F1_Rev.1_RE

NTP Study Number:	C20515
Lock Date:	01/12/2011
Cage Range:	ALL
Date Range:	ALL
Reasons For Removal:	ALL
Removal Date Range:	ALL
Treatment Groups:	Include ALL
Study Gender:	Both
TDMSE Version:	3.0.1.1_001
PWG Approval Date:	02/21/2013

WISTAR HAN RATS MALE DAY ON TEST	0718	0715	0704	0730	0597	0730	0729	0535	0710	0730	0345	0730	0612	0729	0730	0730	0729	0729	0704	0729	0730	0729	0729	0729	0729	
Control ANIMAL ID	00001	00002	00003	00004	00005	00006	00007	00008	00009	00010	00011	00012	00013	00014	00015	00016	00017	00018	00019	00020	00021	00022	00023	00024	00025	**males (cont...)**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum	+	+	+	+	I	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis			3																	2						
Basophilic Focus		X		X					X					X			X							X		
Clear Cell Focus	X	X	X	X		X	X		X	X				X	X	X	X	X	X	X				X		
Mixed Cell Focus																										
Necrosis											2		3													
Bile Duct, Cyst																										
Bile Duct, Dilatation									4												3					
Bile Duct, Hyperplasia													2													
Bile Duct, Inflammation, Chronic Active													2													
Mesentery	+								+						+				+			+				
Fat, Necrosis	2								2						2				2			2				
Oral Mucosa																										

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WISTAR HAN RATS MALE																										
Control ANIMAL ID	00001	00002	00003	00004	00005	00006	00007	00008	00009	00010	00011	00012	00013	00014	00015	00016	00017	00018	00019	00020	00021	00022	00023	00024	00025	**males (cont...)**
Developmental Malformation																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy																										
Basophilic Focus					X											X										
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Squamous								3																		
Inflammation, Chronic Active																										
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
CARDIOVASCULAR SYSTEM																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy		1	2		1	2		1		2			1			1		1	1			1	1	2	1	
ENDOCRINE SYSTEM																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Accessory Adrenal Cortical Nodule																										
Degeneration, Cystic																			1							
Hyperplasia										2		3	2		2	2		2		2	2	2	2	2		
Hypertrophy	2			2						2				1	2	2	2				2		2	2	2	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																										

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WISTAR HAN RATS MALE

Control

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ANIMAL ID	00001	00002	00003	00004	00005	00006	00007	00008	00009	00010	00011	00012	00013	00014	00015	00016	00017	00018	00019	00020	00021	00022	00023	00024	00025	males (cont...)
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	+	M	+	+	+	+	M	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	M	M	+	
Hyperplasia														1												
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst																			2							
Pars Distalis, Hyperplasia												2		2	2						1		2	3		
Pars Intermedia, Hyperplasia							2																			
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia	2	1			1				2	1		4	2	2		1		1		1	1	1	1	1	1	
Follicular Cell, Hyperplasia						3			1								1									
GENERAL BODY SYSTEM																										
Peritoneum																										
GENITAL SYSTEM																										
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Granuloma Sperm				3																						
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active																			2							
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia			1									1					1	1					1			
Inflammation, Chronic Active																										
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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WISTAR HAN RATS MALE																										
Control																										
ANIMAL ID	00001	00002	00003	00004	00005	00006	00007	00008	00009	00010	00011	00012	00013	00014	00015	00016	00017	00018	00019	00020	00021	00022	00023	00024	00025	**males (cont...)**
Hyperplasia																										
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy			1	4	1		1	3				2			4			1								
Edema	2		3	3		2			2									2		3						
Necrosis											3															
HEMATOPOIETIC SYSTEM																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node	+	+	+	+		+						+								+		+			+	
Axillary, Infiltration Cellular, Plasma Cell																						1				
Iliac, Ectasia			2	3																						
Lumbar, Ectasia																						2				
Lumbar, Hemorrhage																				2						
Lumbar, Infiltration Cellular, Plasma Cell	3	2										4													3	
Pancreatic, Ectasia																										
Pancreatic, Inflammation, Chronic Active																										
Lymph Node, Bronchial	+	+	M	+	+	M	+	+	+	M	+	M	+	+	+	+	+	+	+	M	+	+	+	+	M	
Lymph Node, Mandibular	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	
Ectasia				3																						
Lymph Node, Mediastinal	+	+	+	+	+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ectasia				3																						
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ectasia				2																		1				

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ANIMAL ID	00001	00002	00003	00004	00005	00006	00007	00008	00009	00010	00011	00012	00013	00014	00015	00016	00017	00018	00019	00020	00021	00022	00023	00024	00025	
Infiltration Cellular, Plasma Cell																									3	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hematopoietic Cell Proliferation		2																								
Thymus	+	+	+	+	+	+	+	I	I	M	+	+	+	+	+	+	+	+	+	+	+	+	M	I	I	
Atrophy											4															
INTEGUMENTARY SYSTEM																										
Mammary Gland	M	M	+	M	M	M	M	+	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	
Galactocele																										
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst Epithelial Inclusion							X																			
Inflammation, Chronic Active	4	4	4	3			4					4			4	4		4	4	4	4	4		4	4	
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperostosis																										
Skeletal Muscle																										
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Peripheral Nerve			+		+														+							
Spinal Cord			+		+														+							

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WISTAR HAN RATS MALE																									
Control																									
ANIMAL ID	00001	00002	00003	00004	00005	00006	00007	00008	00009	00010	00011	00012	00013	00014	00015	00016	00017	00018	00019	00020	00021	00022	00023	00024	00025
RESPIRATORY SYSTEM																									
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Metaplasia, Squamous																									
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body																									
Hemorrhage											2														
Inflammation, Lymphohistiocytic				2	1																				
Alveolar Epithelium, Hyperplasia																								1	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active		1										1			1										
Glands, Olfactory Epithelium, Hyperplasia																									
Olfactory Epithelium, Accumulation, Hyaline Droplet					2	1				2					1	1	2			1			1		2
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SPECIAL SENSES SYSTEM																									
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cataract																	2								
Retina, Atrophy																									
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																									
Hyperplasia												1		2		2	2	1	2		2		2		
Hypertrophy																									

males (cont...)

