandular dilation	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	0	0.00	0.00	0.00	0.00	0.00
Granuloma (s)	0	0.00	0.00	0.00	0.00	0.00
Inflammation	4	0.66	0.89	2.67	0.00	8.00
Mucous in lumen	4	0.66	0.29	0.88	0.00	2.63
Grandula ectasia	3	0.50	0.68	2.04	0.00	6.12

Larynx Level 2*

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	87					
Foreign body	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage, luminal	1	1.15	1.15	0.00	1.15	1.15
Mineralization	5	5.75	5.75	0.00	5.75	5.75
Inflammation	6	6.90	6.90	0.00	6.90	6.90

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	82					
Foreign body	1	1.22	1.22	0.00	1.22	1.22
Hemorrhage, luminal	1	1.22	1.22	0.00	1.22	1.22
Mineralization	14	17.07	17.07	0.00	17.07	17.07
Inflammation	1	1.22	1.22	0.00	1.22	1.22

*Single study only

Larynx Level 3*

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	87					
Hemorrhage, luminal	1	1.15	1.15	0.00	1.15	1.15
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Hemosiderin	0	0.00	0.00	0.00	0.00	0.00
Granuloma	1	1.15	1.15	0.00	1.15	1.15
Inflammation	1	1.15	1.15	0.00	1.15	1.15

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	82					
Hemorrhage, luminal	1	1.22	1.22	0.00	1.22	1.22
Mineralization	9	10.98	10.98	0.00	10.98	10.98
Hemosiderin	1	1.22	1.22	0.00	1.22	1.22
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Inflammation	2	2.44	2.44	0.00	2.44	2.44

*Single study only

Larynx Level 6*

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	87					
Hemorrhage, luminal	18	20.69	20.69	0.00	20.69	20.69
Granuloma	2	2.30	2.30	0.00	2.30	2.30
Squamous metaplasia	25	28.74	28.74	0.00	28.74	28.74

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	81					
Hemorrhage, luminal	5	6.17	6.17	0.00	6.17	6.17
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Squamous metaplasia	9	11.11	11.11	0.00	11.11	11.11

*Single study only

Trachea

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3365					
Inhaled food	1	0.03	0.03	0.21	0.00	1.43
Glandular dilation	235	6.98	6.86	9.34	0.00	26.92
Pigment deposition	17	0.51	0.47	2.05	0.00	11.43
Hemosiderin	2	0.06	0.08	0.36	0.00	2.00
Mineralization	5	0.15	0.13	0.52	0.00	3.00
Squamous metaplasia	5	0.15	0.13	0.54	0.00	3.13
Mononuclear cell foci	134	3.98	4.12	7.47	0.00	31.63
Inflammatory cell foci	15	0.45	0.47	3.16	0.00	21.43
Necrosis	1	0.03	0.02	0.15	0.00	1.00
Inflammation	74	2.20	1.89	7.12	0.00	44.79

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3376					
Inhaled food	0	0.00	0.00	0.00	0.00	0.00
Glandular dilation	267	7.91	7.75	11.29	0.00	38.38
Pigment deposition	31	0.92	0.75	3.75	0.00	23.00
Hemosiderin	0	0.00	0.00	0.00	0.00	0.00
Mineralization	1	0.03	0.04	0.30	0.00	2.04
Squamous metaplasia	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	132	3.91	3.88	7.29	0.00	36.36
Inflammatory cell foci	17	0.50	0.53	3.58	0.00	24.29
Necrosis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	94	2.78	2.09	9.62	0.00	53.61

Lungs

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3656					
Inhaled food	1	0.03	0.03	0.20	0.00	1.43
Nematodes	1	0.03	0.03	0.20	0.00	1.43
Bacterial colonies	1	0.03	0.03	0.19	0.00	1.32
Aneurism; vascular	1	0.03	0.02	0.14	0.00	1.00
Atelectasis	96	2.63	1.97	9.90	0.00	68.00
Collapse	5	0.14	0.14	0.70	0.00	4.00
Emphysema	77	2.11	1.80	8.96	0.00	60.00
Congestion	458	12.53	12.09	6.16	0.00	28.95
Hemorrhage	76	2.08	2.06	2.39	0.00	12.00
Edema	100	2.74	2.73	3.35	0.00	14.00
Thrombosis/thrombi	14	0.38	0.37	0.75	0.00	2.86
Pigment deposition	73	2.00	1.75	6.23	0.00	42.00
Alveolar histiocytosis	880	24.07	24.04	18.54	0.00	79.21
Heart failure cells	2	0.05	0.05	0.37	0.00	2.63
Mineralization	176	4.81	4.98	16.91	0.00	75.71
Vascular mineralization	563	15.40	16.36	24.98	0.00	85.83
Septal mineralization	21	0.57	0.51	1.52	0.00	8.00
Osseous metaplasia	113	3.09	3.24	4.37	0.00	20.00
Lipoproteinosis	49	1.34	1.56	4.77	0.00	25.00
Alveolar metaplasia	2	0.05	0.06	0.40	0.00	2.86
Lymphoid hyperplasia	258	7.06	6.03	18.68	0.00	79.00
Mononuclear cell foci	148	4.05	3.49	10.03	0.00	58.00
Perivascular cuffing	225	6.15	5.79	10.40	0.00	48.00
Inflammatory cell foci	6	0.16	0.24	1.70	0.00	12.00
Granulocytosis	10	0.27	0.22	0.70	0.00	3.00
Fat necrosis	0	0.00	0.00	0.00	0.00	0.00
Alveolitis	66	1.81	1.85	3.57	0.00	13.16
Pleuritis	7	0.19	0.15	0.62	0.00	4.00
Bronchitis	35	0.96	0.72	4.53	0.00	32.00
Granuloma(s)	130	3.56	3.50	3.38	0.00	12.00
Peri-/ vasculitis	22	0.60	0.62	3.64	0.00	25.71
Inflammation	150	4.10	4.30	6.18	0.00	25.71
Constriction	0	0.00	0.00	0.00	0.00	0.00
Alveolar hemorrhage	6	0.16	0.12	0.85	0.00	6.00
Fibrin deposits	16	0.44	0.43	1.54	0.00	7.14
Fibrosis	127	3.47	3.38	8.08	0.00	33.00
Vascular hypertrophy	16	0.44	0.32	2.26	0.00	16.00
Hypertrophy	2	0.05	0.04	0.28	0.00	2.00
Broncholization	4	0.11	0.08	0.57	0.00	4.04
Bronchial hyperplasia	5	0.14	0.13	0.46	0.00	2.02
Bronchiolo-alveolar hyperplasia	22	0.60	0.63	1.48	0.00	6.67
Mesothelial hyperplasia	2	0.05	0.06	0.31	0.00	2.00
Alveolar hyperplasia	104	2.84	2.82	6.78	0.00	38.57

Lungs

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3601					
Inhaled food	0	0.00	0.00	0.00	0.00	0.00
Nematodes in bronchus	0	0.00	0.00	0.00	0.00	0.00
Nematodes	1	0.03	0.02	0.14	0.00	1.00
Bacterial colonies	1	0.03	0.02	0.15	0.00	1.02
Malformation	0	0.00	0.00	0.00	0.00	0.00
Epidermoidal cyst	0	0.00	0.00	0.00	0.00	0.00
Aneurism; vascular	0	0.00	0.00	0.00	0.00	0.00
Atelectasis	71	1.97	1.51	7.10	0.00	47.47
Collapse	10	0.28	0.27	1.14	0.00	6.00
Emphysema	54	1.50	1.26	6.69	0.00	45.45
Congestion	251	6.97	6.76	4.65	0.00	17.39
Hemorrhage	35	0.97	1.07	2.56	0.00	16.00
Edema	28	0.78	0.81	1.35	0.00	6.06
Thrombosis/thrombi	4	0.11	0.11	0.37	0.00	1.47
Pigment deposition	167	4.64	4.13	12.22	0.00	82.83
Alveolar histiocytosis	959	26.63	25.86	16.80	0.00	72.73
Heart failure cells	3	0.08	0.11	0.53	0.00	3.17
Mineralization	137	3.80	4.01	15.14	0.00	68.12
Vascular mineralization	410	11.39	12.34	22.35	0.00	84.00
Septal mineralization	0	0.00	0.00	0.00	0.00	0.00
Osseous metaplasia	36	1.00	1.07	1.85	0.00	10.00
Lipoproteinosis	68	1.89	2.23	6.11	0.00	24.00
Alveolar metaplasia	4	0.11	0.09	0.47	0.00	2.86
Lymphoid hyperplasia	237	6.58	5.64	19.59	0.00	87.14
Mononuclear cell foci	97	2.69	2.45	7.65	0.00	48.48
Perivascular cuffing	160	4.44	4.43	7.56	0.00	30.00
Inflammatory cell foci	3	0.08	0.10	0.58	0.00	4.00
Granulocytosis	14	0.39	0.35	0.82	0.00	4.41
Fat necrosis	1	0.03	0.04	0.29	0.00	2.00
Alveolitis	69	1.92	1.90	4.23	0.00	18.33
Pleuritis	6	0.17	0.19	0.67	0.00	4.00
Bronchitis	78	2.17	1.64	10.82	0.00	75.76
Granuloma(s)	116	3.22	3.19	3.82	0.00	14.17
Peri- / vasculitis	16	0.44	0.48	3.11	0.00	21.74
Inflammation	181	5.03	5.51	8.91	0.00	42.00
Constriction	1	0.03	0.02	0.15	0.00	1.02
Alveolar hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Fibrin deposits	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	135	3.75	3.64	9.34	0.00	40.00
Vascular hypertrophy	8	0.22	0.16	1.14	0.00	8.00
Hypertrophy	0	0.00	0.00	0.00	0.00	0.00
Bronchialization	0	0.00	0.00	0.00	0.00	0.00
Bronchial hyperplasia	4	0.11	0.10	0.36	0.00	2.00
Bronchiolo-alveolar hyperplasia	23	0.64	0.67	1.66	0.00	8.00
Mesothelial hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Alveolar hyperplasia	56	1.56	1.55	3.96	0.00	21.74

Pituitary Gland

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3675					
Cyst(s)/clefts	620	16.87	16.82	9.57	0.00	40.00
Cystic Rathke's cleft	15	0.41	0.42	1.23	0.00	6.00
Tubular structures in pars nervosa	4	0.11	0.14	0.86	0.00	6.00
Cholesterol – clefts	3	0.08	0.10	0.49	0.00	2.90
Hemorrhage	14	0.38	0.33	1.48	0.00	9.18
Congestion	1	0.03	0.04	0.28	0.00	2.00
Angiectasis	48	1.31	1.25	3.50	0.00	18.37
Pigment deposition	27	0.73	0.72	2.89	0.00	16.00
Mineralization	4	0.11	0.08	0.35	0.00	2.04
Vacuolation	3	0.08	0.08	0.43	0.00	2.74
Lipidosis	0	0.00	0.00	0.00	0.00	0.00
Cystic degeneration	54	1.47	1.56	5.33	0.00	24.29
Mononuclear cell foci	1	0.03	0.03	0.20	0.00	1.43
Necrosis	0	0.00	0.00	0.00	0.00	0.00
Nerve fiber degeneration	2	0.05	0.07	0.34	0.00	2.00
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Gliosis	1	0.03	0.02	0.14	0.00	1.00
Altered cell focus	36	0.98	0.87	2.59	0.00	14.14
Focal hypertrophy	31	0.84	0.86	2.65	0.00	11.59
Hyperplasia	419	11.40	11.54	8.60	0.00	30.30
Hypertrophy, pars anterior	17	0.46	0.62	2.08	0.00	10.00
Hypertrophy, pars intermedia	9	0.24	0.31	1.48	0.00	10.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3690					
Cyst(s)/clefts	275	7.45	7.43	5.96	0.00	25.00
Cystic Rathke's cleft	16	0.43	0.46	1.76	0.00	11.67
Tubular structures in pars nervosa	0	0.00	0.00	0.00	0.00	0.00
Cholesterol – clefts	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	25	0.68	0.69	3.58	0.00	23.33
Congestion	14	0.38	0.41	1.22	0.00	7.14
Angiectasis	155	4.20	4.27	11.74	0.00	66.67
Pigment deposition	34	0.92	1.03	2.87	0.00	14.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Vacuolation	2	0.05	0.06	0.28	0.00	1.43
Lipidosis	1	0.03	0.02	0.14	0.00	1.00
Cystic degeneration	43	1.17	1.27	4.12	0.00	20.00
Mononuclear cell foci	0	0.00	0.00	0.00	0.00	0.00
Necrosis	1	0.03	0.03	0.19	0.00	1.35
Nerve fiber degeneration	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	2	0.05	0.07	0.36	0.00	2.08
Gliosis	0	0.00	0.00	0.00	0.00	0.00
Altered cell focus	37	1.00	0.83	3.05	0.00	19.00
Focal hypertrophy	10	0.27	0.33	1.50	0.00	8.70
Hyperplasia	454	12.30	12.83	10.10	0.00	36.00
Hypertrophy, pars anterior	6	0.16	0.22	0.77	0.00	4.00
Hypertrophy, pars intermedia	1	0.03	0.04	0.28	0.00	2.00

Adrenals

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1036					
Accessory cortical tissue	21	2.03	2.04	4.03	0.00	11.67
Cortical cyst(s)	0	0.00	0.00	0.00	0.00	0.00
Osseous metplasia	1	0.10	0.10	0.37	0.00	1.43
Congestion	28	2.70	3.00	7.18	0.00	22.45
Hemorrhage	1	0.10	0.10	0.37	0.00	1.43
Angiectasis	9	0.87	0.86	2.01	0.00	5.71
Thrombosis	2	0.19	0.13	0.52	0.00	2.02
Hyaline inclusions	1	0.10	0.10	0.37	0.00	1.43
Hyaline vascular change	1	0.10	0.10	0.37	0.00	1.43
Pigment deposition	350	33.78	28.81	43.27	0.00	97.14
Mineralization	1	0.10	0.06	0.22	0.00	0.83
Vascular mineralization	1	0.10	0.10	0.37	0.00	1.43
Atrophy	2	0.19	0.15	0.41	0.00	1.43
Hemopoietic foci	15	1.45	1.39	2.34	0.00	7.14
Cortical vacuolation	200	19.31	15.60	29.21	0.00	84.29
Cortical hemorrh. degen.	84	8.11	4.92	16.66	0.00	65.00
Cystic cortical degeneration	26	2.51	3.01	7.10	0.00	26.53
Cortical atrophy	23	2.22	2.19	6.50	0.00	24.29
Hypertrophy focal: glomerulosa	35	3.38	3.33	8.90	0.00	28.57
Hypertrophy focal: fasciculata	7	0.68	0.67	2.58	0.00	10.00
Fibrosis	2	0.19	0.19	0.74	0.00	2.86
Capsular fibrosis	1	0.10	0.10	0.37	0.00	1.43
Mononuclear cell foci	39	3.76	3.75	6.15	0.00	21.43
Granulocytic cell foci	10	0.97	0.60	1.95	0.00	7.50
Inflammatory foci	0	0.00	0.00	0.00	0.00	0.00
Necrosis	4	0.39	0.38	0.85	0.00	2.86
Periarteritis/arteritis	1	0.10	0.10	0.37	0.00	1.43
Altered cell foci	335	32.34	32.12	34.61	0.00	84.29
Cortical hypertrophy	109	10.52	7.88	20.63	0.00	64.29
Cortical hyperplasia	99	9.56	8.08	15.08	0.00	47.14
Medullary hyperplasia	10	0.97	0.96	2.21	0.00	8.16

Adrenals

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1035					
Accessory cortical tissue	20	1.93	1.92	4.18	0.00	15.94
Cortical cyst(s)	2	0.19	0.19	0.74	0.00	2.86
Osseous metplasia	0	0.00	0.00	0.00	0.00	0.00
Congestion	39	3.77	4.92	16.97	0.00	66.00
Hemorrhage	1	0.10	0.06	0.22	0.00	0.83
Angiectasis	143	13.82	14.60	25.36	0.00	80.00
Thrombosis	7	0.68	0.56	1.48	0.00	4.35
Hyaline inclusions	0	0.00	0.00	0.00	0.00	0.00
Hyaline vascular change	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	387	37.39	32.23	47.22	0.00	100.00
Mineralization	3	0.29	0.24	0.65	0.00	2.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Atrophy	0	0.00	0.00	0.00	0.00	0.00
Hemopoietic foci	29	2.80	2.58	3.75	0.00	12.86
Cortical vacuolation	87	8.41	6.56	13.66	0.00	40.00
Cortical hemorrh. degen.	179	17.29	12.58	30.62	0.00	95.00
Cystic cortical degeneration	169	16.33	17.86	34.76	0.00	95.71
Cortical atrophy	61	5.89	5.82	20.97	0.00	81.43
Hypertrophy focal: glomerulosa	78	7.54	7.47	19.97	0.00	64.29
Hypertrophy focal: fasciculata	18	1.74	1.74	6.74	0.00	26.09
Fibrosis	7	0.68	0.71	2.27	0.00	8.70
Capsular fibrosis	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	20	1.93	1.92	4.10	0.00	13.04
Granulocytic cell foci	8	0.77	0.56	1.49	0.00	4.29
Inflammatory foci	2	0.19	0.19	0.75	0.00	2.90
Necrosis	12	1.16	1.03	1.98	0.00	7.25
Periarteritis/arteritis	1	0.10	0.10	0.37	0.00	1.43
Altered cell foci	242	23.38	23.31	27.19	0.00	75.71
Cortical hypertrophy	82	7.92	5.90	14.76	0.00	44.29
Cortical hyperplasia	75	7.25	6.59	10.85	0.00	30.43
Medullary hyperplasia	7	0.68	0.63	1.29	0.00	4.29