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Zymbal's Gland			+		+																					
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst							2																			
Nephropathy	3	2	2	1		2		2	1	2		2	1	2	2	4	1		1	2	2	2	2	1	1	
Transitional Epithelium, Hyperplasia																										
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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WISTAR HAN RATS MALE

Control

DAY ON TEST	0627	0599	0597	0730	0729	0730	0619	0731	0729	0494	0731	0730	0730	0731	0730	0730	0729	0520	0730	0729	0729	0730	0607	0653	0729	
ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050	* TOTALS
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**48**
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis																1										**3 2.0**
Basophilic Focus	X		X					X	X											X						**11**
Clear Cell Focus	X	X		X	X	X		X	X			X	X		X	X				X		X				**29**
Mixed Cell Focus									X				X									X				**3**
Necrosis																										**2 2.5**
Bile Duct, Cyst															X											**1**
Bile Duct, Dilatation																	3									**3 3.3**
Bile Duct, Hyperplasia																										**1 2.0**
Bile Duct, Inflammation, Chronic Active																										**1 2.0**
Mesentery				+										+												**7**
Fat, Necrosis				2																						**6 2.0**
Oral Mucosa										+																**1**

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Control

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ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050	* TOTALS	
Developmental Malformation										X																1	
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Atrophy				1																						1	1.0
Basophilic Focus																										2	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia, Squamous																										1	3.0
Inflammation, Chronic Active						4																				1	4.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
CARDIOVASCULAR SYSTEM																											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy			1		1	1		1	1		1		1		1		2		1	2	2	1		1		28	1.3
ENDOCRINE SYSTEM																											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Accessory Adrenal Cortical Nodule				3																						1	3.0
Degeneration, Cystic																								1		2	1.0
Hyperplasia		2		2				2	2	2	2	2	2	2			2		2		2	2		2	2	26	2.0
Hypertrophy	2							2	2			2					2			2	2	2			2	20	2.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia								2											2							2	2.0

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WISTAR HAN RATS MALE

Control

DAY ON TEST	0627	0599	0597	0730	0729	0730	0619	0731	0729	0494	0731	0730	0730	0731	0730	0730	0729	0520	0730	0729	0729	0730	0607	0653	0729	
ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050	* TOTALS
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Parathyroid Gland	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**43**
Hyperplasia																										**1 1.0**
Pituitary Gland	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Cyst																										**1 2.0**
Pars Distalis, Hyperplasia		2	2		2			2			2				2	1	2									**14 1.9**
Pars Intermedia, Hyperplasia																			2			3				**3 2.3**
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
C-cell, Hyperplasia		2		1	1	2	1		1	1		1	3	1	1	1		2	2	1	1	2	2			**34 1.4**
Follicular Cell, Hyperplasia									2											3						**5 2.0**
GENERAL BODY SYSTEM																										
Peritoneum														+												**1**
GENITAL SYSTEM																										
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Granuloma Sperm							3																			**2 3.0**
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active	1																						2			**3 1.7**
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Hyperplasia				3	1								1			1			1		1		2			**12 1.3**
Inflammation, Chronic Active			3																							**1 3.0**
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**

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DAY ON TEST	0627	0599	0597	0730	0729	0730	0619	0731	0729	0494	0731	0730	0730	0731	0730	0730	0729	0520	0730	0729	0729	0730	0607	0653	0729	
WISTAR HAN RATS MALE																										
Control																										
ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050	*** TOTALS**
Hyperplasia																					2					**1 2.0**
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Atrophy				4	3	3	4							3					1				3			**15 2.5**
Edema				3		2								3	2	2	2			2		1			2	**16 2.3**
Necrosis																										**1 3.0**
HEMATOPOIETIC SYSTEM																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Lymph Node		+				+	+																			**12**
Axillary, Infiltration Cellular, Plasma Cell																										**1 1.0**
Iliac, Ectasia																										**2 2.5**
Lumbar, Ectasia							4																			**2 3.0**
Lumbar, Hemorrhage																										**1 2.0**
Lumbar, Infiltration Cellular, Plasma Cell		3																								**5 3.0**
Pancreatic, Ectasia						3																				**1 3.0**
Pancreatic, Inflammation, Chronic Active						4																				**1 4.0**
Lymph Node, Bronchial	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	+	+	+	+	+	+	+	+	**42**
Lymph Node, Mandibular	+	M	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	**46**
Ectasia																										**1 3.0**
Lymph Node, Mediastinal	+	+	M	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	**46**
Ectasia																										**1 3.0**
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Ectasia																										**2 1.5**

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WISTAR HAN RATS MALE																											
Control ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050	*** TOTALS**	
Infiltration Cellular, Plasma Cell																										**1**	**3.0**
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hematopoietic Cell Proliferation			3																							**2**	**2.5**
Thymus	+	+	+	I	+	+	+	+	+	M	+	+	+	+	M	+	+	M	+	+	+	+	+	+	+	**40**	
Atrophy																										**1**	**4.0**
INTEGUMENTARY SYSTEM																											
Mammary Gland	+	M	+	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	**6**	
Galactocele	1																									**1**	**1.0**
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Cyst Epithelial Inclusion																										**1**	
Inflammation, Chronic Active		4	3	4		3	3		4	4	4	3	4			3			2	4	4	3		3		**31**	**3.7**
MUSCULOSKELETAL SYSTEM																											
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hyperostosis																								2		**1**	**2.0**
Skeletal Muscle														+												**1**	
NERVOUS SYSTEM																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Peripheral Nerve		+	+																							**5**	
Spinal Cord		+	+																							**5**	

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WISTAR HAN RATS MALE

Control

DAY ON TEST	0627	0599	0597	0730	0729	0730	0619	0731	0729	0494	0731	0730	0730	0731	0730	0730	0729	0520	0730	0729	0729	0730	0607	0653	0729	
ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050	* TOTALS
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Metaplasia, Squamous																				2						**1 2.0**
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Foreign Body	X																									**1**
Hemorrhage																										**1 2.0**
Inflammation, Lymphohistiocytic	1	1				1	1																			**6 1.2**
Alveolar Epithelium, Hyperplasia		2									1									1						**4 1.3**
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active																					1					**4 1.0**
Glands, Olfactory Epithelium, Hyperplasia				1																						**1 1.0**
Olfactory Epithelium, Accumulation, Hyaline Droplet	2			2				3				2		1		1	1	1			2			2		**19 1.6**
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cataract																						2				**2 2.0**
Retina, Atrophy					2																	3				**2 2.5**
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Atrophy																							2			**1 2.0**
Hyperplasia				2	2	1					1		1				1			1	1				2	**17 1.5**
Hypertrophy												2										2				**2 2.0**

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WISTAR HAN RATS MALE																										
Control																										
ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050	*** TOTALS**
Zymbal's Gland										+																**3**
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cyst									2					2	3											**4 2.3**
Nephropathy	1	1	1	1	2	1		2	1	1	2	2	3	2	2	3	1			2	4	2	2	1	1	**43 1.8**
Transitional Epithelium, Hyperplasia											2															**1 2.0**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**

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WISTAR HAN RATS MALE																									
10 mg/m3 DAY ON TEST	0730	0730	0547	0730	0729	0729	0729	0286	0730	0729	0730	0729	0729	0729	0730	0633	0562	0564	0429	0730	0730	0667	0729	0603	0717
ANIMAL ID	00201	00202	00203	00204	00205	00206	00207	00208	00209	00210	00211	00212	00213	00214	00215	00216	00217	00218	00219	00220	00221	00222	00223	00224	00225
ALIMENTARY SYSTEM																									
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+
Inflammation, Acute																									
Necrosis																									
Intestine Large, Colon	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Acute																									
Necrosis																									
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	A	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+
Intestine Small, Ileum	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+
Diverticulum										4															
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis					1							1	1												
Basophilic Focus	X				X	X	X		X			X		X							X		X		
Clear Cell Focus	X	X			X	X	X		X	X		X	X	X						X	X		X		X
Congestion																									
Inflammation, Granulomatous																									
Necrosis			4							2															
Bile Duct, Cyst										X															
Bile Duct, Dilatation																					2				

males (cont...)

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WISTAR HAN RATS MALE																										
10 mg/m3 DAY ON TEST	0730	0730	0547	0730	0729	0729	0729	0286	0730	0729	0730	0729	0729	0729	0730	0633	0562	0564	0429	0730	0730	0677	0729	0603	0717	
ANIMAL ID	00201	00202	00203	00204	00205	00206	00207	00208	00209	00210	00211	00212	00213	00214	00215	00216	00217	00218	00219	00220	00221	00222	00223	00224	00225	**males (cont...)**
Bile Duct, Hyperplasia										1																
Mesentery												+					+						+			
Fat, Necrosis												2					2						2			
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy			2																				1		2	
Basophilic Focus					X					X						X										
Inflammation, Acute																										
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ulcer																										
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Tooth																						+				
Inflammation, Chronic Active																						4				
CARDIOVASCULAR SYSTEM																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy	2		1	2	1	1	1		2	2	1	1		1	1				1	1	1	1	1	1	1	
ENDOCRINE SYSTEM																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Degeneration, Cystic																										

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10 mg/m3 DAY ON TEST	0730	0730	0547	0730	0729	0729	0729	0286	0730	0729	0730	0729	0729	0729	0730	0633	0562	0564	0429	0730	0730	0667	0729	0603	0717	
ANIMAL ID	00201	00202	00203	00204	00205	00206	00207	00208	00209	00210	00211	00212	00213	00214	00215	00216	00217	00218	00219	00220	00221	00222	00223	00224	00225	**males (cont...)**
Hyperplasia					2				2	2	2	2		2				2		2		2	2		2	
Hypertrophy	2	2			1	2				2	2			2	2											
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia					2																					
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	+	+	+	+	+	+	M	+	+	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Hyperplasia	2	2				2	3				2				2			2					2			
Pars Intermedia, Hyperplasia																										
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia	2	1			3	2	1		2	1		1	1	1	1	1	2			1	1	1		1		
Follicular Cell, Hyperplasia												2														

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active			3	2		2																		3		
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia			2		2	1	1		2	2			3							2						

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WISTAR HAN RATS MALE																									
10 mg/m3 DAY ON TEST	730	730	547	730	729	729	729	286	730	729	730	729	729	729	730	633	562	564	429	730	730	677	729	603	717
ANIMAL ID	0020 1	0020 2	0020 3	0020 4	0020 5	0020 6	0020 7	0020 8	0020 9	0021 0	0021 1	0021 2	0021 3	0021 4	0021 5	0021 6	0021 7	0021 8	0021 9	0022 0	0022 1	0022 2	0022 3	0022 4	0022 5
Inflammation, Chronic Active																		3							
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy	4			2		1								1				2							
Edema	3						2								2							2			
Artery, Inflammation, Chronic Active																					2				
HEMATOPOIETIC SYSTEM																									
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node			+													+					+				
Lumbar, Ectasia																					2				
Lumbar, Infiltration Cellular, Plasma Cell																2									
Renal, Ectasia																3									
Lymph Node, Bronchial	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+
Ectasia					3																				
Hyperplasia, Lymphoid													3												
Infiltration Cellular, Plasma Cell																									
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Granulomatous																									

males (cont...)

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BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

WISTAR HAN RATS MALE																									
10 mg/m3 DAY ON TEST	0730	0730	0547	0730	0729	0729	0729	0286	0730	0729	0730	0729	0729	0729	0730	0633	0562	0564	0429	0730	0730	0667	0729	0603	0717
ANIMAL ID	00201	00202	00203	00204	00205	00206	00207	00208	00209	00210	00211	00212	00213	00214	00215	00216	00217	00218	00219	00220	00221	00222	00223	00224	00225
Thymus	+	+	+	+	+	+	+	+	I	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+
INTEGUMENTARY SYSTEM																									
Mammary Gland	M	+	M	+	M	+	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion																									
Inflammation, Chronic Active	4				4		4		3				4		4	4			3		3	4	4		
MUSCULOSKELETAL SYSTEM																									
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skeletal Muscle																									
Necrosis																									
NERVOUS SYSTEM																									
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Peripheral Nerve																+		+							
Spinal Cord																+		+							
RESPIRATORY SYSTEM																									
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Acute																									
Inflammation, Chronic Active																						1			
Metaplasia, Squamous		1	3	1	1	2	1	2	2	1	2	1	2	1	2	2	1	2	2		1	1		1	1

males (cont...)

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
\+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
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DAY ON TEST	0730	0730	0547	0730	0729	0729	0729	0286	0730	0729	0730	0729	0729	0729	0730	0633	0562	0564	0429	0730	0730	0667	0729	0603	0717
WISTAR HAN RATS MALE 10 mg/m3 ANIMAL ID	00201	00202	00203	00204	00205	00206	00207	00208	00209	00210	00211	00212	00213	00214	00215	00216	00217	00218	00219	00220	00221	00222	00223	00224	00225
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Lymphohistiocytic		1				1				1		1													1
Inflammation, Acute																									
Metaplasia, Squamous																									
Alveolar Epithelium, Hyperplasia																		1			1				
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic																									
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Acute																									
Inflammation, Chronic Active																						3			
Glands, Olfactory Epithelium, Hyperplasia	2	1	2	1		1	2		1	2	1	1		1	1	2	2	1	2	1	2				
Goblet Cell, Hyperplasia	1	1					1			1		1						1				1			
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	3	4	2	2	3	3	2	4	3	2	4	2	3	2	3	3	3	3	2	3	3	2	3	2
Respiratory Epithelium, Accumulation, Hyaline Droplet						1			1			1					1					1			
Trachea	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Acute																									
SPECIAL SENSES SYSTEM																									
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cataract	3										4								2						
Cornea, Inflammation, Chronic Active																									
Retina, Atrophy											3									3					
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia		1			2	1	1				2														

males (cont...)