Adrenal Cortex

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2999					
Accessory cortical tissue	383	12.77	12.97	16.79	0.00	83.00
Cyst(s)	0	0.00	0.00	0.00	0.00	0.00
Congestion	66	2.20	2.18	3.52	0.00	14.29
Hemorrhage	7	0.23	0.24	0.95	0.00	4.29
Edema	0	0.00	0.00	0.00	0.00	0.00
Angiectasis	145	4.83	4.74	9.14	0.00	50.00
Thrombosis	6	0.20	0.19	0.70	0.00	2.86
Mineralization	1	0.03	0.03	0.16	0.00	1.00
Vascular mineralization	1	0.03	0.04	0.26	0.00	1.67
Osseous metaplasia	4	0.13	0.15	0.54	0.00	2.02
Pigment deposition	327	10.90	11.70	28.30	0.00	100.00
Ceroid pigment	2	0.07	0.10	0.63	0.00	4.00
Caryo/cyomegaly	6	0.20	0.15	0.95	0.00	6.00
Hemopoietic foci	78	2.60	2.51	2.97	0.00	9.09
Megakaryocytopoiesis	0	0.00	0.00	0.00	0.00	0.00
Vacuolation	716	23.87	25.65	31.03	0.00	100.00
Hyaline degeneration	0	0.00	0.00	0.00	0.00	0.00
Ceroid degeneration	9	0.30	0.39	1.48	0.00	8.33
Cystic degeneration	85	2.83	2.78	3.45	0.00	12.00
Cystic hemorrhagic necrosis	6	0.20	0.21	1.15	0.00	7.14
Atrophy	15	0.50	0.57	1.17	0.00	6.00
Atrophy: fasciculata	2	0.07	0.07	0.34	0.00	2.00
Atrophy: glomerulosa	2	0.07	0.07	0.34	0.00	2.00
Mononuclear cell foci	87	2.90	2.98	4.86	0.00	22.00
Granulocytosis	2	0.07	0.09	0.38	0.00	2.00
Histiocytosis	0	0.00	0.00	0.00	0.00	0.00
Abscess	1	0.03	0.03	0.16	0.00	1.00
Necrosis	18	0.60	0.66	1.17	0.00	4.00
Periarteritis/arteritis	12	0.40	0.33	1.76	0.00	11.00
Inflammation	4	0.13	0.16	0.51	0.00	2.00
Fibrosis	5	0.17	0.21	0.98	0.00	6.00
Capsular fibrosis	3	0.10	0.13	0.47	0.00	2.04
Eosinophilic foci	34	1.13	1.32	4.41	0.00	22.00
Basophilic foci	13	0.43	0.56	2.61	0.00	16.00
Mixed foci	8	0.27	0.33	2.11	0.00	13.33
Vacuolated foci	91	3.03	3.10	10.41	0.00	53.33
Cellular alteration	841	28.04	27.23	32.11	0.00	86.00
Focal hypertrophy: glomerulosa	445	14.84	15.37	22.40	0.00	81.00
Hypertrophy: fasciculata	315	10.50	11.09	20.51	0.00	84.85
Cortical hyperplasia	413	13.77	13.00	19.24	0.00	93.00
Focal hyperplasia (z. glomerulosa)	4	0.13	0.10	0.50	0.00	3.03

Adrenal Cortex

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3001					
Accessory cortical tissue	302	10.06	9.94	14.37	0.00	71.72
Cyst(s)	7	0.23	0.25	0.58	0.00	2.00
Congestion	60	2.00	2.22	3.60	0.00	14.00
Hemorrhage	37	1.23	1.02	4.48	0.00	28.00
Edema	1	0.03	0.04	0.23	0.00	1.43
Angiectasis	1003	33.42	33.20	35.79	0.00	91.92
Thrombosis	27	0.90	0.79	2.66	0.00	12.00
Mineralization	2	0.07	0.06	0.27	0.00	1.43
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Osseous metaplasia	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	447	14.90	15.94	33.05	0.00	100.00
Ceroid pigment	2	0.07	0.10	0.63	0.00	4.00
Caryo/cyomegaly	39	1.30	0.98	6.23	0.00	39.39
Hemopoietic foci	109	3.63	3.62	4.04	0.00	14.29
Megakaryocytopoiesis	2	0.07	0.05	0.32	0.00	2.00
Vacuolation	268	8.93	8.49	14.76	0.00	80.81
Hyaline degeneration	0	0.00	0.00	0.00	0.00	0.00
Ceroid degeneration	4	0.13	0.19	0.74	0.00	4.00
Cystic degeneration	1174	39.12	39.68	31.62	0.00	87.14
Cystic hemorrhagic necrosis	88	2.93	3.14	13.89	0.00	65.71
Atrophy	8	0.27	0.39	1.36	0.00	8.00
Atrophy: fasciculata	3	0.10	0.12	0.64	0.00	4.00
Atrophy: glomerulosa	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	61	2.03	2.24	3.49	0.00	14.00
Granulocytosis	2	0.07	0.10	0.44	0.00	2.00
Histiocytosis	1	0.03	0.05	0.32	0.00	2.00
Abscess	0	0.00	0.00	0.00	0.00	0.00
Necrosis	18	0.60	0.59	1.21	0.00	4.29
Periarteritis/arteritis	3	0.10	0.10	0.35	0.00	1.45
Inflammation	8	0.27	0.23	0.62	0.00	3.03
Fibrosis	72	2.40	2.28	5.09	0.00	25.00
Capsular fibrosis	1	0.03	0.05	0.32	0.00	2.00
Eosinophilic foci	8	0.27	0.26	1.02	0.00	5.00
Basophilic foci	10	0.33	0.47	2.56	0.00	16.00
Mixed foci	4	0.13	0.17	1.05	0.00	6.67
Vacuolated foci	24	0.80	0.90	4.25	0.00	26.67
Cellular alteration	819	27.29	27.00	33.89	0.00	93.94
Focal hypertrophy: glomerulosa	577	19.23	19.95	27.14	0.00	85.86
Hypertrophy: fasciculata	304	10.13	10.68	20.85	0.00	90.00
Cortical hyperplasia	324	10.80	9.98	14.94	0.00	75.76
Focal hyperplasia (z. glomerulosa)	19	0.63	0.61	1.94	0.00	8.00

Adrenal Medulla

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2992					
Congestion	6	0.20	0.21	1.36	0.00	8.57
Angiectasis	63	2.11	1.59	10.06	0.00	63.64
Pigment deposition	45	1.50	1.15	6.80	0.00	43.00
Calcification	1	0.03	0.03	0.16	0.00	1.01
Vacuolization	2	0.07	0.09	0.38	0.00	2.00
Hemopoietic foci	1	0.03	0.05	0.32	0.00	2.00
Mononuclear cell foci	101	3.38	3.38	4.12	0.00	15.15
Abscess	1	0.03	0.03	0.16	0.00	1.00
Necrosis	3	0.10	0.10	0.36	0.00	1.52
Periarteritis/arteritis	2	0.07	0.08	0.35	0.00	2.00
Inflammation	6	0.20	0.24	1.23	0.00	7.69
Fibrosis	1	0.03	0.05	0.32	0.00	2.00
Medullary hyperplasia	170	5.68	5.31	6.79	0.00	39.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3369					
Congestion	3	0.09	0.10	0.64	0.00	4.29
Angiectasis	78	2.32	1.75	11.75	0.00	78.79
Pigment deposition	115	3.41	2.88	13.24	0.00	86.87
Calcification	0	0.00	0.00	0.00	0.00	0.00
Vacuolization	2	0.06	0.04	0.30	0.00	2.02
Hemopoietic foci	9	0.27	0.29	1.22	0.00	5.80
Mononuclear cell foci	66	1.96	2.10	2.91	0.00	10.00
Abscess	0	0.00	0.00	0.00	0.00	0.00
Necrosis	0	0.00	0.00	0.00	0.00	0.00
Periarteritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	10	0.30	0.25	1.39	0.00	9.18
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Medullary hyperplasia	75	2.23	2.03	5.89	0.00	39.39

Thyroid Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3686					
Anomaly	1	0.03	0.04	0.28	0.00	2.00
Ectopic thymus	7	0.19	0.18	0.65	0.00	3.03
Ultimobranchial cyst(s)	160	4.34	4.58	4.75	0.00	25.25
Altered colloid	273	7.41	7.07	17.66	0.00	69.39
Reduced Secretion	0	0.00	0.00	0.00	0.00	0.00
Thyroid dysplasia	5	0.14	0.10	0.71	0.00	5.05
Follicular dilation	36	0.98	1.10	3.01	0.00	14.93
Follicular cyst(s)	230	6.24	6.15	8.00	0.00	45.45
Congestion	17	0.46	0.45	1.73	0.00	11.43
Hemorrhage	3	0.08	0.08	0.33	0.00	2.00
Pigment depositions	3	0.08	0.11	0.60	0.00	4.00
Mineralization	48	1.30	1.19	5.05	0.00	31.31
Fibrosis	7	0.19	0.16	0.65	0.00	4.08
Mononuclear cell foci	26	0.71	0.71	1.07	0.00	4.00
Abscess	3	0.08	0.09	0.37	0.00	2.04
Periarthritis/arteritis	4	0.11	0.10	0.49	0.00	2.86
Inflammation	2	0.05	0.06	0.30	0.00	2.00
Atrophy	1	0.03	0.02	0.14	0.00	1.00
Follicular hypertrophy	12	0.33	0.36	0.89	0.00	2.99
Follicular hyperplasia	224	6.08	5.91	7.98	0.00	36.00
C-cell hyperplasia	747	20.27	20.11	22.72	0.00	100.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3667					
Anomaly	1	0.03	0.04	0.28	0.00	2.00
Ectopic thymus	14	0.38	0.30	1.02	0.00	6.06
Ultimobranchial cyst(s)	93	2.54	2.61	3.38	0.00	20.00
Altered colloid	260	7.09	6.55	17.00	0.00	68.69
Reduced Secretion	2	0.05	0.07	0.35	0.00	2.00
Thyroid dysplasia	9	0.25	0.18	1.02	0.00	7.00
Follicular dilation	21	0.57	0.71	2.12	0.00	12.00
Follicular cyst(s)	124	3.38	3.21	5.34	0.00	28.28
Congestion	3	0.08	0.09	0.46	0.00	2.94
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Pigment depositions	1	0.03	0.04	0.28	0.00	2.00
Mineralization	7	0.19	0.24	1.44	0.00	10.00
Fibrosis	5	0.14	0.12	0.51	0.00	3.06
Mononuclear cell foci	26	0.71	0.73	1.51	0.00	5.80
Abscess	2	0.05	0.04	0.29	0.00	2.02
Periarthritis/arteritis	1	0.03	0.04	0.28	0.00	2.00
Inflammation	6	0.16	0.18	0.52	0.00	2.13
Atrophy	0	0.00	0.00	0.00	0.00	0.00
Follicular hypertrophy	5	0.14	0.13	0.50	0.00	2.86
Follicular hyperplasia	125	3.41	3.22	6.06	0.00	24.74
C-cell hyperplasia	801	21.84	21.79	22.86	0.00	100.00

Parathyroid Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3240					
Anomaly	1	0.03	0.04	0.31	0.00	2.17
Cyst(s)	2	0.06	0.05	0.25	0.00	1.43
Hemorrhage	1	0.03	0.04	0.28	0.00	1.96
Angiectasis	1	0.03	0.03	0.22	0.00	1.54
Mononuclear cell foci	1	0.03	0.04	0.31	0.00	2.22
Increased collagen deposition	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	24	0.74	0.76	2.30	0.00	14.49
Hyperplasia *	345	10.65	11.48	12.93	0.00	75.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3117					
Anomaly	2	0.06	0.09	0.60	0.00	4.26
Cyst(s)	4	0.13	0.11	0.36	0.00	1.47
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Angiectasis	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	2	0.06	0.05	0.26	0.00	1.54
Increased collagen deposition	1	0.03	0.02	0.14	0.00	1.01
Fibrosis	68	2.18	2.10	6.36	0.00	42.42
Hyperplasia *	88	2.82	4.60	14.59	0.00	100.00

*Values due to low sample numbers in single studies

Pancreas

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3629					
Dense body inclusion	0	0.00	0.00	0.00	0.00	0.00
Increased apoptosis	0	0.00	0.00	0.00	0.00	0.00
Cyst(s)	7	0.19	0.23	0.77	0.00	4.00
Islet cell cyst	1	0.03	0.04	0.28	0.00	2.00
Ductal ectasia	14	0.39	0.48	1.47	0.00	8.16
Congestion	27	0.74	0.68	1.33	0.00	5.05
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Edema	9	0.25	0.33	1.16	0.00	6.38
Thrombosis	3	0.08	0.07	0.42	0.00	2.90
Aneurysm	2	0.06	0.06	0.41	0.00	2.90
Zymogen depletion	36	0.99	0.91	3.84	0.00	24.00
Lipofuscin deposits	7	0.19	0.14	1.00	0.00	7.07
Pigment deposition	496	13.67	13.68	24.31	0.00	74.29
Hemosiderin: islets	59	1.63	2.11	7.12	0.00	34.00
Hemosiderin: exocrine	48	1.32	1.71	6.89	0.00	41.54
Mineralization	33	0.91	0.69	2.33	0.00	15.00
Vascular mineralization	15	0.41	0.38	1.30	0.00	8.00
Lipomatosis	47	1.30	1.17	2.68	0.00	13.00
Vacuolar cytoplasmic change	1	0.03	0.04	0.31	0.00	2.17
Acinar atrophy	428	11.79	11.90	10.80	0.00	45.00
Mononuclear cell foci	130	3.58	3.57	4.46	0.00	18.00
Inflammatory cell foci	1	0.03	0.03	0.20	0.00	1.43
Necrosis	3	0.08	0.06	0.32	0.00	2.00
Fat necrosis	3	0.08	0.07	0.28	0.00	1.56
Periarteritis/arteritis	72	1.98	1.91	2.61	0.00	9.00
Peripancreatitis	1	0.03	0.03	0.20	0.00	1.43
Inflammation	153	4.22	4.19	7.25	0.00	31.43
Fibrosis	26	0.72	0.56	2.63	0.00	18.00
Ductal hyperplasia	1	0.03	0.03	0.20	0.00	1.45
Exocrine hyperplasia	55	1.52	1.54	1.90	0.00	6.67
Islet cell hyperplasia	458	12.62	13.86	17.26	0.00	67.24
Exocrine hypertrophy	0	0.00	0.00	0.00	0.00	0.00
Basophilic cell foci	14	0.39	0.36	1.23	0.00	8.00

Pancreas

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3639					
Dense body inclusion	1	0.03	0.04	0.29	0.00	2.08
Increased apoptosis	1	0.03	0.02	0.14	0.00	1.00
Cyst(s)	5	0.14	0.15	0.65	0.00	3.39
Islet cell cyst	0	0.00	0.00	0.00	0.00	0.00
Ductal ectasia	9	0.25	0.33	0.92	0.00	4.08
Congestion	24	0.66	0.59	1.00	0.00	4.00
Hemorrhage	2	0.05	0.07	0.35	0.00	2.00
Edema	12	0.33	0.38	1.21	0.00	7.14
Thrombosis	0	0.00	0.00	0.00	0.00	0.00
Aneurysm	0	0.00	0.00	0.00	0.00	0.00
Zymogen depletion	37	1.02	0.96	4.20	0.00	26.00
Lipofuscin deposits	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	97	2.67	2.14	6.62	0.00	38.00
Hemosiderin: islets	1	0.03	0.02	0.12	0.00	0.84
Hemosiderin: exocrine	3	0.08	0.11	0.76	0.00	5.36
Mineralization	2	0.05	0.03	0.24	0.00	1.68
Vascular mineralization	1	0.03	0.02	0.12	0.00	0.83
Lipomatosis	12	0.33	0.31	0.79	0.00	4.00
Vacuolar cytoplasmic change	1	0.03	0.02	0.14	0.00	1.00
Acinar atrophy	287	7.89	8.04	7.45	0.00	23.21
Mononuclear cell foci	143	3.93	3.91	5.63	0.00	30.00
Inflammatory cell foci	0	0.00	0.00	0.00	0.00	0.00
Necrosis	1	0.03	0.02	0.14	0.00	1.00
Fat necrosis	1	0.03	0.02	0.14	0.00	1.00
Periarteritis/arteritis	29	0.80	0.80	2.00	0.00	10.00
Peripancreatitis	7	0.19	0.24	0.84	0.00	4.17
Inflammation	153	4.20	4.07	7.15	0.00	29.17
Fibrosis	4	0.11	0.12	0.48	0.00	2.17
Ductal hyperplasia	1	0.03	0.04	0.31	0.00	2.17
Exocrine hyperplasia	5	0.14	0.17	0.62	0.00	3.45
Islet cell hyperplasia	245	6.73	7.13	11.81	0.00	58.57
Exocrine hypertrophy	4	0.11	0.12	0.46	0.00	2.08
Basophilic cell foci	13	0.36	0.37	1.18	0.00	6.00

Liver

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3737					
Bacteria colonies	1	0.03	0.03	0.18	0.00	1.27
Herniated liver lobe	4	0.11	0.09	0.37	0.00	2.00
Constriction	24	0.64	0.63	3.26	0.00	22.86
Lobe torsion	1	0.03	0.03	0.18	0.00	1.27
Cyst(s)	1	0.03	0.02	0.14	0.00	1.00
Dilated duct	43	1.15	1.22	2.82	0.00	12.00
Sinusoidal ectasia	32	0.86	1.07	4.48	0.00	28.00
Congestion	288	7.71	7.78	6.73	0.00	26.00
Hemorrhage	4	0.11	0.13	0.46	0.00	2.00
Angiectasis	149	3.99	4.06	6.30	0.00	32.00
Lymphangiectasis	4	0.11	0.10	0.55	0.00	3.80
Hyaline droplets	2	0.05	0.06	0.28	0.00	1.43
Hemosiderin deposition	69	1.85	1.69	5.61	0.00	31.43
Kupffer cell pigmentation	73	1.95	1.71	6.99	0.00	45.00
Bile pigment	1	0.03	0.03	0.18	0.00	1.27
Pigment deposition	51	1.36	1.44	2.93	0.00	15.71
Cholestasis	1	0.03	0.04	0.27	0.00	1.92
Amyloidosis	0	0.00	0.00	0.00	0.00	0.00
Mineralization	3	0.08	0.07	0.34	0.00	2.00
Vacuolization	129	3.45	3.60	9.75	0.00	50.00
Fatty change	1364	36.50	36.81	25.07	0.00	88.61
Fatty degeneration	6	0.16	0.23	1.63	0.00	11.54
Megakaryocytosis	1	0.03	0.03	0.20	0.00	1.43
Cell edema	11	0.29	0.22	1.56	0.00	11.00
Granular hepatocytic cytoplasm	0	0.00	0.00	0.00	0.00	0.00
Atrophy	40	1.07	1.06	2.24	0.00	8.00
Spongiosis hepatis	51	1.36	1.37	2.28	0.00	10.13
Kupffer cell proliferation	99	2.65	2.84	6.49	0.00	41.43
Inflammatory cell foci	1482	39.66	37.29	32.44	0.00	100.00
Multinucleated cells	0	0.00	0.00	0.00	0.00	0.00
Increased mitosis	2	0.05	0.05	0.24	0.00	1.43
Hepatocellular polyploidy	0	0.00	0.00	0.00	0.00	0.00
Karyo-/cytomegaly	0	0.00	0.00	0.00	0.00	0.00
Increased apoptosis	0	0.00	0.00	0.00	0.00	0.00
Single cell necrosis	84	2.25	1.79	8.04	0.00	56.00
Necrosis	214	5.73	5.79	6.31	0.00	35.00
Abscess(es)	0	0.00	0.00	0.00	0.00	0.00
Granuloma(s)	27	0.72	0.78	2.80	0.00	14.29
Perihepatitis	2	0.05	0.06	0.31	0.00	1.67
Periarteritis/arteritis	2	0.05	0.04	0.18	0.00	1.00
Focal vasculitis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	354	9.47	10.11	20.15	0.00	69.23
Capsular inflammation	1	0.03	0.03	0.18	0.00	1.27
Peribiliary fibrosis	560	14.99	15.85	17.06	0.00	51.67
Peribiliary inflammation	60	1.61	1.80	6.92	0.00	42.86