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WISTAR HAN RATS MALE DAY ON TEST	0730	0730	0547	0730	0729	0729	0729	0286	0730	0729	0730	0729	0729	0729	0730	0633	0562	0564	0429	0730	0730	0667	0729	0603	0717	
10 mg/m3 ANIMAL ID	00201	00202	00203	00204	00205	00206	00207	00208	00209	00210	00211	00212	00213	00214	00215	00216	00217	00218	00219	00220	00221	00222	00223	00224	00225	**males (cont...)**
Hypertrophy																										
Zymbal's Gland																										
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst																								2		
Hydronephrosis																								2		
Inflammation, Suppurative																2							2			
Nephropathy	3	2		1	3	1	2		2		3		2	3	1					2	3	1	1	2	2	
Transitional Epithelium, Hyperplasia																							3			
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Calculus Gross Observation																					2					
Inflammation, Chronic Active																		1								
Transitional Epithelium, Hyperplasia																		2								

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WISTAR HAN RATS MALE

10 mg/m3

DAY ON TEST	0729	0439	0730	0730	0731	0730	0730	0704	0730	0704	0730	0730	0637	0729	0653	0730	0730	0729	0731	0730	0730	0505	0730	0729	0620	
ANIMAL ID	00226	00227	00228	00229	00230	00231	00232	00233	00234	00235	00236	00237	00238	00239	00240	00241	00242	00243	00244	00245	00246	00247	00248	00249	00250	* TOTALS
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**48**
Inflammation, Acute													2													**1 2.0**
Necrosis													3													**1 3.0**
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Inflammation, Acute													3													**1 3.0**
Necrosis													3													**1 3.0**
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	**47**
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**48**
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**48**
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**48**
Diverticulum																										**1 4.0**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis					1						1	1													1	**7 1.0**
Basophilic Focus	X					X		X	X	X	X			X		X			X				X	X		**20**
Clear Cell Focus	X		X	X		X			X		X			X		X	X		X				X	X		**26**
Congestion			1																							**1 1.0**
Inflammation, Granulomatous																		1								**1 1.0**
Necrosis													2													**3 2.7**
Bile Duct, Cyst																										**1**
Bile Duct, Dilatation											2															**2 2.0**

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DAY ON TEST	0729	0439	0730	0730	0731	0730	0730	0704	0730	0704	0730	0730	0637	0729	0653	0730	0730	0729	0731	0730	0730	0505	0730	0729	0620		
WISTAR HAN RATS MALE																											
10 mg/m3 ANIMAL ID	00226	00227	00228	00229	00230	00231	00232	00233	00234	00235	00236	00237	00238	00239	00240	00241	00242	00243	00244	00245	00246	00247	00248	00249	00250	*** TOTALS**	
Bile Duct, Hyperplasia								2																		**2**	**1.5**
Mesentery	+				+								+						+							**7**	
Fat, Necrosis	2				2								2						2							**7**	**2.0**
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Atrophy														1												**4**	**1.5**
Basophilic Focus				2																						**4**	**2.0**
Inflammation, Acute													2													**1**	**2.0**
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Ulcer																									2	**1**	**2.0**
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Tooth																										**1**	
Inflammation, Chronic Active																										**1**	**4.0**
CARDIOVASCULAR SYSTEM																											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Cardiomyopathy	1	1	1	2	1	1		1	1	2	1	1	1	1	1	1	1	1		1	1		2		1	**40**	**1.2**
ENDOCRINE SYSTEM																											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Degeneration, Cystic												1														**1**	**1.0**

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DAY ON TEST	0729	0439	0730	0730	0731	0730	0730	0704	0730	0704	0730	0730	0637	0729	0653	0730	0730	0729	0731	0730	0730	0505	0730	0729	0620		
WISTAR HAN RATS MALE																											
10 mg/m3																											
ANIMAL ID	00226	00227	00228	00229	00230	00231	00232	00233	00234	00235	00236	00237	00238	00239	00240	00241	00242	00243	00244	00245	00246	00247	00248	00249	00250	* TOTALS	
Hyperplasia	2			2		2			2	2	2	2		2	2	2		2	2		2		2			**25**	**2.0**
Hypertrophy	2		2	2		2	2			2			2	2			2	2		2				2	2	**21**	**2.0**
Adrenal Medulla	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**48**	
Hyperplasia																										**1**	**2.0**
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Parathyroid Gland	+	+	+	M	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	+	M	+	+	+	**43**	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Pars Distalis, Hyperplasia			2		2	1	2	2	2	2	2				3		2		2	2	2					**21**	**2.0**
Pars Intermedia, Hyperplasia				2																						**1**	**2.0**
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
C-cell, Hyperplasia	1		1					1	2		1			1	2		1	2	1	4	1	1				**30**	**1.4**
Follicular Cell, Hyperplasia																										**1**	**2.0**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Chronic Active															3											**5**	**2.6**
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hyperplasia						3			3		2				1		2	2			1		1	2		**17**	**1.9**

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WISTAR HAN RATS MALE																										
10 mg/m3 DAY ON TEST	0729	0439	0730	0730	0731	0730	0730	0704	0730	0704	0730	0730	0637	0729	0653	0730	0730	0729	0731	0730	0730	0505	0730	0729	0620	
ANIMAL ID	00226	00227	00228	00229	00230	00231	00232	00233	00234	00235	00236	00237	00238	00239	00240	00241	00242	00243	00244	00245	00246	00247	00248	00249	00250	*** TOTALS**
Inflammation, Chronic Active																									2	**2 2.5**
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Atrophy				3																3				1		**8 2.1**
Edema							2									2		2	2	2	2			2		**11 2.1**
Artery, Inflammation, Chronic Active														2												**2 2.0**
HEMATOPOIETIC SYSTEM																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Lymph Node			+															+								**5**
Lumbar, Ectasia																		3								**2 2.5**
Lumbar, Infiltration Cellular, Plasma Cell																										**1 2.0**
Renal, Ectasia			1																							**2 2.0**
Lymph Node, Bronchial	+	+	M	M	+	+	+	M	+	+	M	M	+	+	+	M	M	+	+	M	M	+	+	+	+	**40**
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	**46**
Ectasia														2												**2 2.5**
Hyperplasia, Lymphoid																										**1 3.0**
Infiltration Cellular, Plasma Cell												2														**1 2.0**
Lymph Node, Mediastinal	+	M	M	+	+	+	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	M	+	+	+	**45**
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Granulomatous																		3								**1 3.0**