Liver

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Increased glycogen depos.	305	8.16	8.08	18.63	0.00	100.00
Thrombus	3	0.08	0.07	0.26	0.00	1.27
Granulocytosis	19	0.51	0.47	1.36	0.00	8.00
Hemopoiesis	232	6.21	6.70	14.56	0.00	98.33
Biliary cyst(s)	48	1.28	1.37	1.62	0.00	8.00
Capsular fibrosis	8	0.21	0.19	0.67	0.00	3.00
Capsular adhesion	1	0.03	0.03	0.20	0.00	1.43
Fibrosis	43	1.15	1.40	4.82	0.00	30.00
Cirrhosis	2	0.05	0.05	0.23	0.00	1.27
Hepatocellular hypertrophy	88	2.35	2.26	5.47	0.00	20.00
Hyperplasia	50	1.34	1.45	3.15	0.00	11.67
Clear cell foci	1395	37.33	37.20	19.29	0.00	76.00
Basophilic foci	1175	31.44	31.92	20.78	0.00	82.00
Eosinophilic foci	384	10.28	10.64	15.51	0.00	50.00
Mixed foci	238	6.37	6.72	9.83	0.00	49.15
Vacuolated foci	240	6.42	6.89	9.70	0.00	30.00
Oval cell proliferation	2	0.05	0.05	0.27	0.00	1.43
Bile duct hyperplasia	1055	28.23	28.05	17.44	0.00	60.00
Regenerative hyperplasia	1	0.03	0.03	0.18	0.00	1.27
Common bile duct ectasia	21	0.56	0.39	1.98	0.00	12.15

Liver

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3706					
Bacteria colonies	0	0.00	0.00	0.00	0.00	0.00
Herniated liver lobe	6	0.16	0.13	0.40	0.00	1.67
Constriction	9	0.24	0.26	1.84	0.00	13.04
Lobe torsion	2	0.05	0.04	0.29	0.00	2.04
Cyst(s)	5	0.13	0.18	0.69	0.00	4.00
Dilated duct	31	0.84	0.80	1.75	0.00	7.14
Sinusoidal ectasia	20	0.54	0.62	2.38	0.00	14.29
Congestion	128	3.45	3.47	4.29	0.00	18.00
Hemorrhage	3	0.08	0.06	0.23	0.00	1.02
Angiectasis	114	3.08	2.97	4.70	0.00	16.33
Lymphangiectasis	0	0.00	0.00	0.00	0.00	0.00
Hyaline droplets	2	0.05	0.06	0.40	0.00	2.86
Hemosiderin deposition	202	5.45	5.04	16.76	0.00	100.00
Kupffer cell pigmentation	152	4.10	3.59	12.63	0.00	72.00
Bile pigment	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	141	3.80	4.19	7.18	0.00	36.00
Cholestasis	4	0.11	0.16	0.89	0.00	6.00
Amyloidosis	1	0.03	0.02	0.14	0.00	1.01
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Vacuolization	77	2.08	2.00	5.39	0.00	24.00
Fatty change	629	16.97	16.78	15.47	0.00	62.90
Fatty degeneration	9	0.24	0.36	1.88	0.00	12.00
Megakaryocytosis	0	0.00	0.00	0.00	0.00	0.00
Cell edema	0	0.00	0.00	0.00	0.00	0.00
Granular hepatocytic cytoplasm	1	0.03	0.04	0.28	0.00	2.00
Atrophy	24	0.65	0.70	1.39	0.00	6.00
Spongiosis hepatis	12	0.32	0.32	0.83	0.00	4.00
Kupffer cell proliferation	147	3.97	4.37	9.46	0.00	56.52
Inflammatory cell foci	1348	36.37	33.46	31.24	0.00	100.00
Multinucleated cells	44	1.19	1.29	3.54	0.00	12.86
Increased mitosis	15	0.40	0.47	1.09	0.00	5.71
Hepatocellular ploidy	4	0.11	0.07	0.38	0.00	2.50
Karyo-/cytomegaly	5	0.13	0.14	1.01	0.00	7.14
Increased apoptosis	3	0.08	0.10	0.58	0.00	4.00
Single cell necrosis	107	2.89	2.31	9.79	0.00	67.00
Necrosis	208	5.61	5.41	10.59	0.00	52.00
Abscess(es)	0	0.00	0.00	0.00	0.00	0.00
Granuloma(s)	40	1.08	1.16	4.17	0.00	24.56
Perihepatitis	1	0.03	0.03	0.20	0.00	1.45
Periarteritis/arteritis	1	0.03	0.03	0.20	0.00	1.43
Focal vasculitis	1	0.03	0.02	0.14	0.00	1.00
Inflammation	285	7.69	8.11	17.38	0.00	60.00
Capsular inflammation	0	0.00	0.00	0.00	0.00	0.00
Peribiliary fibrosis	636	17.16	18.04	18.64	0.00	60.00
Peribiliary inflammation	54	1.46	1.64	6.16	0.00	32.86

Liver

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Increased glycogen depos.	254	6.85	7.14	17.89	0.00	100.00
Thrombus	1	0.03	0.04	0.28	0.00	2.00
Granulocytosis	24	0.65	0.63	1.24	0.00	4.29
Hemopoiesis	365	9.85	10.22	15.84	0.00	100.00
Biliary cyst(s)	138	3.72	3.86	3.41	0.00	14.00
Capsular fibrosis	4	0.11	0.08	0.27	0.00	1.01
Capsular adhesion	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	45	1.21	1.53	5.23	0.00	27.12
Cirrhosis	0	0.00	0.00	0.00	0.00	0.00
Hepatocellular hypertrophy	88	2.37	2.25	5.06	0.00	27.00
Hyperplasia	41	1.11	1.32	3.44	0.00	22.00
Clear cell foci	478	12.90	13.13	10.84	0.00	50.00
Basophilic foci	2008	54.18	54.78	23.34	0.00	91.43
Eosinophilic foci	321	8.66	8.91	13.73	0.00	56.00
Mixed foci	132	3.56	3.47	6.45	0.00	26.67
Vacuolated foci	78	2.10	2.18	3.96	0.00	14.29
Oval cell proliferation	3	0.08	0.07	0.42	0.00	2.86
Bile duct hyperplasia	1327	35.81	35.86	18.96	0.00	80.00
Regenerative hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Common bile duct ectasia	13	0.35	0.24	1.18	0.00	6.48

Common Bile Duct

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	107					
Dilated lumen	57	53.27	87.29	32.47	0.00	100.00
Inflammation	8	7.48	13.24	30.05	0.00	100.00
Hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Mineralization	1	0.93	0.74	3.03	0.00	12.50
Thromboarteritis	1	0.93	2.94	12.13	0.00	50.00
Periarteritis/Arteritis	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	80					
Dilated lumen	28	35.00	84.32	37.22	0.00	100.00
Inflammation	2	2.50	7.89	25.07	0.00	100.00
Hyperplasia	1	1.25	2.63	11.47	0.00	50.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Thromboarteritis	0	0.00	0.00	0.00	0.00	0.00
Periarteritis/Arteritis	1	1.25	2.63	11.47	0.00	50.00

Oral Cavity

* single studies only or gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	214					
Ectopic sebaceous glands	1	0.47	16.67	28.87	0.00	50.00
Inflammation	1	0.47	16.67	28.87	0.00	50.00
Dental dysplasia	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	213					
Ectopic sebaceous glands	0	0.00	0.00	0.00	0.00	0.00
Inflammation	1	0.47	33.33	57.74	0.00	100.00
Dental dysplasia	0	0.00	0.00	0.00	0.00	0.00

Tongue

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2541					
Anomaly	1	0.04	0.04	0.25	0.00	1.49
Cyst	1	0.04	0.06	0.33	0.00	2.00
Squamous cyst	3	0.12	0.08	0.36	0.00	2.00
Dilated glands	1	0.04	0.03	0.17	0.00	1.00
Congestion	3	0.12	0.12	0.71	0.00	4.29
Hemorrhage	2	0.08	0.06	0.33	0.00	2.00
Mineralization	4	0.16	0.15	0.55	0.00	2.86
Hyperkeratosis	16	0.63	0.50	1.92	0.00	10.00
Myophagocytic focus/foci	0	0.00	0.00	0.00	0.00	0.00
Vascular mineralization	14	0.55	0.44	1.71	0.00	10.00
Angiopathy	2	0.08	0.07	0.29	0.00	1.43
Myofiber atrophy	2	0.08	0.07	0.29	0.00	1.43
Atrophy, salivary glands	56	2.20	2.52	11.33	0.00	64.18
Vacuolar degeneration salivary glands	8	0.31	0.35	1.76	0.00	10.45
Mucosal atrophy	2	0.08	0.10	0.42	0.00	2.04
Focal myodegeneration	6	0.24	0.20	0.68	0.00	3.13
Mononuclear cell foci	36	1.42	1.22	3.76	0.00	22.00
Epithelial hyperplasia	2	0.08	0.08	0.37	0.00	2.00
Erosion/mucosal	1	0.04	0.03	0.17	0.00	1.00
Periarteritis/arteritis	17	0.67	0.60	1.77	0.00	10.00
Inflammation	55	2.16	2.16	5.41	0.00	22.86
Fibrosis	34	1.34	1.41	8.46	0.00	50.75

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2570					
Anomaly	0	0.00	0.00	0.00	0.00	0.00
Cyst	0	0.00	0.00	0.00	0.00	0.00
Squamous cyst	2	0.08	5.26	22.63	0.00	100.00
Dilated glands	0	0.00	0.00	0.00	0.00	0.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Mineralization	2	0.08	0.10	0.43	0.00	2.00
Hyperkeratosis	18	0.70	0.47	2.76	0.00	17.00
Myophagocytic focus/foci	1	0.04	0.05	0.32	0.00	2.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Angiopathy	0	0.00	0.00	0.00	0.00	0.00
Myofiber atrophy	44	1.71	1.22	6.54	0.00	40.21
Atrophy, salivary glands	54	2.10	2.60	12.89	0.00	78.57
Vacuolar degeneration salivary glands	6	0.23	0.30	1.01	0.00	5.36
Mucosal atrophy	2	0.08	0.10	0.43	0.00	2.00
Focal myodegeneration	2	0.08	0.05	0.23	0.00	1.02
Mononuclear cell foci	33	1.28	0.99	3.78	0.00	23.00
Epithelial hyperplasia	1	0.04	0.05	0.33	0.00	2.04
Erosion/mucosal	0	0.00	0.00	0.00	0.00	0.00
Periarteritis/arteritis	14	0.54	0.46	1.41	0.00	8.00
Inflammation	69	2.68	2.84	6.51	0.00	30.00
Fibrosis	22	0.86	1.04	6.08	0.00	37.50

Teeth

* single studies only or gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1					
Peridontitis	1	100.00	100.00	0.00	100.00	100.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	0					
Peridontitis	0	0.00	0.00	0.00	0.00	0.00

Esophagus

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3682					
Food in lumen	4	0.11	0.11	0.59	0.00	4.00
Dilated lumen	7	0.19	0.25	1.18	0.00	8.00
Hyperkeratosis	49	1.33	1.39	3.76	0.00	17.39
Parakeratosis	1	0.03	0.03	0.20	0.00	1.45
Basal cell hyperplasia	1	0.03	0.03	0.20	0.00	1.45
Inflammation	5	0.14	0.15	0.45	0.00	2.00
Mucosal atrophy	3	0.08	0.09	0.61	0.00	4.35

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3651					
Food in lumen	6	0.16	0.13	0.69	0.00	4.46
Dilated lumen	8	0.22	0.21	0.59	0.00	2.00
Hyperkeratosis	41	1.12	1.35	3.52	0.00	20.00
Parakeratosis	0	0.00	0.00	0.00	0.00	0.00
Basal cell hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Inflammation	1	0.03	0.02	0.14	0.00	1.00
Mucosal atrophy	2	0.05	0.08	0.37	0.00	2.04

Stomach

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3650					
Anomaly	2	0.05	0.04	0.28	0.00	2.00
Epidermoid cyst	4	0.11	0.14	0.86	0.00	6.00
Fibrosis	28	0.77	0.60	2.33	0.00	15.00
Increased collagen	7	0.19	0.26	1.44	0.00	10.00
Thrombosis	0	0.00	0.00	0.00	0.00	0.00
Vacuolation	29	0.79	0.78	5.06	0.00	35.71
Mucosal cyst	3	0.08	0.09	0.61	0.00	4.29
Submucosal lipidosis	1	0.03	0.03	0.20	0.00	1.43
Ectopic pancreas	1	0.03	0.03	0.20	0.00	1.43
Cyst(s)	3	0.08	0.07	0.35	0.00	2.02
Dilated glands	727	19.92	20.27	25.19	0.00	84.29
Congestion	14	0.38	0.37	1.03	0.00	4.29
Hemorrhage	6	0.16	0.16	0.44	0.00	1.67
Edema	95	2.60	2.80	3.83	0.00	14.00
Pigment deposition	0	0.00	0.00	0.00	0.00	0.00
Amyloidosis	1	0.03	0.04	0.29	0.00	2.04
Vascular mineralization	1	0.03	0.03	0.22	0.00	1.59
Mineralization	129	3.53	3.43	3.80	0.00	13.27
Mucosal atrophy	58	1.59	1.32	5.66	0.00	39.00
Lymphoid follicles	48	1.32	1.35	4.50	0.00	22.00
Mononuclear cell foci	42	1.15	1.29	2.47	0.00	10.00
Inflammatory cell foci	71	1.95	1.77	8.17	0.00	53.00
Focal giant cell aggregates	1	0.03	0.04	0.29	0.00	2.04
Parakeratosis	6	0.16	0.17	0.86	0.00	5.71
Erosion/ulceration	200	5.48	5.88	5.75	0.00	24.00
Erosion(s)/forestomach	10	0.27	0.25	0.73	0.00	3.13
Erosion/ glandular stomach	19	0.52	0.43	1.45	0.00	7.00
Ulcer(s)/forestomach	69	1.89	1.76	3.18	0.00	12.24
Ulceration/ glandular stomach	4	0.11	0.09	0.47	0.00	2.86
Granuloma(s)	1	0.03	0.04	0.29	0.00	2.04
Peritonitis	4	0.11	0.10	0.49	0.00	2.86
Periarteritis/arteritis	10	0.27	0.30	0.75	0.00	4.00
Inflammation	260	7.12	6.95	8.88	0.00	38.57
Hyperkeratosis	118	3.23	3.31	5.56	0.00	24.29
Epithelial degeneration	1	0.03	0.03	0.22	0.00	1.56
Basal cell proliferation	15	0.41	0.49	1.98	0.00	12.86
Glandular nodule	31	0.85	0.64	4.10	0.00	29.00
Epithelial hyperplasia	72	1.97	1.91	4.42	0.00	19.19
Hyperplasia	116	3.18	3.01	5.05	0.00	28.00
Mesothelial proliferation	0	0.00	0.00	0.00	0.00	0.00

Stomach

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3637					
Anomaly	0	0.00	0.00	0.00	0.00	0.00
Epidermoid cyst	5	0.14	0.14	0.50	0.00	2.08
Fibrosis	5	0.14	0.13	0.46	0.00	2.08
Increased collagen	1	0.03	0.04	0.28	0.00	2.00
Thrombosis	1	0.03	0.02	0.12	0.00	0.83
Vacuolation	12	0.33	0.38	1.56	0.00	10.14
Mucosal cyst	1	0.03	0.04	0.28	0.00	2.00
Submucosal lipidosis	0	0.00	0.00	0.00	0.00	0.00
Ectopic pancreas	0	0.00	0.00	0.00	0.00	0.00
Cyst(s)	7	0.19	0.20	0.62	0.00	2.90
Dilated glands	894	24.58	25.47	27.95	0.00	92.86
Congestion	7	0.19	0.16	0.54	0.00	2.86
Hemorrhage	6	0.16	0.17	0.54	0.00	2.08
Edema	58	1.59	1.66	2.59	0.00	12.86
Pigment deposition	4	0.11	0.11	0.81	0.00	5.71
Amyloidosis	1	0.03	0.02	0.14	0.00	1.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Mineralization	17	0.47	0.53	1.01	0.00	4.17
Mucosal atrophy	62	1.70	1.36	7.69	0.00	54.00
Lymphoid follicles	23	0.63	0.63	2.50	0.00	14.00
Mononuclear cell foci	24	0.66	0.78	2.02	0.00	8.57
Inflammatory cell foci	42	1.15	1.10	5.10	0.00	29.00
Focal giant cell aggregates	0	0.00	0.00	0.00	0.00	0.00
Parakeratosis	0	0.00	0.00	0.00	0.00	0.00
Erosion/ulceration	110	3.02	3.10	3.38	0.00	13.04
Erosion(s)/forestomach	4	0.11	0.14	0.64	0.00	4.00
Erosion/ glandular stomach	17	0.47	0.46	1.37	0.00	6.06
Ulcer(s)/forestomach	27	0.74	0.68	1.51	0.00	6.06
Ulceration/ glandular stomach	4	0.11	0.13	0.46	0.00	2.08
Granuloma(s)	4	0.11	0.13	0.46	0.00	2.04
Peritonitis	2	0.05	0.04	0.28	0.00	2.00
Periarthritis/arteritis	6	0.16	0.18	0.70	0.00	4.29
Inflammation	176	4.84	4.64	6.70	0.00	30.00
Hyperkeratosis	56	1.54	1.67	2.97	0.00	13.04
Epithelial degeneration	2	0.05	0.06	0.29	0.00	1.49
Basal cell proliferation	12	0.33	0.47	1.51	0.00	6.25
Glandular nodule	26	0.71	0.52	3.68	0.00	26.00
Epithelial hyperplasia	38	1.04	1.12	2.57	0.00	10.00
Hyperplasia	67	1.84	1.54	4.70	0.00	32.00
Mesothelial proliferation	1	0.03	0.04	0.28	0.00	2.00

Forestomach

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	249					
Squamous cyst	1	0.40	0.34	0.58	0.00	1.01
Mononuclear all foci	1	0.40	0.67	1.15	0.00	2.00
Erosions	4	1.61	1.67	0.57	1.01	2.00
Ulceration	13	5.22	4.69	3.10	2.00	8.08
Inflammation	11	4.42	4.33	4.51	0.00	9.00
Hyperkeratosis	6	2.41	2.00	3.46	0.00	6.00
Squamous cell hyperplasia	9	3.61	3.00	5.20	0.00	9.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	249					
Squamous cyst	1	0.40	0.67	1.15	0.00	2.00
Mononuclear all foci	0	0.00	0.00	0.00	0.00	0.00
Erosions	4	1.61	2.00	2.00	0.00	4.00
Ulceration	13	5.22	4.35	3.80	0.00	7.00
Inflammation	15	6.02	6.00	6.00	0.00	12.00
Hyperkeratosis	19	7.63	9.33	9.02	0.00	18.00
Squamous cell hyperplasia	13	5.22	5.33	5.03	0.00	10.00

Glandular Stomach

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	199					
Mineralization	1	0.50	0.67	1.15	0.00	2.00
Mucosal atrophy	1	0.50	0.33	0.58	0.00	1.00
Mononuclear all foci	1	0.50	0.67	1.15	0.00	2.00
Erosion	12	6.03	4.67	5.03	0.00	10.00
Ulceration	0	0.00	0.00	0.00	0.00	0.00
Granuloma	1	0.50	0.33	0.58	0.00	1.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	199					
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Mucosal atrophy	0	0.00	0.00	0.00	0.00	0.00
Mononuclear all foci	0	0.00	0.00	0.00	0.00	0.00
Erosion	15	7.54	6.71	3.04	4.00	10.00
Ulceration	2	1.01	0.67	1.15	0.00	2.00
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Inflammation	4	2.01	1.33	2.31	0.00	4.00

Small Intestine

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2100					
Diverticulum	2	0.10	0.11	0.41	0.00	1.67
Dilated lumen	1	0.05	0.06	0.30	0.00	1.67
Glandular ectasia	4	0.19	0.17	0.91	0.00	5.00
Nematodes	1	0.05	0.06	0.30	0.00	1.67
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	1	0.05	0.07	0.37	0.00	2.00
Digested blood	1	0.05	0.03	0.19	0.00	1.02
Mineralization	6	0.29	0.30	0.87	0.00	3.33
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	4	0.19	0.15	0.46	0.00	1.69

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2181					
Diverticulum	0	0.00	0.00	0.00	0.00	0.00
Dilated lumen	0	0.00	0.00	0.00	0.00	0.00
Glandular ectasia	2	0.09	0.11	0.62	0.00	3.39
Nematodes	0	0.00	0.00	0.00	0.00	0.00
Congestion	1	0.05	0.05	0.27	0.00	1.47
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Digested blood	3	0.14	0.14	0.42	0.00	1.54
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	1	0.05	0.07	0.37	0.00	2.00
Inflammation	1	0.05	0.05	0.28	0.00	1.54

Duodenum

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2227					
Mucosal atrophy	4	0.18	0.13	0.73	0.00	4.00
Mononuclear cell foci	1	0.04	0.05	0.26	0.00	1.43
Diverticulum	1	0.04	0.03	0.17	0.00	0.93
Distended lumen	1	0.04	0.03	0.19	0.00	1.03
Glandular dilation	5	0.22	0.27	1.13	0.00	6.12
Congestion	1	0.04	0.05	0.26	0.00	1.43
Mineralization	5	0.22	0.22	0.52	0.00	2.00
Amyloidosis	1	0.04	0.07	0.37	0.00	2.04
Lymphoid hyperplasia	1	0.04	0.03	0.18	0.00	1.00
Ulceration	0	0.00	0.00	0.00	0.00	0.00
Inflammation	23	1.03	0.77	4.01	0.00	22.00
Mucosal hyperplasia	1	0.04	0.03	0.19	0.00	1.03
Avillous focal hyperplasia	1	0.04	0.03	0.18	0.00	1.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2354					
Mucosal atrophy	1	0.04	0.03	0.18	0.00	1.00
Mononuclear cell foci	2	0.08	0.11	0.44	0.00	2.04
Diverticulum	0	0.00	0.00	0.00	0.00	0.00
Distended lumen	3	0.13	0.10	0.54	0.00	3.06
Glandular dilation	4	0.17	0.25	1.11	0.00	6.00
Congestion	3	0.13	0.09	0.53	0.00	3.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Amyloidosis	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Ulceration	2	0.08	0.08	0.31	0.00	1.43
Inflammation	50	2.12	1.61	8.74	0.00	49.48
Mucosal hyperplasia	6	0.25	0.19	0.75	0.00	3.06
Avillous focal hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Jejunum

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1899					
Diverticulum	3	0.16	0.16	0.49	0.00	2.00
Nematodes	1	0.05	0.03	0.16	0.00	0.83
Cyst(s)	1	0.05	0.04	0.19	0.00	1.00
Dilation	5	0.26	0.25	0.95	0.00	4.48
Congestion	11	0.58	0.76	2.77	0.00	14.00
Lymphangiectasis	1	0.05	0.08	0.39	0.00	2.04
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	2	0.11	0.07	0.38	0.00	2.00
Mucosal atrophy	2	0.11	0.07	0.38	0.00	2.00
Mononuclear cell foci	1	0.05	0.19	0.96	0.00	5.00
Ulcer(s)	2	0.11	0.11	0.41	0.00	1.67
Periarthritis/arteritis	1	0.05	0.07	0.38	0.00	2.00
Inflammation	34	1.79	1.40	5.39	0.00	28.00
Mucosal hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1910					
Diverticulum	3	0.16	0.10	0.29	0.00	1.02
Nematodes	0	0.00	0.00	0.00	0.00	0.00
Cyst(s)	0	0.00	0.00	0.00	0.00	0.00
Dilation	3	0.16	0.10	0.31	0.00	1.05
Congestion	8	0.42	0.46	1.89	0.00	10.00
Lymphangiectasis	0	0.00	0.00	0.00	0.00	0.00
Mineralization	3	0.16	0.22	1.18	0.00	6.25
Lymphoid hyperplasia	7	0.37	0.32	0.90	0.00	4.08
Mucosal atrophy	2	0.10	0.10	0.37	0.00	1.69
Mononuclear cell foci	1	0.05	0.07	0.39	0.00	2.04
Ulcer(s)	1	0.05	0.04	0.19	0.00	1.01
Periarthritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	48	2.51	1.78	9.06	0.00	47.96
Mucosal hyperplasia	1	0.05	0.07	0.38	0.00	2.00

Ileum

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1810					
Blood in lumen	1	0.06	0.06	0.29	0.00	1.43
Nematode(s)	0	0.00	0.00	0.00	0.00	0.00
Pigment	1	0.06	0.04	0.20	0.00	1.00
Dilation	3	0.17	0.14	0.39	0.00	1.43
Congestion	1	0.06	0.06	0.29	0.00	1.43
Lymphoid hyperplasia	4	0.22	0.16	0.45	0.00	1.45
Mucosal atrophy	4	0.22	0.17	0.82	0.00	4.00
Mononuclear cell foci	1	0.06	0.06	0.29	0.00	1.43
Ulceration	1	0.06	0.04	0.18	0.00	0.89
Periarthritis/arteritis	2	0.11	0.08	0.41	0.00	2.00
Inflammation	10	0.55	0.63	1.87	0.00	7.25

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1893					
Blood in lumen	0	0.00	0.00	0.00	0.00	0.00
Nematode(s)	2	0.11	0.09	0.33	0.00	1.43
Pigment	0	0.00	0.00	0.00	0.00	0.00
Dilation	4	0.21	0.17	0.41	0.00	1.43
Congestion	6	0.32	0.37	0.91	0.00	4.00
Lymphoid hyperplasia	3	0.16	0.20	0.55	0.00	2.00
Mucosal atrophy	1	0.05	0.04	0.20	0.00	1.00
Mononuclear cell foci	0	0.00	0.00	0.00	0.00	0.00
Ulceration	1	0.05	0.04	0.20	0.00	1.01
Periarthritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00

Large Intestine

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rat examined	2543					
Dilated lumen	4	0.16	0.18	0.76	0.00	3.28
Nematodes	72	2.83	2.98	5.11	0.00	15.52
Congestion	1	0.04	0.05	0.28	0.00	1.67
Hemorrhage	2	0.08	0.10	0.43	0.00	2.00
Edema	3	0.12	0.12	0.41	0.00	1.67
Lymphoid hyperplasia	2	0.08	0.10	0.42	0.00	2.00
Mineralization	7	0.28	0.28	0.88	0.00	4.76
Erosion(s)	2	0.08	0.09	0.38	0.00	1.67
Granuloma(s)	2	0.08	0.10	0.57	0.00	3.45
Periarthritis/arteritis	1	0.04	0.03	0.17	0.00	1.02
Inflammation	5	0.20	0.21	0.61	0.00	2.04

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rat examined	2562					
Dilated lumen	0	0.00	0.00	0.00	0.00	0.00
Nematodes	60	2.34	2.42	4.14	0.00	13.56
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Edema	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	3	0.12	0.15	0.70	0.00	4.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Erosion(s)	0	0.00	0.00	0.00	0.00	0.00
Granuloma(s)	1	0.04	0.05	0.28	0.00	1.69
Periarthritis/arteritis	1	0.04	0.03	0.17	0.00	1.01
Inflammation	1	0.04	0.03	0.17	0.00	1.01

Cecum

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2365					
Nematodes	11	0.47	0.38	1.28	0.00	6.00
Congestion	10	0.42	0.33	0.97	0.00	4.00
Hemorrhage	5	0.21	0.22	0.74	0.00	2.86
Edema	10	0.42	0.38	0.86	0.00	3.00
Mineralization	6	0.25	0.23	0.55	0.00	2.00
Amyloidosis	2	0.08	0.13	0.71	0.00	4.00
Lymphoid hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	2	0.08	0.09	0.35	0.00	1.43
Ulcer(s)	6	0.25	0.29	0.89	0.00	4.29
Periarthritis/arteritis	3	0.13	0.12	0.39	0.00	1.43
Vasculitis	1	0.04	0.03	0.18	0.00	1.00
Inflammation	41	1.73	1.81	3.73	0.00	14.29
Collagen increased	2	0.08	0.08	0.30	0.00	1.43
Fibrosis	14	0.59	0.40	2.12	0.00	12.00
Mucosal hyperplasia	1	0.04	0.03	0.16	0.00	0.91
Hyperemia	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2360					
Nematodes	2	0.08	0.06	0.25	0.00	1.00
Congestion	9	0.38	0.36	1.00	0.00	4.00
Hemorrhage	4	0.17	0.22	0.79	0.00	4.08
Edema	6	0.25	0.29	0.84	0.00	4.08
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Amyloidosis	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	11	0.47	0.39	1.86	0.00	10.42
Mononuclear cell foci	2	0.08	0.09	0.35	0.00	1.45
Ulcer(s)	0	0.00	0.00	0.00	0.00	0.00
Periarthritis/arteritis	4	0.17	0.14	0.60	0.00	3.13
Vasculitis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	12	0.51	0.53	1.71	0.00	8.70
Collagen increased	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	7	0.30	0.31	1.77	0.00	10.00
Mucosal hyperplasia	1	0.04	0.06	0.35	0.00	2.00
Hyperemia	1	0.04	0.04	0.25	0.00	1.43

Colon

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2563					
Diverticulum	1	0.04	0.05	0.28	0.00	1.67
Dilation	6	0.23	0.20	0.51	0.00	2.04
Nematodes	80	3.12	3.07	2.91	0.00	10.00
Edema	7	0.27	0.36	0.74	0.00	2.00
Congestion	3	0.12	0.17	0.75	0.00	4.00
Lymphoid hyperplasia	24	0.94	1.24	4.86	0.00	28.00
Mineralization	12	0.47	0.50	1.09	0.00	4.00
Mucosal atrophy	2	0.08	0.06	0.34	0.00	2.00
Mononuclear cell foci	1	0.04	0.04	0.24	0.00	1.43
Periarthritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Ulcer(s)	2	0.08	0.08	0.34	0.00	1.43
Inflammation	39	1.52	1.82	5.50	0.00	28.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2615					
Diverticulum	0	0.00	0.00	0.00	0.00	0.00
Dilation	10	0.38	0.30	1.37	0.00	8.00
Nematodes	69	2.64	2.43	2.07	0.00	8.00
Edema	2	0.08	0.11	0.46	0.00	2.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	3	0.11	0.17	0.74	0.00	4.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Mucosal atrophy	1	0.04	0.03	0.17	0.00	1.01
Mononuclear cell foci	2	0.08	0.08	0.33	0.00	1.43
Periarthritis/arteritis	1	0.04	0.04	0.24	0.00	1.43
Ulcer(s)	0	0.00	0.00	0.00	0.00	0.00
Inflammation	21	0.80	1.11	5.99	0.00	36.00

Rectum

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1859					
Dilation	33	1.78	1.34	4.75	0.00	22.00
Nematodes	95	5.11	5.08	3.09	0.00	10.00
Mineralization	4	0.22	0.16	0.62	0.00	3.00
Mucosal atrophy	1	0.05	0.04	0.20	0.00	1.00
Collagen increased	1	0.05	0.00	0.00	0.00	0.00
Inflammation	12	0.65	0.69	1.99	0.00	7.14

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1909					
Dilation	47	2.46	1.81	6.57	0.00	29.00
Nematodes	79	4.14	4.09	2.71	0.00	9.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Mucosal atrophy	1	0.05	0.04	0.20	0.00	1.00
Collagen increased	0	0.00	0.00	0.00	0.00	0.00
Inflammation	14	0.73	0.73	2.32	0.00	8.57

Salivary Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2798					
Cyst	1	0.04	0.05	0.32	0.00	2.00
Ductal ectasia	19	0.68	0.74	2.56	0.00	12.00
Edema	0	0.00	0.00	0.00	0.00	0.00
Mineralization	5	0.18	0.13	0.57	0.00	2.99
Concretions	1	0.04	0.02	0.13	0.00	0.83
Angiopathy	0	0.00	0.00	0.00	0.00	0.00
Alveolar atrophy	10	0.36	0.32	1.04	0.00	5.77
Mononuclear cell foci	18	0.64	0.47	1.62	0.00	9.09
Fibrosis	6	0.21	0.16	0.60	0.00	3.00
Inflammation	38	1.36	1.09	2.94	0.00	12.50
Periarthritis/arteritis	2	0.07	0.07	0.32	0.00	1.72
Ductal hyperplasia	5	0.18	0.13	0.81	0.00	5.05
Acinar hyperplasia	2	0.07	0.04	0.24	0.00	1.49
Hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Squamous metaplasia	2	0.07	0.10	0.62	0.00	3.85

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2799					
Cyst	0	0.00	0.00	0.00	0.00	0.00
Ductal ectasia	18	0.64	0.79	3.28	0.00	19.61
Edema	0	0.00	0.00	0.00	0.00	0.00
Mineralization	1	0.04	0.02	0.13	0.00	0.83
Concretions	1	0.04	0.05	0.32	0.00	2.00
Angiopathy	2	0.07	0.05	0.32	0.00	2.02
Alveolar atrophy	8	0.29	0.21	0.99	0.00	6.06
Mononuclear cell foci	22	0.79	0.82	1.86	0.00	8.00
Fibrosis	5	0.18	0.15	0.59	0.00	3.23
Inflammation	27	0.96	0.77	2.69	0.00	12.86
Periarthritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Ductal hyperplasia	4	0.14	0.10	0.65	0.00	4.04
Acinar hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Hyperplasia	1	0.04	0.03	0.16	0.00	1.00
Squamous metaplasia	4	0.14	0.18	0.95	0.00	5.88

Parotid Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	270					
Ectopic gland tissue	0	0.00	0.00	0.00	0.00	0.00
Ductular ectasia	0	0.00	0.00	0.00	0.00	0.00
Vacuolation: acinar	1	0.37	0.33	0.58	0.00	1.00
Congestion	1	0.37	0.28	0.48	0.00	0.83
Acinar atrophy	18	6.67	5.44	4.72	0.00	8.33
Basophilic acini	5	1.85	1.50	1.32	0.00	2.50
Mononuclear foci	6	2.22	1.89	2.01	0.00	4.00
Granulocytosis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	1	0.37	0.28	0.48	0.00	0.83
Fibrosis	2	0.74	0.56	0.96	0.00	1.67
Acinar hyperplasia	1	0.37	0.28	0.48	0.00	0.83

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	269					
Ectopic gland tissue	1	0.37	0.28	0.48	0.00	0.83
Ductular ectasia	2	0.74	0.67	1.17	0.00	2.02
Vacuolation: acinar	3	1.12	1.01	1.75	0.00	3.03
Congestion	0	0.00	0.00	0.00	0.00	0.00
Acinar atrophy	18	6.69	5.47	4.74	0.00	8.33
Basophilic acini	26	9.67	7.52	9.01	0.00	17.50
Mononuclear foci	6	2.23	1.96	2.71	0.00	5.05
Granulocytosis	1	0.37	0.34	0.58	0.00	1.01
Inflammation	7	2.60	2.06	2.08	0.00	4.17
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Acinar hyperplasia	1	0.37	0.28	0.48	0.00	0.83

Sublingual Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2224					
Ectopic salivary gland	37	1.66	1.70	5.18	0.00	26.00
Cyst(s)	0	0.00	0.00	0.00	0.00	0.00
Ductal ectasia	2	0.09	0.10	0.40	0.00	2.04
Congestion	7	0.31	0.31	1.77	0.00	10.00
Edema	2	0.09	0.10	0.39	0.00	1.69
Mineralization	3	0.13	0.09	0.54	0.00	3.03
Atrophy	25	1.12	0.96	1.92	0.00	8.08
Mononuclear cell foci	44	1.98	1.87	3.01	0.00	10.20
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Inflammation	18	0.81	0.86	2.65	0.00	11.76
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Ductular hyperplasia	1	0.04	0.03	0.18	0.00	1.00
Hyperplasia	4	0.18	0.12	0.42	0.00	2.02