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WISTAR HAN RATS MALE																										
10 mg/m3 DAY ON TEST	0729	0439	0730	0730	0731	0730	0730	0704	0730	0704	0730	0730	0637	0729	0653	0730	0730	0729	0731	0730	0730	0505	0730	0729	0620	
ANIMAL ID	00226	00227	00228	00229	00230	00231	00232	00233	00234	00235	00236	00237	00238	00239	00240	00241	00242	00243	00244	00245	00246	00247	00248	00249	00250	*** TOTALS**
Thymus	M	+	M	I	+	+	I	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**43**
INTEGUMENTARY SYSTEM																										
Mammary Gland	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	M	+	**6**
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cyst Epithelial Inclusion																							X			**1**
Inflammation, Chronic Active			3		4	4	4	4		4	4			4		4		4	4				2			**23 3.7**
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Skeletal Muscle									+				+													**2**
Necrosis													3													**1 3.0**
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Peripheral Nerve								+		+																**4**
Spinal Cord								+		+																**4**
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Acute																						1				**1 1.0**
Inflammation, Chronic Active																			1							**2 1.0**
Metaplasia, Squamous	1	3	2	1	2	1	1	2	1	1	1	3	2	1	2	2	1	1	1	2	2	2	1	1	2	**47 1.5**

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WISTAR HAN RATS MALE

10 mg/m3

DAY ON TEST	0729	0439	0730	0730	0731	0730	0730	0704	0730	0704	0730	0730	0637	0729	0653	0730	0730	0729	0731	0730	0730	0505	0730	0729	0620	
ANIMAL ID	00226	00227	00228	00229	00230	00231	00232	00233	00234	00235	00236	00237	00238	00239	00240	00241	00242	00243	00244	00245	00246	00247	00248	00249	00250	* TOTALS
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Lymphohistiocytic			1					1	1		1						1		1		1		1		1	14 1.0
Inflammation, Acute						2																1				2 1.5
Metaplasia, Squamous																				1						1 1.0
Alveolar Epithelium, Hyperplasia				2										2	2						3					6 1.8
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic								1																		1 1.0
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Acute																						2				1 2.0
Inflammation, Chronic Active																										1 3.0
Glands, Olfactory Epithelium, Hyperplasia	2	1	1	1	2		2	3	2	1	3	1	1			1	1	1	1	1	1	1		2	2	39 1.5
Goblet Cell, Hyperplasia					1	1	1		1	2				1		1	1	1	1	1		1			1	20 1.1
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	3	3	2	3	3	2	3	4	3	3	2	2	3	2	3	3	3	4	4	3	3	2	2	4	50 2.8
Respiratory Epithelium, Accumulation, Hyaline Droplet		1				1	1		1	2	1			1				1	1	1	1				1	17 1.1
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Inflammation, Acute																						1				1 1.0
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cataract																										3 3.0
Cornea, Inflammation, Chronic Active																						3				1 3.0
Retina, Atrophy																2										3 2.7
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia												1						1								7 1.3

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+ .. Tissue examined microscopically
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1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

DAY ON TEST	0729	0439	0730	0730	0731	0730	0730	0704	0730	0704	0730	0730	0637	0729	0653	0730	0730	0729	0731	0730	0730	0505	0730	0729	0620	
WISTAR HAN RATS MALE																										
10 mg/m3 ANIMAL ID	00226	00227	00228	00229	00230	00231	00232	00233	00234	00235	00236	00237	00238	00239	00240	00241	00242	00243	00244	00245	00246	00247	00248	00249	00250	*** TOTALS**
Hypertrophy							2		1														1			**3 1.3**
Zymbal's Gland															+							+				**2**
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cyst																										**1 2.0**
Hydronephrosis																										**1 2.0**
Inflammation, Suppurative																						1				**3 1.7**
Nephropathy	1		2	3	2	3	1	1	2	2		2	2	2	1	1		2	1	1	2		2	2	1	**38 1.8**
Transitional Epithelium, Hyperplasia																										**1 3.0**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Calculus Gross Observation																										**1 2.0**
Inflammation, Chronic Active																										**1 1.0**
Transitional Epithelium, Hyperplasia																										**1 2.0**

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
\+ .. Tissue examined microscopically
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WISTAR HAN RATS MALE																										
30 mg/m3 DAY ON TEST	073	072	072	073	071	056	070	065	070	070	072	072	072	073	056	073	073	073	073	072	072	062	072	073	072	
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**males (cont...)**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis	1			1													1									
Basophilic Focus	X		X		X		X		X				X		X		X				X			X		
Clear Cell Focus	X	X	X	X						X		X				X	X			X	X		X			
Eosinophilic Focus																									X	
Necrosis																										
Bile Duct, Dilatation																									2	
Mesentery																								+		
Fat, Necrosis																								2		
Oral Mucosa																										
Developmental Malformation																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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WISTAR HAN RATS MALE																									
30 mg/m3 DAY ON TEST	0731	0729	0729	0731	0711	0564	0704	0653	0704	0704	0729	0726	0729	0730	0564	0730	0730	0730	0730	0729	0722	0620	0729	0731	0729
ANIMAL ID	0040 1	0040 2	0040 3	0040 4	0040 5	0040 6	0040 7	0040 8	0040 9	0041 0	0041 1	0041 2	0041 3	0041 4	0041 5	0041 6	0041 7	0041 8	0041 9	0042 0	0042 1	0042 2	0042 3	0042 4	0042 5
Atrophy																			1						
Basophilic Focus														X									X		
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																									
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Necrosis																									
CARDIOVASCULAR SYSTEM																									
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy			1	1	2	1	2							1		1	1	1	1	1	2	1	1	1	1
Necrosis																									
ENDOCRINE SYSTEM																									
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Degeneration, Cystic									1						1			2							
Hyperplasia	2	2	2	2							2			2	2	2	2	3	2	2		2		2	2
Hypertrophy	2								2	2		2					1		2		2			2	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																					3			2	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

males (cont...)

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\+ .. Tissue examined microscopically
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1-4 .. Lesion qualified as:
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WISTAR HAN RATS MALE																										
30 mg/m3 DAY ON TEST	073	072	072	073	071	056	070	065	070	070	072	072	072	073	056	073	073	073	073	072	072	062	072	073	072	
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**males (cont...)**
Parathyroid Gland	M	+	+	M	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	M	+	+	+	
Hyperplasia																										
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Hyperplasia	2	2										3		2			2									
Pars Intermedia, Hyperplasia																										
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia	1		1	2				1		1		2	1			1		1	1			1	1		2	
Follicular Cell, Hyperplasia							3						1						2							

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active						2																				
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia		3											3				1		1	1			2			
Inflammation, Chronic Active					2					3																
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active		3																								
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy		3																			3					

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WISTAR HAN RATS MALE																									
30 mg/m3 DAY ON TEST	073	072	072	073	071	056	070	065	070	070	072	072	072	073	056	073	073	073	073	072	072	062	072	073	072
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025
Edema		3			2				2			2		2	2	2	2				3				3
HEMATOPOIETIC SYSTEM																									
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node									+	+		+													+
Iliac, Ectasia									2																
Iliac, Inflammation, Chronic Active										4															
Lumbar, Ectasia												3													
Lumbar, Infiltration Cellular, Plasma Cell																									3
Lymph Node, Bronchial	I	+	+	+	+	+	M	+	+	+	+	+	+	+	M	M	+	M	M	+	M	+	+	+	+
Hyperplasia, Lymphohistiocytic				1		1											1								1
Lymph Node, Mandibular	M	M	M	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	M	+	+	+	+	+	+
Infiltration Cellular, Plasma Cell																									
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Lymphohistiocytic							1														3				
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis												3													
Hematopoietic Cell Proliferation						3									2						3				
Necrosis																									
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+
Cyst																								3	

males (cont...)