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2211					
Ectopic salivary gland	57	2.58	2.65	7.20	0.00	34.00
Cyst(s)	2	0.09	0.08	0.31	0.00	1.45
Ductal ectasia	0	0.00	0.00	0.00	0.00	0.00
Congestion	2	0.09	0.11	0.44	0.00	2.04
Edema	0	0.00	0.00	0.00	0.00	0.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Atrophy	23	1.04	0.96	2.08	0.00	10.00
Mononuclear cell foci	32	1.45	1.33	2.34	0.00	10.00
Granuloma	3	0.14	0.11	0.44	0.00	2.00
Inflammation	19	0.86	0.81	1.89	0.00	8.57
Fibrosis	1	0.05	0.06	0.35	0.00	2.00
Ductular hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Hyperplasia	5	0.23	0.17	0.49	0.00	2.02

(Sub)-Mandibular Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2266					
Anomaly	1	0.04	0.03	0.18	0.00	1.01
Ectopic parotid gland acini	1	0.04	0.03	0.18	0.00	1.00
Cyst(s)	0	0.00	0.00	0.00	0.00	0.00
Ductal ectasia	5	0.22	0.22	0.65	0.00	2.94
Secretory reduction	1	0.04	0.03	0.18	0.00	1.00
Congestion	9	0.40	0.40	2.27	0.00	12.86
Edema	1	0.04	0.04	0.25	0.00	1.43
Vascular mineralization	3	0.13	0.13	0.49	0.00	2.02
Mineralization	3	0.13	0.14	0.57	0.00	2.90
Atrophy	36	1.59	1.49	2.53	0.00	9.09
Mononuclear cell foci	25	1.10	1.00	1.81	0.00	8.08
Granuloma	1	0.04	0.05	0.28	0.00	1.56
Inflammation	28	1.24	1.30	2.11	0.00	8.96
Interstitial fibrosis	2	0.09	0.11	0.43	0.00	2.00
Acinar hypertrophy	2	0.09	0.06	0.35	0.00	2.00
Ductular proliferation	0	0.00	0.00	0.00	0.00	0.00
Hyperplasia	1	0.04	0.05	0.30	0.00	1.69

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3600					
Anomaly	0	0.00	0.00	0.00	0.00	0.00
Ectopic parotid gland acini	2	0.06	0.04	0.28	0.00	2.00
Cyst(s)	1	0.03	0.04	0.28	0.00	2.00
Ductal ectasia	1	0.03	0.02	0.12	0.00	0.84
Secretory reduction	1	0.03	0.02	0.14	0.00	1.00
Congestion	4	0.11	0.13	0.68	0.00	4.41
Edema	1	0.03	0.04	0.28	0.00	2.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Atrophy	29	0.81	0.80	2.30	0.00	14.00
Mononuclear cell foci	36	1.00	0.87	3.20	0.00	22.00
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Inflammation	20	0.56	0.63	2.19	0.00	14.29
Interstitial fibrosis	1	0.03	0.04	0.28	0.00	2.00
Acinar hypertrophy	1	0.03	0.04	0.30	0.00	2.13
Ductular proliferation	1	0.03	0.03	0.24	0.00	1.67
Hyperplasia	1	0.03	0.03	0.21	0.00	1.47

Urinary Bladder

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3578					
Embryological rests	0	0.00	0.00	0.00	0.00	0.00
Ectasia	84	2.35	2.18	3.57	0.00	18.18
Congestion	20	0.56	0.51	1.36	0.00	7.14
Hemorrhage	17	0.48	0.46	0.90	0.00	4.29
Edema	11	0.31	0.31	0.83	0.00	4.35
Angiectasis	1	0.03	0.02	0.12	0.00	0.83
Mineralization	5	0.14	0.14	0.58	0.00	2.86
Urolith(s)	11	0.31	0.33	1.04	0.00	5.71
Vascular mineralization	1	0.03	0.02	0.14	0.00	1.00
Colloid plug	4	0.11	0.16	0.67	0.00	4.00
Collagenization	1	0.03	0.03	0.20	0.00	1.43
Mononuclear cell foci	234	6.54	6.69	6.22	0.00	24.49
Granuloma(s)	2	0.06	0.06	0.32	0.00	2.04
Serositis	3	0.08	0.07	0.35	0.00	2.00
Arteritis/periarteritis	1	0.03	0.03	0.21	0.00	1.47
Pericystitis	1	0.03	0.02	0.15	0.00	1.02
Inflammation	104	2.91	3.04	3.48	0.00	16.92
Muscular hypertrophy	13	0.36	0.39	2.11	0.00	14.29
Urothelial hyperplasia	49	1.37	1.47	2.04	0.00	10.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3555					
Embryological rests	2	0.06	0.06	0.29	0.00	1.43
Ectasia	31	0.87	0.87	1.83	0.00	9.00
Congestion	5	0.14	0.12	0.35	0.00	1.43
Hemorrhage	2	0.06	0.04	0.21	0.00	1.11
Edema	2	0.06	0.06	0.30	0.00	1.59
Angiectasis	1	0.03	0.02	0.14	0.00	1.01
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Urolith(s)	5	0.14	0.14	0.46	0.00	2.04
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Colloid plug	0	0.00	0.00	0.00	0.00	0.00
Collagenization	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	139	3.91	4.22	4.69	0.00	16.16
Granuloma(s)	0	0.00	0.00	0.00	0.00	0.00
Serositis	2	0.06	0.07	0.36	0.00	2.08
Arteritis/periarteritis	0	0.00	0.00	0.00	0.00	0.00
Pericystitis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	25	0.70	0.66	1.22	0.00	5.88
Muscular hypertrophy	8	0.23	0.32	2.01	0.00	14.00
Urothelial hyperplasia	19	0.53	0.54	1.26	0.00	7.35

Ureter

* single studies only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	109					
Dilation	2	1.83	40.00	54.77	0.00	100.00
Calculi	0	0.00	0.00	0.00	0.00	0.00
Necrosis	1	0.92	20.00	44.72	0.00	100.00
Inflammation	1	0.92	20.00	44.72	0.00	100.00
Urothelial hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Hypertrophy muscularis	1	0.92	20.00	44.72	0.00	100.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	159					
Dilation	5	3.14	40.38	54.43	0.00	100.00
Calculi	1	0.63	10.00	22.36	0.00	50.00
Necrosis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00
Urothelial hyperplasia	1	0.63	10.00	22.36	0.00	50.00
Hypertrophy muscularis	0	0.00	0.00	0.00	0.00	0.00

Kidneys

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3641					
Bacterial colonies	1	0.03	0.03	0.20	0.00	1.43
Adipocyte focus	0	0.00	0.00	0.00	0.00	0.00
Hypoplasia	1	0.03	0.03	0.20	0.00	1.43
Cystic kidney	2	0.05	0.06	0.28	0.00	1.43
Cortical cyst(s)	134	3.68	3.39	4.87	0.00	29.00
Tubular cyst(s)	5	0.14	0.17	0.71	0.00	4.29
Hemorrhagic cyst(s)	1	0.03	0.04	0.28	0.00	2.00
Pelvic dilation	187	5.14	5.06	4.53	0.00	19.40
Tubular dilation	522	14.34	13.69	25.81	0.00	97.14
Dilated bowman's capsules	14	0.38	0.48	1.85	0.00	10.20
Congestion	86	2.36	2.58	5.25	0.00	23.33
Hemorrhage	4	0.11	0.09	0.47	0.00	3.00
Angiectasis	40	1.10	1.28	3.77	0.00	22.00
Hyaline droplets	113	3.10	3.40	11.73	0.00	65.00
Tubular pigmentation	648	17.80	17.29	31.56	0.00	96.67
Hemosiderosis	163	4.48	4.57	19.46	0.00	100.00
Amyloidosis	15	0.41	0.52	2.02	0.00	10.20
Interstitial pigment	84	2.31	1.68	11.88	0.00	84.00
Cholesterol clefts	0	0.00	0.00	0.00	0.00	0.00
Corticomed. mineralization	207	5.69	4.99	14.46	0.00	73.74
Cortical mineralization	162	4.45	4.63	8.26	0.00	36.00
Medullary mineralization	153	4.20	4.44	10.67	0.00	46.38
Glomerular mineralization	2	0.05	0.06	0.40	0.00	2.86
Basm. Membr. Mineralization	1	0.03	0.03	0.20	0.00	1.43
Pelvic mineralization	740	20.32	21.43	19.69	0.00	73.00
Vascular mineralization	1	0.03	0.03	0.20	0.00	1.43
Osseous metaplasia	1	0.03	0.04	0.28	0.00	2.00
Tubular vacuolation	15	0.41	0.45	1.13	0.00	6.00
Tubular basophilia	736	20.21	20.95	28.75	0.00	95.71
Tubular atrophy	357	9.80	9.89	19.96	0.00	91.43
Tubular casts	872	23.95	23.98	30.41	0.00	95.71
Tubulonephrosis	1	0.03	0.03	0.20	0.00	1.43
Renal atrophy	1	0.03	0.04	0.28	0.00	2.00
Glomerulosclerosis	285	7.83	8.47	18.32	0.00	68.57
Mononuclear cell foci	1541	42.32	43.39	30.70	0.00	97.00
Mixed cell infiltration	1	0.03	0.04	0.28	0.00	2.00
Granulopoiesis	0	0.00	0.00	0.00	0.00	0.00
Debris in pelvis	103	2.83	2.51	9.10	0.00	52.00
Tubular cell necrosis	2	0.05	0.05	0.23	0.00	1.43
Necrosis	20	0.55	0.54	1.55	0.00	10.00
Granuloma(s)	4	0.11	0.12	0.46	0.00	2.08
Microabscess	14	0.38	0.42	1.20	0.00	7.14
Abscess	1	0.03	0.04	0.28	0.00	2.00
Thrombus / Thrombi	0	0.00	0.00	0.00	0.00	0.00
Pyelitis	265	7.28	7.18	7.63	0.00	28.00
Perinephritis	1	0.03	0.03	0.20	0.00	1.43
Arteritis/periarteritis	3	0.08	0.09	0.45	0.00	2.86
Inflammation interstitial	0	0.00	0.00	0.00	0.00	0.00

Kidneys

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Inflammation	144	3.95	4.20	6.68	0.00	30.43
Chr. Prog. Nephropathy	1947	53.47	56.26	25.68	0.00	100.00
Granular cell focus	1	0.03	0.02	0.14	0.00	1.00
Papillary edema	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	183	5.03	5.05	9.46	0.00	36.00
Tubular hypertrophy	6	0.16	0.18	0.56	0.00	2.04
Urothelial hyperplasia	216	5.93	5.98	8.01	0.00	32.00
Tubular hyperplasia	32	0.88	0.82	1.70	0.00	7.07

Kidneys

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3599					
Bacterial colonies	0	0.00	0.00	0.00	0.00	0.00
Adipocyte focus	1	0.03	0.04	0.29	0.00	2.00
Hypoplasia	0	0.00	0.00	0.00	0.00	0.00
Cystic kidney	0	0.00	0.00	0.00	0.00	0.00
Cortical cyst(s)	49	1.36	1.33	1.95	0.00	8.33
Tubular cyst(s)	6	0.17	0.20	0.70	0.00	4.00
Hemorrhagic cyst(s)	5	0.14	0.18	0.74	0.00	4.00
Pelvic dilation	141	3.92	4.04	4.37	0.00	22.00
Tubular dilation	506	14.06	13.98	23.88	0.00	92.86
Dilated bowman's capsules	7	0.19	0.21	0.80	0.00	4.08
Congestion	42	1.17	1.29	3.21	0.00	16.67
Hemorrhage	1	0.03	0.03	0.20	0.00	1.43
Angiectasis	33	0.92	1.03	2.70	0.00	10.20
Hyaline droplets	31	0.86	0.93	2.45	0.00	10.34
Tubular pigmentation	1192	33.12	33.13	39.13	0.00	100.00
Hemosiderosis	247	6.86	7.39	20.09	0.00	100.00
Amyloidosis	1	0.03	0.04	0.29	0.00	2.00
Interstitial pigment	72	2.00	1.47	10.29	0.00	72.00
Cholesterol clefts	1	0.03	0.04	0.29	0.00	2.04
Corticomed. mineralization	1195	33.20	34.29	39.01	0.00	98.00
Cortical mineralization	700	19.45	19.70	33.01	0.00	96.00
Medullary mineralization	398	11.06	11.37	25.47	0.00	96.88
Glomerular mineralization	0	0.00	0.00	0.00	0.00	0.00
Basm. Membr. Mineralization	0	0.00	0.00	0.00	0.00	0.00
Pelvic mineralization	1849	51.38	53.27	31.66	0.00	100.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Osseous metaplasia	0	0.00	0.00	0.00	0.00	0.00
Tubular vacuolation	17	0.47	0.52	1.19	0.00	6.00
Tubular basophilia	828	23.01	24.39	29.25	0.00	87.14
Tubular atrophy	423	11.75	12.41	21.37	0.00	82.61
Tubular casts	887	24.65	25.61	29.39	0.00	91.30
Tubulonephrosis	3	0.08	0.10	0.52	0.00	3.33
Renal atrophy	2	0.06	0.08	0.37	0.00	2.00
Glomerulosclerosis	122	3.39	3.23	9.79	0.00	57.00
Mononuclear cell foci	1560	43.35	45.20	30.70	0.00	95.00
Mixed cell infiltration	0	0.00	0.00	0.00	0.00	0.00
Granulopoiesis	1	0.03	0.02	0.14	0.00	1.00
Debris in pelvis	74	2.06	1.68	7.42	0.00	50.00
Tubular cell necrosis	13	0.36	0.41	1.30	0.00	6.00
Necrosis	17	0.47	0.52	1.93	0.00	12.00
Granuloma(s)	5	0.14	0.17	1.19	0.00	8.33
Microabscess	11	0.31	0.29	1.41	0.00	8.00
Abscess	0	0.00	0.00	0.00	0.00	0.00
Thrombus / Thrombi	1	0.03	0.03	0.21	0.00	1.45
Pyelitis	144	4.00	4.01	8.03	0.00	34.29
Perinephritis	2	0.06	0.06	0.32	0.00	1.69
Arteritis/periarteritis	12	0.33	0.31	0.77	0.00	4.00
Inflammation interstitial	1	0.03	0.04	0.29	0.00	2.04

Kidneys

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Inflammation	117	3.25	3.44	10.93	0.00	74.29
Chr. Prog. Nephropathy	756	21.01	22.39	19.08	0.00	72.00
Granular cell focus	0	0.00	0.00	0.00	0.00	0.00
Papillary edema	1	0.03	0.03	0.22	0.00	1.56
Fibrosis	161	4.47	4.19	11.08	0.00	66.00
Tubular hypertrophy	21	0.58	0.61	2.51	0.00	17.14
Urothelial hyperplasia	524	14.56	15.61	20.22	0.00	62.00
Tubular hyperplasia	21	0.58	0.55	1.24	0.00	6.00

Skin and Subcutis

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3563					
Auricular chondropathy	7	0.20	0.18	0.76	0.00	4.00
Epidermoid cyst	64	1.80	1.89	2.02	0.00	7.25
Telogen Hair	0	0.00	0.00	0.00	0.00	0.00
Congestion	2	0.06	0.05	0.23	0.00	1.45
Hemorrhage	2	0.06	0.05	0.24	0.00	1.43
Edema	0	0.00	0.00	0.00	0.00	0.00
Distended follicles	7	0.20	0.14	1.00	0.00	7.07
Alopecia	6	0.17	0.10	0.71	0.00	5.00
Encrustation	3	0.08	0.12	0.63	0.00	4.00
Hair follicle crusting	2	0.06	0.06	0.42	0.00	2.94
Follicular keratosis	16	0.45	0.49	1.58	0.00	7.25
Atrophy of adnexum	182	5.11	5.43	13.84	0.00	82.00
Osseous metaplasia	5	0.14	0.13	0.55	0.00	3.03
Mononuclear cell foci	12	0.34	0.41	1.30	0.00	6.00
Abscess	20	0.56	0.60	1.08	0.00	4.00
Fat necrosis	1	0.03	0.02	0.14	0.00	1.01
Tail necrosis	0	0.00	0.00	0.00	0.00	0.00
Necrosis	1	0.03	0.03	0.20	0.00	1.43
Tail: Fracture	2	0.06	0.04	0.28	0.00	2.00
Granuloma	5	0.14	0.12	0.41	0.00	2.02
Periarthritis/arteritis	1	0.03	0.04	0.28	0.00	2.00
Folliculitis	19	0.53	0.46	2.40	0.00	15.15
Pododermatitis	65	1.82	3.57	14.95	0.00	100.00
Panniculitis	1	0.03	0.03	0.24	0.00	1.67
Inflammation dermal	6	0.17	0.19	0.71	0.00	4.00
Inflammation: tail	2	0.06	0.04	0.22	0.00	1.37
Scab/ ulceration	5	0.14	0.14	0.70	0.00	4.00
Inflammation	82	2.30	2.18	2.81	0.00	13.13
Botryomycosis	1	0.03	0.04	0.28	0.00	2.00
Collagenosis	1	0.03	0.03	0.19	0.00	1.37
Fibrosis	18	0.51	0.44	1.12	0.00	5.48
Basal cell hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Hyperkeratosis	51	1.43	1.70	7.66	0.00	54.00
Intracutaneous keratosis	1	0.03	0.02	0.12	0.00	0.83
Parakeratosis	1	0.03	0.02	0.14	0.00	1.01
Acanthosis	16	0.45	0.38	1.07	0.00	5.83
Epidermal hyperplasia	1	0.03	0.02	0.14	0.00	1.01
Sebaceous hyperplasia	4	0.11	0.16	0.68	0.00	4.00
Cartilaginous hyperplasia	3	0.08	0.08	0.38	0.00	2.00
Hyperplasia	41	1.15	0.90	4.49	0.00	31.31

Skin and Subcutis

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3546					
Auricular chondropathy	5	0.14	0.15	0.64	0.00	4.00
Epidermoid cyst	14	0.39	0.40	0.90	0.00	4.00
Telogen Hair	1	0.03	0.04	0.29	0.00	2.00
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	2	0.06	0.04	0.20	0.00	1.01
Edema	2	0.06	0.05	0.25	0.00	1.47
Distended follicles	4	0.11	0.08	0.57	0.00	4.00
Alopecia	3	0.08	0.08	0.31	0.00	1.45
Encrustation	3	0.08	0.11	0.61	0.00	4.08
Hair follicle crusting	6	0.17	0.18	1.24	0.00	8.70
Follicular keratosis	14	0.39	0.39	1.17	0.00	5.88
Atrophy of adnexum	214	6.03	6.56	15.89	0.00	92.00
Osseous metaplasia	2	0.06	0.04	0.29	0.00	2.00
Mononuclear cell foci	22	0.62	0.63	2.34	0.00	14.00
Abscess	1	0.03	0.03	0.24	0.00	1.67
Fat necrosis	1	0.03	0.03	0.24	0.00	1.67
Tail necrosis	0	0.00	0.00	0.00	0.00	0.00
Necrosis	0	0.00	0.00	0.00	0.00	0.00
Tail: Fracture	1	0.03	0.02	0.14	0.00	1.00
Granuloma	3	0.08	0.07	0.35	0.00	2.00
Periarthritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Folliculitis	16	0.45	0.42	1.70	0.00	10.00
Pododermatitis	3	0.08	0.09	0.38	0.00	2.04
Panniculitis	0	0.00	0.00	0.00	0.00	0.00
Inflammation dermal	8	0.23	0.26	0.82	0.00	4.00
Inflammation: tail	0	0.00	0.00	0.00	0.00	0.00
Scab/ ulceration	3	0.08	0.10	0.59	0.00	4.00
Inflammation	49	1.38	1.32	2.39	0.00	13.00
Botryomycosis	0	0.00	0.00	0.00	0.00	0.00
Collagenosis	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	20	0.56	0.39	1.34	0.00	7.50
Basal cell hyperplasia	1	0.03	0.03	0.21	0.00	1.49
Hyperkeratosis	68	1.92	1.76	5.63	0.00	31.00
Intracutaneous keratosis	0	0.00	0.00	0.00	0.00	0.00
Parakeratosis	0	0.00	0.00	0.00	0.00	0.00
Acanthosis	26	0.73	0.65	1.61	0.00	8.00
Epidermal hyperplasia	5	0.14	0.12	0.55	0.00	3.39
Sebaceous hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Cartilaginous hyperplasia	3	0.08	0.06	0.39	0.00	2.73
Hyperplasia	16	0.45	0.37	1.65	0.00	11.00

Ears

* single studies only or gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	5					
Pigmented macrophages	0	0.00	0.00	0.00	0.00	0.00
Scab/encrusted epithelial and inflammatory cell debris	0	0.00	0.00	0.00	0.00	0.00
Epithelial hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Inflammation	2	40.00	41.67	11.79	33.33	50.00
Auricular chondropathy	4	80.00	75.00	35.36	50.00	100.00
Rupture	1	20.00	25.00	35.36	0.00	50.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	22					
Pigmented macrophages	2	9.09	4.76	11.66	0.00	28.57
Scab/encrusted epithelial and inflammatory cell debris	1	4.55	2.38	5.83	0.00	14.29
Epithelial hyperplasia	1	4.55	2.38	5.83	0.00	14.29
Inflammation	3	13.64	7.14	17.50	0.00	42.86
Auricular chondropathy	16	72.73	83.33	40.82	0.00	100.00
Rupture	0	0.00	0.00	0.00	0.00	0.00

Testes

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3617					
Dilation/rete testis	1	0.03	0.04	0.28	0.00	2.00
Capsular dilatation	2	0.06	0.03	0.24	0.00	1.67
Spermatocele	18	0.50	0.51	1.14	0.00	5.00
Congestion	21	0.58	0.60	2.34	0.00	15.71
Hemorrhage	5	0.14	0.16	0.50	0.00	2.00
Edema	182	5.03	4.54	8.85	0.00	37.37
Vascular hyalinosis	3	0.08	0.09	0.34	0.00	1.43
Amyloidosis	1	0.03	0.04	0.28	0.00	2.00
Mineralization	164	4.53	4.60	3.73	0.00	13.13
Angiopathy	7	0.19	0.20	1.41	0.00	10.00
Oligospermia	5	0.14	0.13	0.55	0.00	3.00
Aspermia	16	0.44	0.60	2.14	0.00	12.00
Maturation arrest	3	0.08	0.09	0.45	0.00	2.86
Sperm stasis	48	1.33	1.37	3.65	0.00	20.00
Giant cells	17	0.47	0.48	1.20	0.00	4.29
Tubular degeneration	812	22.45	22.04	15.55	0.00	99.00
Mononuclear cell foci	5	0.14	0.13	0.58	0.00	2.86
Granuloma(s)	18	0.50	0.54	2.12	0.00	14.49
Periarteritis/arteritis	327	9.04	8.81	8.81	0.00	40.58
Inflammation	1	0.03	0.04	0.28	0.00	2.00
Fibrosis	4	0.11	0.11	0.44	0.00	2.02
Leydig cell hyperplasia	120	3.32	3.43	4.52	0.00	22.00

Epididymides

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3517					
Edema	1	0.03	0.02	0.12	0.00	0.83
Hemorrhage	1	0.03	0.02	0.14	0.00	1.00
Tubular dilatation	14	0.40	1.29	7.18	0.00	50.00
Spermatocele	1	0.03	0.02	0.14	0.00	1.01
Mineralization	1	0.03	0.02	0.14	0.00	1.00
Vacuolization	186	5.29	4.63	11.75	0.00	53.33
Cell debris in lumen	38	1.08	1.18	3.20	0.00	14.49
Giant cells	1	0.03	0.04	0.28	0.00	2.00
Oligospermia	237	6.74	5.82	13.39	0.00	93.00
Aspermia	291	8.27	9.96	14.01	0.00	100.00
Oligo/azoospermia	23	0.65	0.80	2.98	0.00	16.00
Atrophy	38	1.08	0.90	2.15	0.00	9.17
Sperm stasis	1	0.03	0.03	0.21	0.00	1.47
Degeneration	98	2.79	1.96	13.86	0.00	98.00
Mononuclear cell foci	143	4.07	4.24	11.22	0.00	61.43
Abscess	2	0.06	0.06	0.31	0.00	1.69
Sperm granuloma(s)	13	0.37	1.31	7.07	0.00	50.00
Hyaline vascular change	1	0.03	0.03	0.21	0.00	1.47
Periarteritis/arteritis	8	0.23	0.22	0.71	0.00	3.39
Inflammation	10	0.28	0.26	0.62	0.00	2.86

Prostate

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3608					
Mucous cyst	1	0.03	0.03	0.20	0.00	1.41
Distension	15	0.42	0.43	1.28	0.00	8.33
Inspissated secretion	6	0.17	0.15	0.68	0.00	4.29
Pigment deposition	2	0.06	0.06	0.40	0.00	2.86
Concretions	340	9.42	7.65	24.43	0.00	96.67
Mineralization	6	0.17	0.19	0.80	0.00	4.29
Hemorrhage	2	0.06	0.04	0.29	0.00	2.02
Hemosiderin	1	0.03	0.03	0.20	0.00	1.41
Edema	16	0.44	0.45	1.50	0.00	7.25
Congestion	5	0.14	0.14	0.83	0.00	5.71
Reduced secretion	4	0.11	0.14	0.58	0.00	3.33
Alveolar atrophy	329	9.12	7.66	16.64	0.00	89.80
Epithelial degeneration	2	0.06	0.08	0.40	0.00	2.00
Epithelial vacuolation	7	0.19	0.19	1.20	0.00	8.45
Squamous metaplasia	13	0.36	0.35	1.43	0.00	8.70
Mononuclear cell foci	162	4.49	4.80	8.37	0.00	36.23
Abscess	10	0.28	0.27	1.03	0.00	5.80
Arteritis	3	0.08	0.08	0.35	0.00	1.67
Inflammation	1025	28.41	29.13	16.11	2.04	78.57
Interstitial fibrosis	16	0.44	0.47	2.02	0.00	10.14
Hyperplasia	169	4.68	4.23	9.05	0.00	55.00

Coagulating Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	101					
Atrophy	20	19.80	10.00	14.14	0.00	20.00
Dilation	0	0.00	0.00	0.00	0.00	0.00
Inflammation	6	5.94	52.50	67.18	5.00	100.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	0					
Atrophy	0	0.00	0.00	0.00	0.00	0.00
Dilation	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00

Seminal Vesicles

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3365					
Dilated acini	114	3.39	4.11	6.55	0.00	40.00
Changed colloid	12	0.36	0.41	1.82	0.00	12.00
Reduced secretion	117	3.48	3.21	6.98	0.00	28.00
Reduced in size	50	1.49	1.45	7.17	0.00	36.23
Inspissated secretion	13	0.39	0.29	1.07	0.00	5.56
Edema	24	0.71	0.96	2.55	0.00	12.50
Congestion	45	1.34	1.67	4.09	0.00	16.67
Hemorrhage	3	0.09	0.20	1.19	0.00	8.33
Pigment deposition	1	0.03	0.03	0.20	0.00	1.43
Mineralisation	2	0.06	0.05	0.24	0.00	1.43
Atrophy	439	13.05	15.81	18.53	0.00	83.33
Fibrosis	5	0.15	0.45	2.37	0.00	16.67
Capsular fibrosis	7	0.21	0.19	0.85	0.00	5.71
Epithelial degeneration	1	0.03	0.04	0.28	0.00	2.00
Squamous metaplasia	3	0.09	0.08	0.32	0.00	1.45
Reactive hyperplasia	6	0.18	0.18	0.64	0.00	2.90
Mononuclear cell foci	14	0.42	0.39	1.09	0.00	4.35
Abscess	5	0.15	0.12	0.63	0.00	4.29
Arteritis/periarteritis	1	0.03	0.02	0.14	0.00	1.00
Inflammation	204	6.06	6.78	7.06	0.00	33.33
Glandular hypertrophy	2	0.06	0.07	0.36	0.00	2.00
Hyperplasia	21	0.62	0.64	1.10	0.00	4.17

Preputial Glands*

* single studies only or gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	228					
Cyst	1	0.44	9.09	30.15	0.00	100.00
Glandular ectasia	38	16.67	21.56	40.18	0.00	100.00
Ductal ectasia	4	1.75	16.67	32.49	0.00	100.00
Mononuclear cell foci	3	1.32	9.19	20.18	0.00	50.00
Abscess	9	3.95	23.12	34.12	0.00	100.00
Inflammation	25	10.96	18.43	22.51	0.00	50.00
Ductal hyperplasia	1	0.44	4.55	15.08	0.00	50.00
Atrophy	2	0.88	0.17	0.39	0.00	1.04

Bulbourethral glands

* single studies only or gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	4					
Glandular ectasia	4	100.00	100.00	0.00	100.00	100.00

Mammary Glands

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	2114					
Epidermal inclusion cyst	0	0.00	0.00	0.00	0.00	0.00
Secretion	47	2.22	2.15	6.10	0.00	25.00
Cystic change	67	3.17	6.45	15.34	0.00	66.67
Dilated ducts	9	0.43	0.31	1.84	0.00	11.76
Galactoecele	8	0.38	0.27	0.71	0.00	2.78
Concretion	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	183	8.66	7.14	19.74	0.00	92.16
Mineralization	1	0.05	0.04	0.23	0.00	1.47
Lipophage aggregates	0	0.00	0.00	0.00	0.00	0.00
Alveolar/ductal degeneration	1	0.05	0.61	3.90	0.00	25.00
Mononuclear cell foci	4	0.19	0.16	0.51	0.00	2.00
Abscess formation	1	0.05	0.07	0.42	0.00	2.70
Fat necrosis	1	0.05	0.07	0.42	0.00	2.70
Macrophage granuloma	1	0.05	0.02	0.16	0.00	1.00
Inflammation	5	0.24	0.18	0.52	0.00	2.00
Fibrosis	6	0.28	0.20	0.80	0.00	4.40
Squamous metaplasia	0	0.00	0.00	0.00	0.00	0.00
Glandular atypia	0	0.00	0.00	0.00	0.00	0.00
Ductal hyperplasia	1	0.05	0.61	3.90	0.00	25.00
Acinar hyperplasia	36	1.70	3.16	9.31	0.00	50.00
Atypical hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3577					
Epidermal inclusion cyst	1	0.03	0.04	0.29	0.00	2.00
Secretion	487	13.61	13.94	27.59	0.00	84.29
Cystic change	758	21.19	23.43	26.49	0.00	85.71
Dilated ducts	148	4.14	4.33	10.97	0.00	38.96
Galactoecele	307	8.58	8.17	12.70	0.00	57.97
Concretion	7	0.20	0.20	1.43	0.00	10.00
Pigment deposition	446	12.47	11.15	23.87	0.00	95.00
Mineralization	44	1.23	1.20	3.88	0.00	22.00
Lipophage aggregates	7	0.20	0.18	0.76	0.00	4.00
Alveolar/ductal degeneration	183	5.12	4.79	15.46	0.00	90.00
Mononuclear cell foci	5	0.14	0.12	0.51	0.00	2.86
Abscess formation	1	0.03	0.02	0.14	0.00	1.01
Fat necrosis	0	0.00	0.00	0.00	0.00	0.00
Macrophage granuloma	0	0.00	0.00	0.00	0.00	0.00
Inflammation	23	0.64	0.65	1.14	0.00	4.17
Fibrosis	7	0.20	0.20	0.71	0.00	4.00
Squamous metaplasia	1	0.03	0.02	0.14	0.00	1.01
Glandular atypia	83	2.32	2.11	6.47	0.00	31.00
Ductal hyperplasia	5	0.14	0.11	0.60	0.00	4.04
Acinar hyperplasia	839	23.46	22.44	22.50	0.00	93.22
Atypical hyperplasia	104	2.91	2.80	8.93	0.00	38.57

Ovaries

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3542					
Embryonic remnants	3	0.08	0.13	0.89	0.00	6.25
Bursa dilation	135	3.81	3.58	3.92	0.00	15.15
Cyst(s)	290	8.19	8.76	9.03	0.00	36.73
Epithelial cyst(s)	2	0.06	0.08	0.57	0.00	4.00
Follicular cyst(s)	64	1.81	1.75	6.35	0.00	32.00
Luteal cyst(s)	15	0.42	0.42	1.30	0.00	7.04
Rete cyst	3	0.08	0.05	0.28	0.00	1.67
Congestion	79	2.23	2.21	3.11	0.00	15.94
Hemorrhage	3	0.08	0.10	0.40	0.00	2.00
Thrombosis	2	0.06	0.06	0.30	0.00	1.49
Angiectasis	2	0.06	0.06	0.32	0.00	2.00
Angiomatous change	3	0.08	0.09	0.45	0.00	2.86
Pigment deposition	149	4.21	4.11	19.57	0.00	100.00
Mineralization	5	0.14	0.17	0.67	0.00	4.00
Reduced corpora lutea	84	2.37	1.82	8.90	0.00	45.71
No corpora lutea	40	1.13	0.86	4.22	0.00	21.43
Hyperpl./trophy corpora lutea	7	0.20	0.26	1.09	0.00	6.00
Atrophy	457	12.90	13.60	29.61	0.00	99.17
Fat necrosis	3	0.08	0.08	0.31	0.00	1.45
Arteritis/periarteritis	2	0.06	0.06	0.30	0.00	1.49
Granuloma	2	0.06	0.06	0.32	0.00	2.00
Abscess	3	0.08	0.10	0.60	0.00	4.08
Inflammation	4	0.11	0.11	0.39	0.00	2.00
Fibrosis	3	0.08	0.11	0.60	0.00	4.00
Rete hyperplasia	62	1.75	1.56	5.18	0.00	28.33
Epithelial hyperplasia	52	1.47	1.50	7.41	0.00	42.00
Theca cell hyperplasia	3	0.08	0.09	0.36	0.00	1.49
Granulosa cell hyperplasia	71	2.00	2.10	5.57	0.00	28.00
Granulosa-theca cell hyperplasia	1	0.03	0.04	0.29	0.00	2.04
Interstitial cell hyperplasia	251	7.09	9.08	22.90	0.00	95.83
Sertoli cell hyperplasia	176	4.97	5.09	15.43	0.00	68.00
Luteal hyperplasia	15	0.42	0.43	3.02	0.00	21.13
Mesothelial hyperplasia	33	0.93	1.35	6.16	0.00	38.00
Hyperplasia	10	0.28	0.29	1.23	0.00	7.04
Tubular hyperplasia	45	1.27	1.21	5.19	0.00	34.29
Sex cord stromal hyperplasia	256	7.23	7.86	19.63	0.00	88.00
Cystic papillary hyperplasia	1	0.03	0.02	0.14	0.00	1.01

Oviducts

* single studies only or gross lesions examined only

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	306					
Anomaly	1	0.33	20.00	44.72	0.00	100.00
Mixed cell infiltration	1	0.33	0.41	0.91	0.00	2.04