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WISTAR HAN RATS MALE																										
30 mg/m3 DAY ON TEST	073	072	072	073	071	056	070	065	070	070	072	072	072	073	056	073	073	073	073	072	072	062	072	073	072	
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**males (cont...)**
INTEGUMENTARY SYSTEM																										
Mammary Gland	M	M	M	M	M	M	M	M	+	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active	4	4		4	4		4	2	4	4		4	4	4	4					4	4	4	4	4	4	
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active																										
Skeletal Muscle						+																				
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hemorrhage																										
Peripheral Nerve						+	M		+	+		+			+							+				
Spinal Cord						+	+		+	+		+			+							+				
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Foreign Body																										
Inflammation, Chronic Active																										
Metaplasia, Squamous	2	2	1	3	3	3	2	2	1	3	2	3	2	3	3	3	2	2	2	1	2	3	2	2	1	
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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DAY ON TEST	0731	0729	0729	0731	0711	0564	0704	0653	0704	0704	0729	0726	0729	0730	0564	0730	0730	0730	0730	0729	0722	0620	0729	0731	0729	
WISTAR HAN RATS MALE 30 mg/m3 ANIMAL ID	0040 1	0040 2	0040 3	0040 4	0040 5	0040 6	0040 7	0040 8	0040 9	0041 0	0041 1	0041 2	0041 3	0041 4	0041 5	0041 6	0041 7	0041 8	0041 9	0042 0	0042 1	0042 2	0042 3	0042 4	0042 5	**males (cont...)**
Inflammation, Lymphohistiocytic		1	1	1	1	2	1		1	1	1	1	1		1		1	2	1	1	1	2	2		1	
Alveolar Epithelium, Hyperplasia		2	2	3	1	1										2		2								
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic																	1						1			
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Foreign Body																										
Inflammation, Acute																										
Inflammation, Chronic Active																										
Glands, Olfactory Epithelium, Hyperplasia	3	2	2	2	2	2	2	2	1	2	3	2		3		2	1	2	1	2	1	1	1	3	1	
Goblet Cell, Hyperplasia	1					1	1				1	1	1	1				1	1	1				1		
Olfactory Epithelium, Accumulation, Hyaline Droplet	4	3	3	3	3	3	3	3	3	3	4	3	2	3	3	3	3	3	3	3	3	3	3	3	3	
Respiratory Epithelium, Accumulation, Hyaline Droplet	1		1	1		1					1			1			1		1	1		1		1	1	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
SPECIAL SENSES SYSTEM																										
Ear																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cataract																			4							
Retina, Atrophy																										
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia								1				2		2							2		1			
Zymbal's Gland																										

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WISTAR HAN RATS MALE DAY ON TEST	0731	0729	0729	0731	0711	0564	0704	0653	0704	0704	0729	0726	0729	0730	0564	0730	0730	0730	0730	0729	0722	0620	0729	0731	0729
30 mg/m3 ANIMAL ID	0040 1	0040 2	0040 3	0040 4	0040 5	0040 6	0040 7	0040 8	0040 9	0041 0	0041 1	0041 2	0041 3	0041 4	0041 5	0041 6	0041 7	0041 8	0041 9	0042 0	0042 1	0042 2	0042 3	0042 4	0042 5
URINARY SYSTEM																									
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																					2	2			
Hydronephrosis															1										
Inflammation, Suppurative						1																			
Nephropathy				2	3		1	3	1	3	1	2	2	3	1	1	2	3	2	2	1	1		2	1
Transitional Epithelium, Hyperplasia																									
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

males (cont...)

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WISTAR HAN RATS MALE																										
30 mg/m3 DAY ON TEST	0729	0730	0729	0729	0730	0729	0730	0730	0729	0729	0730	0700	0729	0730	0729	0730	0639	0731	0309	0729	0729	0729	0646	0684	0722	
ANIMAL ID	00426	00427	00428	00429	00430	00431	00432	00433	00434	00435	00436	00437	00438	00439	00440	00441	00442	00443	00444	00445	00446	00447	00448	00449	00450	* TOTALS
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	A	+	**47**
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	A	+	**47**
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	A	+	**47**
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	A	+	**47**
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	A	+	**47**
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	A	+	**47**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis	1	1	1		1								1													**8 1.0**
Basophilic Focus	X							X		X	X		X			X						X		X		**18**
Clear Cell Focus		X		X	X	X	X													X						**17**
Eosinophilic Focus																										**1**
Necrosis																			2							**1 2.0**
Bile Duct, Dilatation							3																			**2 2.5**
Mesentery																										**1**
Fat, Necrosis																										**1 2.0**
Oral Mucosa																							+			**1**
Developmental Malformation																							X			**1**
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	**49**

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
\+ .. Tissue examined microscopically
X .. Lesion present
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1-4 .. Lesion qualified as:
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2) Mild 4) Marked

WISTAR HAN RATS MALE 30 mg/m3																										
DAY ON TEST	729	730	729	729	730	729	730	730	729	729	730	700	729	730	729	730	639	731	309	729	729	729	646	684	722	
ANIMAL ID	0042 6	0042 7	0042 8	0042 9	0043 0	0043 1	0043 2	0043 3	0043 4	0043 5	0043 6	0043 7	0043 8	0043 9	0044 0	0044 1	0044 2	0044 3	0044 4	0044 5	0044 6	0044 7	0044 8	0044 9	0045 0	* TOTALS
Atrophy			2				2																1			**4 1.5**
Basophilic Focus																										**2**
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Atrophy															1											**1 1.0**
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	**49**
Necrosis																								1		**1 1.0**
CARDIOVASCULAR SYSTEM																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cardiomyopathy	2	1	1		1	2	1	1			1	2	1		1	2	1						1	2	1	**32 1.3**
Necrosis																			1							**1 1.0**
ENDOCRINE SYSTEM																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Degeneration, Cystic																										**3 1.3**
Hyperplasia	2				2	2			2	2	2		2	2		2					2	2		2	2	**28 2.0**
Hypertrophy	2					2									2	2	1	2								**14 1.9**
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Hyperplasia		2																		2						**4 2.3**
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	**49**