Uterus

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3613					
Agnesia	1	0.03	0.03	0.20	0.00	1.43
Ectopic ovarian tissue	1	0.03	0.04	0.28	0.00	2.00
Anomaly	10	0.28	0.29	1.83	0.00	12.86
Epithelial cyst	72	1.99	1.96	5.00	0.00	23.33
Glandular atrophy	24	0.66	0.61	2.92	0.00	17.00
Inflammation	55	1.52	1.51	2.12	0.00	7.25
Intussusception	4	0.11	0.12	0.41	0.00	2.00
Distended cervix	2	0.06	0.04	0.28	0.00	2.00
Congestion	129	3.57	3.92	7.97	0.00	38.78
Hemorrhage	19	0.53	0.52	1.05	0.00	4.29
Thrombosis	1	0.03	0.02	0.14	0.00	1.00
Edema	1	0.03	0.04	0.28	0.00	1.96
Distended lumen	336	9.30	9.28	8.52	0.00	36.00
Lymphangiectasis	2	0.06	0.05	0.28	0.00	1.69
Hydrometra	47	1.30	1.35	3.60	0.00	16.95
Myxometra	2	0.06	0.04	0.18	0.00	1.00
Angiectasis	68	1.88	1.46	6.69	0.00	45.00
Pigment deposition	140	3.87	3.23	14.44	0.00	97.00
Macrophage aggregate	1	0.03	0.02	0.14	0.00	1.00
Cervical sclerosis	3	0.08	0.10	0.72	0.00	5.08
Myometrial sclerosis	1	0.03	0.03	0.24	0.00	1.67
Endometrial fibrosis	131	3.63	3.39	13.82	0.00	88.00
Cervical hypertrophy	102	2.82	2.64	7.60	0.00	30.00
Focal collagen alteration	1	0.03	0.03	0.18	0.00	1.27
Hyperkeratosis	4	0.11	0.10	0.57	0.00	3.80
Atrophy	12	0.33	0.37	1.24	0.00	7.25
Metaplasia	8	0.22	0.25	0.95	0.00	6.00
Granular cells	2	0.06	0.04	0.28	0.00	2.00
Mononuclear cell foci	7	0.19	0.18	0.68	0.00	4.00
Fat necrosis	1	0.03	0.03	0.24	0.00	1.69
Abscess	3	0.08	0.06	0.31	0.00	2.00
Arteritis/periarteritis	9	0.25	0.26	1.82	0.00	12.86
Myometritis	1	0.03	0.02	0.12	0.00	0.83
Stromal proliferation	32	0.89	0.88	2.53	0.00	10.00
Endometritis	15	0.42	0.33	0.98	0.00	4.08
Squamous hyperplasia	3	0.08	0.08	0.40	0.00	2.04
Glandular dilatation	26	0.72	0.43	3.06	0.00	21.67
Glandular hyperplasia	709	19.62	20.20	18.09	0.00	79.00
Endometrial hyperplasia	77	2.13	1.95	7.63	0.00	47.00
Stromal hyperplasia	13	0.36	0.41	1.45	0.00	8.00
Epithelial hyperplasia	19	0.53	0.55	1.82	0.00	10.00
Granular cell hyperplasia	78	2.16	2.06	8.47	0.00	44.44
Adenomyosis	2	0.06	0.04	0.21	0.00	1.27

Cervix

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1462					
Cyst(s)	3	0.21	0.15	0.45	0.00	1.67
Hypertrophy	16	1.09	0.90	2.40	0.00	9.09
Protopase	1	0.07	0.05	0.20	0.00	0.83
Basal cell hyperplasia	4	0.27	0.32	0.81	0.00	2.86
Squamous metaplasia/hyperplasia	43	2.94	3.60	5.84	0.00	18.00
Hyperkeratosis	6	0.41	0.60	1.96	0.00	8.00
Inflammation	1	0.07	0.06	0.24	0.00	1.01
Cervical atrophy	5	0.34	0.46	1.34	0.00	4.29
Fibrosis	101	6.91	6.36	8.09	0.00	28.33

Vagina

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1949					
Cyclus change	1	0.05	0.03	0.16	0.00	1.01
Anestrus	260	13.34	9.71	25.70	0.00	83.33
Proestrus	20	1.03	0.83	2.29	0.00	8.70
Estrus	9	0.46	0.38	1.26	0.00	6.25
Metestrus	24	1.23	0.99	2.75	0.00	12.00
Diestrus	18	0.92	0.72	2.10	0.00	10.00
Cyst(s)	2	0.10	0.07	0.46	0.00	2.86
Prolapse	2	0.10	2.93	16.12	0.00	100.00
Dilated lumen	15	0.77	5.49	22.30	0.00	100.00
Congestion	3	0.15	0.10	0.49	0.00	2.90
Inflammatory secretion	6	0.31	0.25	1.30	0.00	8.00
Mucinous plug	74	3.80	2.79	9.21	0.00	45.83
Cellular detritus	1	0.05	0.05	0.32	0.00	2.00
Angiectasis	1	0.05	0.03	0.16	0.00	1.00
Mucosal atrophy	99	5.08	4.47	13.05	0.00	65.22
Cystic mucosal degeneration	35	1.80	1.46	4.18	0.00	17.39
Mucification	172	8.83	6.84	18.09	0.00	75.36
Abscess	10	0.51	2.85	16.01	0.00	100.00
Necrosis	1	0.05	0.04	0.23	0.00	1.43
Inflammation	16	0.82	4.50	12.78	0.00	50.00
Hyperkeratosis	1	0.05	0.05	0.32	0.00	2.00
Stromal hyperplasia	2	0.10	2.56	16.01	0.00	100.00
Granular cell foci	1	0.05	0.37	2.29	0.00	14.29
Granular cell hyperplasia	1	0.05	0.03	0.16	0.00	1.00
Basal cell hyperplasia	1	0.05	0.04	0.23	0.00	1.45
Epithelial hyperplasia	4	0.21	0.15	0.57	0.00	2.90

Clitoral Glands

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	214					
Cyst	1	0.47	8.33	20.41	0.00	50.00
Dilation	46	21.50	41.22	49.08	0.00	100.00
Hypertrophy	1	0.47	8.33	20.41	0.00	50.00
Inflammation	9	4.21	17.89	40.28	0.00	100.00
Acinar/ductal dilation	3	1.40	0.43	1.06	0.00	2.61
Abscess	1	0.47	0.14	0.35	0.00	0.87

Bone Marrow

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3606					
Hemorrhage	1	0.03	0.04	0.28	0.00	2.00
Fatty marrow	255	7.07	6.22	17.04	0.00	85.00
Hemosiderin	6	0.17	0.23	1.17	0.00	8.00
Mineralisation	31	0.86	0.52	3.65	0.00	25.83
Myelofibrosis	3	0.08	0.08	0.40	0.00	2.00
Increased Megakaryocytopoiesis	12	0.33	0.42	2.13	0.00	14.00
Increased granulopoiesis	156	4.33	4.61	7.54	0.00	41.43
Increased erythropoiesis	53	1.47	1.73	5.11	0.00	34.00
Hemopoietic activity	87	2.41	2.66	14.35	0.00	100.00
Decreased granulopoiesis	31	0.86	0.94	2.61	0.00	14.00
Decreased erythropoiesis	16	0.44	0.46	1.54	0.00	7.14
Fibrous osteodystrophy	5	0.14	0.18	0.74	0.00	4.00
Myelofibrosis	35	0.97	0.98	2.47	0.00	11.43
Myelostromal proliferation	1	0.03	0.03	0.20	0.00	1.45
Granuloma	1	0.03	0.03	0.20	0.00	1.43
Hypercellularity	7	0.19	0.16	0.89	0.00	6.00
Hypocellularity	134	3.72	3.90	10.60	0.00	53.62

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3586					
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Fatty marrow	237	6.61	6.38	17.22	0.00	79.17
Hemosiderin	0	0.00	0.00	0.00	0.00	0.00
Mineralisation	19	0.53	0.52	3.44	0.00	24.29
Myelofibrosis	8	0.22	0.16	0.99	0.00	7.00
Increased Megakaryocytopoiesis	21	0.59	0.84	5.94	0.00	42.00
Increased granulopoiesis	131	3.65	3.76	6.08	0.00	27.12
Increased erythropoiesis	89	2.48	2.93	7.34	0.00	44.00
Hemopoietic activity	82	2.29	2.46	14.22	0.00	100.00
Decreased granulopoiesis	19	0.53	0.55	1.53	0.00	7.35
Decreased erythropoiesis	13	0.36	0.37	1.15	0.00	5.71
Fibrous osteodystrophy	3	0.08	0.09	0.37	0.00	2.00
Myelofibrosis	2	0.06	0.06	0.28	0.00	1.45
Myelostromal proliferation	0	0.00	0.00	0.00	0.00	0.00
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Hypercellularity	17	0.47	0.40	2.06	0.00	14.00
Hypocellularity	80	2.23	2.71	9.75	0.00	59.18

Mesentric Lymph Node

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3584					
Histiocytosis	441	12.30	13.89	28.57	0.00	96.00
Sinusoidal cysts	269	7.51	6.87	8.60	0.00	44.33
Congestion	186	5.19	5.82	8.84	0.00	43.48
Hemorrhage	13	0.36	0.37	1.01	0.00	4.41
Edema	7	0.20	0.19	0.87	0.00	4.35
Erythrophagocytosis	111	3.10	3.03	5.07	0.00	20.29
Angiectasis	20	0.56	0.59	1.97	0.00	11.27
Lymphangiectasia	13	0.36	0.44	2.57	0.00	18.00
Pigment deposition	738	20.59	21.03	35.46	0.00	100.00
Pigment-laden histiocytes	80	2.23	2.51	12.34	0.00	79.17
Histiocytic conglomerates	144	4.02	3.43	16.76	0.00	86.00
Vascular mineralization	1	0.03	0.03	0.20	0.00	1.43
Lymphoid hyperplasia	240	6.70	7.25	12.43	0.00	46.00
Mastocytosis	4	0.11	0.12	0.63	0.00	4.00
Granulocytosis	1	0.03	0.03	0.21	0.00	1.47
Erythropoiesis	1	0.03	0.03	0.20	0.00	1.41
Plasmacytosis	30	0.84	1.10	6.24	0.00	44.00
Megakaryocytosis	1	0.03	0.03	0.20	0.00	1.45
Hemopoiesis	2	0.06	0.06	0.29	0.00	1.45
Follicular atrophy	49	1.37	1.55	3.70	0.00	18.00
Increased lymphocytolysis	2	0.06	0.04	0.28	0.00	2.00
Necrosis	1	0.03	0.04	0.28	0.00	2.00
Abscess	3	0.08	0.10	0.39	0.00	2.00
Periarteritis/arteritis	3	0.08	0.08	0.32	0.00	1.45
Inflammation	14	0.39	0.31	1.32	0.00	9.00
Fibrosis	12	0.33	0.33	0.80	0.00	4.12
Stromal hyperplasia	9	0.25	0.22	0.72	0.00	3.33
Endothelial hyperplasia	11	0.31	0.36	2.02	0.00	14.00
Angiomatous hyperplasia	11	0.31	0.28	1.16	0.00	6.00

Mesentric Lymph Node

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3547					
Histiocytosis	529	14.91	16.66	33.23	0.00	98.18
Sinusoidal cysts	169	4.76	3.89	12.18	0.00	76.60
Congestion	119	3.35	3.65	6.74	0.00	34.33
Hemorrhage	13	0.37	0.44	1.20	0.00	6.12
Edema	2	0.06	0.06	0.29	0.00	1.45
Erythrophagocytosis	85	2.40	2.36	5.33	0.00	30.88
Angiectasis	12	0.34	0.36	1.46	0.00	7.27
Lymphangiectasia	7	0.20	0.28	1.98	0.00	14.00
Pigment deposition	807	22.75	23.20	38.69	0.00	100.00
Pigment-laden histiocytes	87	2.45	2.69	13.35	0.00	86.00
Histiocytic conglomerates	148	4.17	3.54	17.53	0.00	92.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	186	5.24	5.76	11.12	0.00	57.14
Mastocytosis	3	0.08	0.10	0.58	0.00	4.00
Granulocytosis	0	0.00	0.00	0.00	0.00	0.00
Erythropoiesis	0	0.00	0.00	0.00	0.00	0.00
Plasmacytosis	58	1.64	2.22	8.63	0.00	46.00
Megakaryocytosis	0	0.00	0.00	0.00	0.00	0.00
Hemopoiesis	2	0.06	0.07	0.35	0.00	2.00
Follicular atrophy	58	1.64	1.89	4.68	0.00	22.45
Increased lymphocytolysis	0	0.00	0.00	0.00	0.00	0.00
Necrosis	4	0.11	0.11	0.38	0.00	1.49
Abscess	0	0.00	0.00	0.00	0.00	0.00
Periarteritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	12	0.34	0.27	1.06	0.00	7.07
Fibrosis	7	0.20	0.26	0.83	0.00	4.17
Stromal hyperplasia	1	0.03	0.04	0.28	0.00	2.00
Endothelial hyperplasia	3	0.08	0.10	0.59	0.00	4.08
Angiomatous hyperplasia	2	0.06	0.04	0.29	0.00	2.04

Mandibular Lymph Node

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3239					
Hemosiderin	168	5.19	4.49	13.44	0.00	77.78
Amyloidosis	1	0.03	0.02	0.14	0.00	1.01
Sinosoidal cysts	502	15.50	15.97	10.16	0.00	50.00
Hyperemia/congestion	261	8.06	9.13	9.96	0.00	46.94
Edema	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Erythrophagocytosis	42	1.30	1.19	3.25	0.00	18.84
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Arterial mineralization	1	0.03	0.03	0.23	0.00	1.64
Mastocytosis	1	0.03	0.04	0.29	0.00	2.04
Granulocytosis	0	0.00	0.00	0.00	0.00	0.00
Plasmacytosis	490	15.13	14.59	31.12	0.00	97.96
Histiocytosis	42	1.30	1.53	6.41	0.00	42.86
Lymphoid hyperplasia	447	13.80	14.08	15.97	0.00	69.12
Lymphoid atrophy	16	0.49	0.50	1.86	0.00	8.82
Lymphangiectasis	38	1.17	0.89	3.62	0.00	19.00
Angiectasis	2	0.06	0.07	0.35	0.00	2.00
Inflammation	3	0.09	0.10	0.41	0.00	2.04
Fibrosis	10	0.31	0.35	0.89	0.00	4.26
Endothelial hyperplasia	1	0.03	0.02	0.14	0.00	1.01

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3249					
Hemosiderin	357	10.99	10.84	21.46	0.00	93.00
Amyloidosis	0	0.00	0.00	0.00	0.00	0.00
Sinosoidal cysts	376	11.57	12.70	9.99	0.00	55.56
Hyperemia/congestion	150	4.62	6.18	12.36	0.00	77.78
Edema	2	0.06	0.06	0.43	0.00	2.94
Hemorrhage	6	0.18	0.18	0.78	0.00	4.35
Erythrophagocytosis	23	0.71	0.68	1.84	0.00	10.00
Mineralization	1	0.03	0.02	0.12	0.00	0.85
Arterial mineralization	0	0.00	0.00	0.00	0.00	0.00
Mastocytosis	0	0.00	0.00	0.00	0.00	0.00
Granulocytosis	1	0.03	0.02	0.15	0.00	1.01
Plasmacytosis	541	16.65	16.89	34.17	0.00	100.00
Histiocytosis	58	1.79	2.01	6.67	0.00	38.00
Lymphoid hyperplasia	384	11.82	12.20	15.49	0.00	64.91
Lymphoid atrophy	5	0.15	0.19	0.83	0.00	4.08
Lymphangiectasis	24	0.74	0.52	2.62	0.00	16.16
Angiectasis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	1	0.03	0.02	0.15	0.00	1.00
Fibrosis	2	0.06	0.04	0.20	0.00	1.06
Endothelial hyperplasia	2	0.06	0.05	0.26	0.00	1.45

Other Lymph Node

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	725					
Focal necrosis	1	0.14	0.20	1.36	0.00	9.09
Sinus dilation	262	36.14	43.31	29.82	0.00	100.00
Erythrocytes/sinuses	1	0.14	0.44	2.98	0.00	20.00
Congestion	143	19.72	30.04	33.55	0.00	100.00
Hemorrhage	5	0.69	2.10	10.13	0.00	60.00
Erythrophagocytosis	66	9.10	13.65	24.49	0.00	83.33
Angiectasis	1	0.14	0.13	0.88	0.00	5.88
Pigment deposition	142	19.59	19.60	27.79	0.00	100.00
Mastocytosis	1	0.14	0.14	0.93	0.00	6.25
Plasmacytosis	24	3.31	5.59	18.25	0.00	100.00
Histiocytosis	34	4.69	10.48	20.59	0.00	100.00
Lymphocytolysis	1	0.14	0.20	1.36	0.00	9.09
Lymphoid atrophy	7	0.97	0.64	2.92	0.00	18.75
Lymphadenitis	3	0.41	0.27	1.39	0.00	9.09
Granuloma	1	0.14	0.20	1.36	0.00	9.09
Fibrosis	2	0.28	0.84	5.00	0.00	33.33
Capsular fibrosis	1	0.14	0.11	0.71	0.00	4.76
Endothelial hyperplasia	1	0.14	0.13	0.88	0.00	5.88
Lymphoid hyperplasia	123	16.97	11.69	21.11	0.00	100.00
Stromal hyperplasia	2	0.28	1.48	6.95	0.00	33.33
Angiomatous hyperplasia	4	0.55	0.48	2.07	0.00	12.50

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	644					
Focal necrosis	0	0.00	0.00	0.00	0.00	0.00
Sinus dilation	62	9.63	10.11	18.00	0.00	100.00
Erythrocytes/sinuses	1	0.16	1.22	7.81	0.00	50.00
Congestion	87	13.51	23.02	33.55	0.00	100.00
Hemorrhage	1	0.16	0.02	0.16	0.00	1.01
Erythrophagocytosis	29	4.50	10.42	23.76	0.00	80.00
Angiectasis	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	232	36.02	30.38	36.73	0.00	100.00
Mastocytosis	4	0.62	1.14	5.99	0.00	37.50
Plasmacytosis	13	2.02	3.95	14.16	0.00	75.00
Histiocytosis	53	8.23	8.18	19.47	0.00	77.78
Lymphocytolysis	0	0.00	0.00	0.00	0.00	0.00
Lymphoid atrophy	2	0.31	0.10	0.53	0.00	3.33
Lymphadenitis	3	0.47	0.07	0.34	0.00	2.02
Granuloma	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Capsular fibrosis	0	0.00	0.00	0.00	0.00	0.00
Endothelial hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	135	20.96	16.97	27.35	0.00	100.00
Stromal hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Angiomatous hyperplasia	8	1.24	1.22	5.76	0.00	33.33

Thymus

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3278					
Anomaly	4	0.12	0.10	0.53	0.00	3.13
Medullary cysts	416	12.69	12.84	11.32	0.00	41.84
Involution	826	25.20	24.83	36.75	0.00	100.00
Congestion	183	5.58	5.32	5.13	0.00	20.59
Hemorrhage	53	1.62	1.70	2.84	0.00	10.00
Hemorrhage/hyperemia	7	0.21	0.28	1.98	0.00	14.00
Edema	1	0.03	0.02	0.15	0.00	1.03
Pigment deposition	9	0.27	0.29	0.97	0.00	4.35
Vascular mineralization	4	0.12	0.13	0.52	0.00	2.22
Mineralization	2	0.06	0.06	0.31	0.00	1.59
Hemopoiesis	1	0.03	0.02	0.15	0.00	1.04
Plasmocytosis	8	0.24	0.26	0.92	0.00	4.48
Histiocytosis	3	0.09	0.13	0.65	0.00	4.17
Increased lymphocytolysis	1	0.03	0.02	0.15	0.00	1.03
Inflammation	1	0.03	0.03	0.21	0.00	1.49
Botryomycosis	0	0.00	0.00	0.00	0.00	0.00
Abscess	1	0.03	0.02	0.13	0.00	0.91
Granuloma(s)	1	0.03	0.04	0.28	0.00	2.00
Fibrosis	9	0.27	0.22	1.03	0.00	6.52
Lymphoid hyperplasia	27	0.82	0.87	1.43	0.00	4.76
Epithelial hyperplasia	61	1.86	1.81	3.24	0.00	14.58