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1-4 .. Lesion qualified as:
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WISTAR HAN RATS MALE

30 mg/m3

DAY ON TEST	0729	0730	0729	0729	0730	0729	0730	0730	0729	0729	0730	0700	0729	0730	0729	0730	0639	0731	0309	0729	0729	0729	0646	0684	0722		
ANIMAL ID	0042 6	0042 7	0042 8	0042 9	0043 0	0043 1	0043 2	0043 3	0043 4	0043 5	0043 6	0043 7	0043 8	0043 9	0044 0	0044 1	0044 2	0044 3	0044 4	0044 5	0044 6	0044 7	0044 8	0044 9	0045 0	* TOTALS	
Parathyroid Gland	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**44**	
Hyperplasia											2																**1 2.0**
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Pars Distalis, Hyperplasia	2		2		2						1					3				2	2				2		**13 2.1**
Pars Intermedia, Hyperplasia							2																				**1 2.0**
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
C-cell, Hyperplasia	2	1	3		1	1	1	2	2	2				1	3	1	1			1	1	1	2				**30 1.4**
Follicular Cell, Hyperplasia							1														2						**5 1.8**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Chronic Active															3							3					**3 2.7**
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hyperplasia					2								1		3			1		1		3					**12 1.8**
Inflammation, Chronic Active									2		3																**4 2.5**
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	**48**	
Inflammation, Chronic Active															2												**2 2.5**
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Atrophy				3													1								4		**5 2.8**

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WISTAR HAN RATS MALE																										
30 mg/m3 DAY ON TEST	072 9	073 0	072 9	072 9	073 0	072 9	073 0	073 0	072 9	072 9	073 0	070 0	072 9	073 0	072 9	073 0	063 9	073 1	030 9	072 9	072 9	072 9	064 6	068 4	072 2	
ANIMAL ID	004 26	004 27	004 28	004 29	004 30	004 31	004 32	004 33	004 34	004 35	004 36	004 37	004 38	004 39	004 40	004 41	004 42	004 43	004 44	004 45	004 46	004 47	004 48	004 49	004 50	*** TOTALS**
Edema				3	3				1	3				2						2		2			2	**18 2.3**
HEMATOPOIETIC SYSTEM																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Lymph Node			+			+																			+	**7**
Iliac, Ectasia																										**1 2.0**
Iliac, Inflammation, Chronic Active																										**1 4.0**
Lumbar, Ectasia			1																							**2 2.0**
Lumbar, Infiltration Cellular, Plasma Cell																									3	**2 3.0**
Lymph Node, Bronchial	+	+	+	+	+	+	+	M	+	M	+	+	+	M	+	+	+	M	M	+	+	+	+	+	M	**37**
Hyperplasia, Lymphohistiocytic			1		1							2			1						1		1			**10 1.1**
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**44**
Infiltration Cellular, Plasma Cell																	4									**1 4.0**
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Hyperplasia, Lymphohistiocytic					1										1											**4 1.5**
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	**49**
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis																										**1 3.0**
Hematopoietic Cell Proliferation																									3	**4 2.8**
Necrosis																			2							**1 2.0**
Thymus	M	+	+	+	+	+	+	+	M	+	+	+	+	M	+	+	+	I	+	+	M	+	+	+	+	**44**
Cyst																										**1 3.0**

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WISTAR HAN RATS MALE																											
30 mg/m3 DAY ON TEST	0729	0730	0729	0729	0730	0729	0730	0730	0729	0729	0730	0700	0729	0730	0729	0730	0639	0731	0309	0729	0729	0729	0646	0684	0722		
ANIMAL ID	00426	00427	00428	00429	00430	00431	00432	00433	00434	00435	00436	00437	00438	00439	00440	00441	00442	00443	00444	00445	00446	00447	00448	00449	00450	*** TOTALS**	
INTEGUMENTARY SYSTEM																											
Mammary Gland	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	**3**	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Chronic Active	4	3	4			4		4		4	3							4			3	4		3	4	**30**	**3.8**
MUSCULOSKELETAL SYSTEM																											
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Chronic Active																	4									**1**	**4.0**
Skeletal Muscle																										**1**	
NERVOUS SYSTEM																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hemorrhage																			1							**1**	**1.0**
Peripheral Nerve																										**6**	
Spinal Cord																										**7**	
RESPIRATORY SYSTEM																											
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Foreign Body																X										**1**	
Inflammation, Chronic Active						1										2										**2**	**1.5**
Metaplasia, Squamous	2	2	2	2	3	2	3	2	2	3	2	3	2	2	1	3	2	3	3	2	1	2	3	3	2	**50**	**2.2**
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	

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DAY ON TEST	729	730	729	729	730	729	730	730	729	729	730	700	729	730	729	730	639	731	309	729	729	729	646	684	722		
WISTAR HAN RATS MALE 30 mg/m3 ANIMAL ID	0042 6	0042 7	0042 8	0042 9	0043 0	0043 1	0043 2	0043 3	0043 4	0043 5	0043 6	0043 7	0043 8	0043 9	0044 0	0044 1	0044 2	0044 3	0044 4	0044 5	0044 6	0044 7	0044 8	0044 9	0045 0	*** TOTALS**	
Inflammation, Lymphohistiocytic	1	1	2		1	1	1	1		1	1	1	1	1	1	1	1		1	1	1		1	1	1	**41**	**1.1**
Alveolar Epithelium, Hyperplasia		3	2			1																2				**11**	**1.9**
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic					1													1			1					**5**	**1.0**
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Foreign Body																	X									**1**	
Inflammation, Acute																								2		**1**	**2.0**
Inflammation, Chronic Active																	4									**1**	**4.0**
Glands, Olfactory Epithelium, Hyperplasia	3	2	3	2	2	1	1	2	3	2	2	2	2	1	3	1	1	1		3	3	2	3	3	2	**47**	**2.0**
Goblet Cell, Hyperplasia			1			1			1		1	2	1	1		1	1	1		1	2	1		1		**25**	**1.1**
Olfactory Epithelium, Accumulation, Hyaline Droplet	4	3	4	3	2	3	2	2	2	2	3	3	3	2	3	4	3	3	2	3	4	3	3	3	4	**50**	**3.0**
Respiratory Epithelium, Accumulation, Hyaline Droplet			1			2	1		1		1			1		1		1		1	2	1		2	1	**25**	**1.1**
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
SPECIAL SENSES SYSTEM																											
Ear																							+			**1**	
Eye	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	**48**	
Cataract																										**1**	**4.0**
Retina, Atrophy							2													2						**2**	**2.0**
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hyperplasia	2		1		1					2	2				2					1						**12**	**1.6**
Zymbal's Gland																							+			**1**	