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3431					
Anomaly	5	0.15	0.16	0.70	0.00	4.00
Medullary cysts	1353	39.43	39.86	23.91	0.00	77.32
Involution	741	21.60	22.02	34.97	0.00	94.29
Congestion	114	3.32	3.15	3.42	0.00	10.34
Hemorrhage	25	0.73	0.83	1.73	0.00	8.00
Hemorrhage/hyperemia	5	0.15	0.21	1.47	0.00	10.42
Edema	0	0.00	0.00	0.00	0.00	0.00
Pigment deposition	41	1.19	1.19	3.92	0.00	20.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Hemopoiesis	0	0.00	0.00	0.00	0.00	0.00
Plasmocytosis	32	0.93	0.94	3.70	0.00	22.00
Histiocytosis	2	0.06	0.08	0.57	0.00	4.00
Increased lymphocytolysis	3	0.09	0.09	0.63	0.00	4.48
Inflammation	3	0.09	0.08	0.34	0.00	2.00
Botryomycosis	0	0.00	0.00	0.00	0.00	0.00
Abscess	0	0.00	0.00	0.00	0.00	0.00
Granuloma(s)	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	78	2.27	2.21	3.24	0.00	12.50
Epithelial hyperplasia	236	6.88	6.57	13.51	0.00	58.00

Spleen

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3621					
Bacterial colonies	1	0.03	0.03	0.20	0.00	1.45
Ectopic spleen	3	0.08	0.08	0.32	0.00	1.47
Cyst(s)	3	0.08	0.10	0.39	0.00	2.00
Deformity	1	0.03	0.02	0.14	0.00	1.00
Congestion	476	13.15	12.51	21.96	0.00	95.65
Hematoma	0	0.00	0.00	0.00	0.00	0.00
Angiectasis	6	0.17	0.19	0.90	0.00	6.12
Increased hemosiderin	1292	35.68	35.49	41.83	0.00	100.00
Capsular fibrosiderosis	3	0.08	0.06	0.42	0.00	3.00
Amyloidosis	1	0.03	0.04	0.28	0.00	2.00
Mineralization	1	0.03	0.03	0.20	0.00	1.43
Fatty change	1	0.03	0.03	0.24	0.00	1.67
Mastocytosis	0	0.00	0.00	0.00	0.00	0.00
Plasmacytosis	20	0.55	0.78	5.10	0.00	36.00
Increased megakaryopoiesis	69	1.91	2.01	12.71	0.00	89.86
Increased erythropoiesis	679	18.75	20.88	29.68	0.00	88.00
Increased granulopoiesis	101	2.79	2.83	7.34	0.00	34.29
Increased hemopoiesis	706	19.50	18.88	31.71	0.00	100.00
Histiocytosis	3	0.08	0.08	0.33	0.00	1.92
Lymphoid hyperplasia	69	1.91	1.92	3.98	0.00	15.71
Atrophy	106	2.93	3.04	6.06	0.00	33.33
Red pulp atrophy	1	0.03	0.04	0.28	0.00	2.00
Fibrinoid change	2	0.06	0.06	0.28	0.00	1.43
Fibrin tags	0	0.00	0.00	0.00	0.00	0.00
Necrosis	17	0.47	0.47	1.13	0.00	6.67
Perisplenitis	2	0.06	0.05	0.25	0.00	1.45
Periarteritis/arteritis	4	0.11	0.11	0.38	0.00	2.00
Inflammation	1	0.03	0.03	0.20	0.00	1.45
Capsular fibrosis	3	0.08	0.08	0.34	0.00	2.00
Vascular fibrosis	1	0.03	0.03	0.20	0.00	1.45
Fibrosis	19	0.52	0.55	1.43	0.00	8.57
Lymphangiectasis	0	0.00	0.00	0.00	0.00	0.00
Stromal hyperplasia	9	0.25	0.26	0.91	0.00	5.71
Focal red pulp hyperplasia	0	0.00	0.00	0.00	0.00	0.00
Mesothelial Hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Spleen

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3587					
Bacterial colonies	0	0.00	0.00	0.00	0.00	0.00
Ectopic spleen	3	0.08	0.08	0.34	0.00	1.67
Cyst(s)	2	0.06	0.05	0.28	0.00	1.69
Deformity	1	0.03	0.02	0.14	0.00	1.01
Congestion	425	11.85	11.24	25.13	0.00	100.00
Hematoma	1	0.03	0.03	0.20	0.00	1.43
Angiectasis	8	0.22	0.21	0.78	0.00	4.00
Increased hemosiderin	1509	42.07	41.61	44.30	0.00	100.00
Capsular fibrosiderosis	0	0.00	0.00	0.00	0.00	0.00
Amyloidosis	0	0.00	0.00	0.00	0.00	0.00
Mineralization	2	0.06	0.04	0.28	0.00	2.00
Fatty change	0	0.00	0.00	0.00	0.00	0.00
Mastocytosis	1	0.03	0.02	0.14	0.00	1.00
Plasmacytosis	35	0.98	1.38	9.61	0.00	68.00
Increased megakaryopoiesis	66	1.84	2.25	13.91	0.00	98.28
Increased erythropoiesis	805	22.44	25.07	33.09	0.00	93.75
Increased granulopoiesis	125	3.48	3.70	9.49	0.00	44.93
Increased hemopoiesis	793	22.11	20.80	32.32	0.00	100.00
Histiocytosis	0	0.00	0.00	0.00	0.00	0.00
Lymphoid hyperplasia	79	2.20	1.92	5.38	0.00	35.00
Atrophy	49	1.37	1.43	3.62	0.00	20.00
Red pulp atrophy	0	0.00	0.00	0.00	0.00	0.00
Fibrinoid change	0	0.00	0.00	0.00	0.00	0.00
Fibrin tags	1	0.03	0.04	0.28	0.00	2.00
Necrosis	10	0.28	0.30	1.45	0.00	10.00
Perisplenitis	3	0.08	0.11	0.46	0.00	2.00
Periarteritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00
Capsular fibrosis	1	0.03	0.04	0.28	0.00	2.00
Vascular fibrosis	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	6	0.17	0.18	0.66	0.00	4.00
Lymphangiectasis	1	0.03	0.02	0.12	0.00	0.83
Stromal hyperplasia	5	0.14	0.16	0.49	0.00	2.00
Focal red pulp hyperplasia	1	0.03	0.03	0.20	0.00	1.45
Mesothelial Hyperplasia	1	0.03	0.03	0.20	0.00	1.43

Soft Palate

* single studies only or gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	81					
Mononuclear cell foci	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	75					
Mononuclear cell foci	1	1.33	1.33	0.00	1.33	1.33

Joints

* single studies only or gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1794					
Arthropathy	113	6.30	6.68	10.50	0.00	40.00
Tendon ossification	0	0.00	0.00	0.00	0.00	0.00
Cartilaginal metaplasia	8	0.45	0.64	3.27	0.00	16.67
Synovial inflammation	2	0.11	0.14	0.49	0.00	2.00
Osteoarthropathy	23	1.28	1.77	9.02	0.00	46.00
Inflammation	13	0.72	4.66	19.64	0.00	100.00
Atrophy	33	1.84	1.27	6.47	0.00	33.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	1784					
Arthropathy	70	3.92	3.81	8.22	0.00	30.00
Tendon ossification	2	0.11	0.15	0.77	0.00	3.92
Cartilaginal metaplasia	15	0.84	1.13	5.77	0.00	29.41
Synovial inflammation	1	0.06	0.08	0.39	0.00	2.00
Osteoarthropathy	19	1.07	1.46	7.45	0.00	38.00
Inflammation	9	0.50	4.40	19.57	0.00	100.00
Atrophy	37	2.07	1.42	7.26	0.00	37.00

Bone (Femur, Sternum, Others)

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Number of bones examined	3612					
Degenerative arthropathy : knee joint	587	16.25	16.86	29.42	0.00	100.00
Degeneration	13	0.36	0.53	3.71	0.00	26.00
Arthritis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	11	0.30	0.22	1.03	0.00	5.83
Epidermal cyst	1	0.03	0.03	0.20	0.00	1.43
Fibro-osseous lesion	96	2.66	2.81	10.58	0.00	60.00
Osteodystrophy	46	1.27	3.05	14.58	0.00	100.00
Osteomyelonecrosis	4	0.11	0.12	0.57	0.00	2.86
Hyperostosis	14	0.39	0.44	1.83	0.00	12.00
Mucous cyst	5	0.14	0.20	1.43	0.00	10.00
Fracture	1	0.03	0.04	0.29	0.00	2.00
Degenerative arthropathy	78	2.16	1.45	7.09	0.00	36.61
Cystic degeneration	114	3.16	3.32	15.96	0.00	92.86
Fibrous osteodystrophy	8	0.22	0.26	1.06	0.00	6.00
Bone necrosis	3	0.08	0.12	0.86	0.00	6.00
Thickened trabeculae	10	0.28	0.26	1.45	0.00	10.00
Chondrophyte	1	0.03	0.04	0.29	0.00	2.00
Periosteal mineralization	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Number of bones examined	3602					
Degenerative arthropathy : knee joint	517	14.35	15.37	28.92	0.00	100.00
Degeneration	15	0.42	0.61	4.29	0.00	30.00
Arthritis	2	0.06	1.36	9.52	0.00	66.67
Inflammation	5	0.14	0.10	0.51	0.00	3.33
Epidermal cyst	0	0.00	0.00	0.00	0.00	0.00
Fibro-osseous lesion	87	2.42	2.55	10.19	0.00	52.86
Osteodystrophy	3	0.08	0.73	4.76	0.00	33.33
Osteomyelonecrosis	0	0.00	0.00	0.00	0.00	0.00
Hyperostosis	18	0.50	0.36	1.24	0.00	6.00
Mucous cyst	1	0.03	0.04	0.29	0.00	2.04
Fracture	0	0.00	0.00	0.00	0.00	0.00
Degenerative arthropathy	22	0.61	0.41	2.16	0.00	13.89
Cystic degeneration	125	3.47	3.67	17.57	0.00	91.43
Fibrous osteodystrophy	2	0.06	0.06	0.31	0.00	2.00
Bone necrosis	3	0.08	0.06	0.43	0.00	3.00
Thickened trabeculae	48	1.33	1.64	7.15	0.00	48.28
Chondrophyte	2	0.06	0.08	0.57	0.00	4.00
Periosteal mineralization	0	0.00	0.00	0.00	0.00	0.00

Tail

* gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3					
Fracture	1	33.33	25.00	35.36	0.00	50.00
Scab ulceration	0	0.00	0.00	0.00	0.00	0.00
Necrosis/infraction	1	33.33	50.00	70.71	0.00	100.00
Inflammation	1	33.33	25.00	35.36	0.00	50.00
Epithelial hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	5					
Fracture	2	40.00	37.50	47.87	0.00	100.00
Scab ulceration	1	20.00	12.50	25.00	0.00	50.00
Necrosis/infraction	1	20.00	25.00	50.00	0.00	100.00
Inflammation	1	20.00	25.00	50.00	0.00	100.00
Epithelial hyperplasia	1	20.00	25.00	50.00	0.00	100.00

Skeletal Muscle

* single studies only on gross lesions examined only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3496					
Myonecrosis	7	0.20	0.24	0.81	0.00	4.00
Inflammation	125	3.58	3.21	9.50	0.00	55.71
Inflammatory cell foci	1	0.03	0.04	0.29	0.00	2.00
Myophagocytic focus	41	1.17	1.34	5.92	0.00	36.00
Granular cell foci	1	0.03	0.03	0.21	0.00	1.45
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Mineralization	17	0.49	0.45	1.18	0.00	5.71
Vascular mineralization	2	0.06	0.04	0.29	0.00	2.02
Mononuclear cell foci	56	1.60	1.71	3.77	0.00	20.29
Atrophy	824	23.57	23.73	25.46	0.00	88.57

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	3472					
Myonecrosis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	58	1.67	1.39	4.69	0.00	22.86
Inflammatory cell foci	0	0.00	0.00	0.00	0.00	0.00
Myophagocytic focus	26	0.75	0.85	3.99	0.00	26.00
Granular cell foci	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	1	0.03	0.02	0.14	0.00	1.00
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Vascular mineralization	0	0.00	0.00	0.00	0.00	0.00
Mononuclear cell foci	74	2.13	2.15	6.44	0.00	37.14
Atrophy	361	10.40	9.78	12.89	0.00	51.67

Diaphragm

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	50					
Myodegeneration	2	4.00	4.00	0.00	4.00	4.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	49					
Myodegeneration	0	0.00	0.00	0.00	0.00	0.00

Body Cavities

* gross lesions only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	304					
Anomaly	0	0.00	0.00	0.00	0.00	0.00
Cyst	0	0.00	0.00	0.00	0.00	0.00
Cystic lymph node	2	0.66	0.53	3.43	0.00	22.22
Lymph node	0	0.00	0.00	0.00	0.00	0.00
Congestion	1	0.33	0.26	1.71	0.00	11.11
Hemorrhage	1	0.33	0.60	3.86	0.00	25.00
Thrombosis	1	0.33	0.79	5.14	0.00	33.33
Mineralization	1	0.33	0.26	1.71	0.00	11.11
Medial mineralization	1	0.33	0.60	3.86	0.00	25.00
Osseous metaplasia	0	0.00	0.00	0.00	0.00	0.00
Hyperostosis	1	0.33	0.48	3.09	0.00	20.00
Lipid granuloma	1	0.33	0.79	5.14	0.00	33.33
Abscess(es)	0	0.00	0.00	0.00	0.00	0.00
Fat necrosis	125	41.12	46.76	31.81	0.00	100.00
Periarthritis/arteritis	4	1.32	3.54	16.15	0.00	100.00
Inflammation	8	2.63	3.97	13.23	0.00	66.67
Botryomycosis	1	0.33	0.79	5.14	0.00	33.33
Fibrosis	0	0.00	0.00	0.00	0.00	0.00
Mesothelial hyperplasia	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	331					
Anomaly	2	0.60	0.27	1.77	0.00	11.76
Cyst	1	0.30	0.76	5.03	0.00	33.33
Cystic lymph node	2	0.60	0.45	3.02	0.00	20.00
Lymph node	1	0.30	0.38	2.51	0.00	16.67
Congestion	0	0.00	0.00	0.00	0.00	0.00
Hemorrhage	0	0.00	0.00	0.00	0.00	0.00
Thrombosis	0	0.00	0.00	0.00	0.00	0.00
Mineralization	1	0.30	0.76	5.03	0.00	33.33
Medial mineralization	0	0.00	0.00	0.00	0.00	0.00
Osseous metaplasia	2	0.60	0.65	4.31	0.00	28.57
Hyperostosis	0	0.00	0.00	0.00	0.00	0.00
Lipid granuloma	0	0.00	0.00	0.00	0.00	0.00
Abscess(es)	1	0.30	0.45	3.02	0.00	20.00
Fat necrosis	174	52.57	58.48	36.72	0.00	100.00
Periarthritis/arteritis	0	0.00	0.00	0.00	0.00	0.00
Inflammation	5	1.51	1.77	7.17	0.00	33.33
Botryomycosis	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	1	0.30	0.38	2.51	0.00	16.67
Mesothelial hyperplasia	1	0.30	0.32	2.15	0.00	14.29

Adipose Tissue

* gross lesions only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	143					
Nodular fat necrosis	33	23.08	64.96	48.97	0.00	100.00
Fibrous septa	0	0.00	0.00	0.00	0.00	0.00
Eosinophilic cytoplasm	0	0.00	0.00	0.00	0.00	0.00
Hyperplasia macrovacuolar	0	0.00	0.00	0.00	0.00	0.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	130					
Nodular fat necrosis	24	18.46	58.75	50.71	0.00	100.00
Fibrous septa	3	2.31	0.30	0.96	0.00	3.03
Eosinophilic cytoplasm	1	0.77	0.10	0.32	0.00	1.01
Hyperplasia macrovacuolar	11	8.46	1.11	3.51	0.00	11.11

Bile duct, Extrahepatocellular

* gross lesions only

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	6					
Dilation	6	100.00	100.00	0.00	100.00	100.00
Inflammation	1	16.67	33.33	57.74	0.00	100.00

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	5					
Dilation	5	100.00	100.00	0.00	100.00	100.00
Inflammation	0	0.00	0.00	0.00	0.00	0.00

Injection sites

Males	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	166					
Epidermal cyst	2	1.20	0.84	1.19	0.00	1.68
Hair follicle reduction	13	7.83	5.46	7.72	0.00	10.92
Congestion	9	5.42	3.78	5.35	0.00	7.56
Hemorrhage	17	10.24	7.14	10.10	0.00	14.29
Pigment deposits	18	10.84	7.56	10.70	0.00	15.13
Mineralization	0	0.00	0.00	0.00	0.00	0.00
Scabs	1	0.60	0.42	0.59	0.00	0.84
Acanthosis	4	2.41	1.68	2.38	0.00	3.36
Inflammation	133	80.12	64.89	49.65	29.79	100.00
Atrophy	4	2.41	4.26	6.02	0.00	8.51
Myodegeneration	1	0.60	1.06	1.50	0.00	2.13
Fibrosis	2	1.20	2.13	3.01	0.00	4.26

Females	Total n	Total %	Mean %	STDEV %	MIN %	MAX %
Numbers of rats examined	164					
Epidermal cyst	0	0.00	0.00	0.00	0.00	0.00
Hair follicle reduction	1	0.61	0.42	0.59	0.00	0.84
Congestion	5	3.05	2.10	2.97	0.00	4.20
Hemorrhage	4	2.44	2.37	0.21	2.22	2.52
Pigment deposits	10	6.10	4.20	5.94	0.00	8.40
Mineralization	1	0.61	0.42	0.59	0.00	0.84
Scabs	10	6.10	4.20	5.94	0.00	8.40
Acanthosis	10	6.10	4.20	5.94	0.00	8.40
Inflammation	123	75.00	54.44	64.43	8.89	100.00
Atrophy	0	0.00	0.00	0.00	0.00	0.00
Myodegeneration	0	0.00	0.00	0.00	0.00	0.00
Fibrosis	1	0.61	1.11	1.57	0.00	2.22