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DAY ON TEST	0729	0730	0729	0729	0730	0729	0730	0730	0729	0729	0730	0700	0729	0730	0729	0730	0639	0731	0309	0729	0729	0729	0646	0684	0722	
WISTAR HAN RATS MALE																										
30 mg/m3																										
ANIMAL ID	0042 6	0042 7	0042 8	0042 9	0043 0	0043 1	0043 2	0043 3	0043 4	0043 5	0043 6	0043 7	0043 8	0043 9	0044 0	0044 1	0044 2	0044 3	0044 4	0044 5	0044 6	0044 7	0044 8	0044 9	0045 0	*** TOTALS**
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	**49**
Cyst													2													**3 2.0**
Hydronephrosis																								4		**2 2.5**
Inflammation, Suppurative										2																**2 1.5**
Nephropathy	1				1	1	3	3	1		2	1	3	2	3	1		3		2	1		1	4	2	**38 1.9**
Transitional Epithelium, Hyperplasia										2																**1 2.0**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	**48**

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WISTAR HAN RATS MALE																										
100 mg/m3 DAY ON TEST	0704	0704	0595	0504	0731	0731	0730	0731	0730	0729	0725	0202	0646	0478	0730	0731	0675	0729	0730	0729	0722	0695	0704	0730	0731	
ANIMAL ID	00601	00602	00603	00604	00605	00606	00607	00608	00609	00610	00611	00612	00613	00614	00615	00616	00617	00618	00619	00620	00621	00622	00623	00624	00625	**males (cont...)**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	
Intestine Small, Duodenum	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic																										
Lymphatic, Angiectasis																										
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis					2	1												1								
Basophilic Focus	X								X	X			X			X						X			X	
Clear Cell Focus	X				X	X	X		X	X			X		X		X		X	X			X		X	
Fatty Change																										
Mixed Cell Focus																										
Necrosis																						1				
Bile Duct, Dilatation															4	3				4						
Mesentery		+																								
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy	1												1				1									

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WISTAR HAN RATS MALE **100 mg/m3**																										
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ANIMAL ID	00601	00602	00603	00604	00605	00606	00607	00608	00609	00610	00611	00612	00613	00614	00615	00616	00617	00618	00619	00620	00621	00622	00623	00624	00625	**males (cont...)**
Basophilic Focus																										
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Squamous														3												
Ulcer														3								3				
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Tooth																								+		
Dysplasia																								2		
CARDIOVASCULAR SYSTEM																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy	1	1	1	2	1	1	1	1	2	2	1		1			1		1	1	1		2	2	1	1	
ENDOCRINE SYSTEM																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Degeneration, Cystic																										
Hyperplasia		2			2		2		2		2		2		2	2	2	2			2		2	2		
Hypertrophy						2		2	2	2			3					2					2			
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																							3			
Hyperplasia																										

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WISTAR HAN RATS MALE **100 mg/m3**																										
DAY ON TEST	0704	0704	0595	0504	0731	0731	0730	0731	0730	0729	0725	0202	0646	0478	0730	0731	0675	0729	0730	0729	0722	0695	0704	0730	0731	**males (cont...)**
ANIMAL ID	00601	00602	00603	00604	00605	00606	00607	00608	00609	00610	00611	00612	00613	00614	00615	00616	00617	00618	00619	00620	00621	00622	00623	00624	00625	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	
Hyperplasia																										
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Hyperplasia	3								1						2				1	2				2	3	
Pars Intermedia, Hyperplasia								2	2																	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia		1			1	1	1	1		2			2		2			1	1	2		2	1	2	2	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland																	+									
Inflammation, Chronic Active																	3									
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active														3				3								
Duct, Ectasia																										
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																		1	2						3	
Inflammation, Chronic Active																	3									

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1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

WISTAR HAN RATS MALE																									
100 mg/m3 DAY ON TEST	0704	0704	0595	0504	0731	0731	0730	0731	0730	0729	0725	0202	0646	0478	0730	0731	0675	0729	0730	0729	0722	0695	0704	0730	0731
ANIMAL ID	00601	00602	00603	00604	00605	00606	00607	00608	00609	00610	00611	00612	00613	00614	00615	00616	00617	00618	00619	00620	00621	00622	00623	00624	00625
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																				2					
Inflammation, Chronic Active											3														
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																		4				3			
Edema					2		2	2								2	2	3					2		
Interstitial Cell, Hyperplasia							3																		
HEMATOPOIETIC SYSTEM																									
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node		+										+					+								
Axillary, Ectasia																									
Iliac, Ectasia																	3								
Renal, Ectasia												4													
Lymph Node, Bronchial	+	+	M	+	+	+	+	+	M	M	+	+	M	M	M	M	M	M	+	+	+	M	+	+	+
Ectasia																									
Hyperplasia, Lymphohistiocytic	1	1		2	2	2	2	2			2								3	2	1		2	2	2
Lymph Node, Mandibular	+	+	+	+	M	+	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Lymphoid																									
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Lymphohistiocytic	3				2	2	2			3			3		2		1				1		3	2	3
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage																						4			

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males (cont...)

WISTAR HAN RATS MALE **100 mg/m3**																										
DAY ON TEST	0704	0704	0595	0504	0731	0731	0730	0731	0730	0729	0725	0202	0646	0478	0730	0731	0675	0729	0730	0729	0722	0695	0704	0730	0731	
ANIMAL ID	00601	00602	00603	00604	00605	00606	00607	00608	00609	00610	00611	00612	00613	00614	00615	00616	00617	00618	00619	00620	00621	00622	00623	00624	00625	**males (cont...)**
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																										
Hematopoietic Cell Proliferation																						3				
Thymus	+	+	+	M	+	+	+	+	I	+	+	+	+	+	I	+	+	M	+	+	+	+	+	+	+	
INTEGUMENTARY SYSTEM																										
Mammary Gland	+	M	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M	+	M	M	M	M	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis		3																								
Cyst Epithelial Inclusion							X																			
Inflammation, Chronic Active	4	3			4	4		4		4			2	4	4	4				4			4	3	4	
Thrombosis		3																								
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Compression											2															
Peripheral Nerve	+												+				+						+			
Spinal Cord	+												+				+						+			
RESPIRATORY SYSTEM																										

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DAY ON TEST	0704	0704	0595	0504	0731	0731	0730	0731	0730	0729	0725	0202	0646	0478	0730	0731	0675	0729	0730	0729	0722	0695	0704	0730	0731
WISTAR HAN RATS MALE 100 mg/m3 ANIMAL ID	00601	00602	00603	00604	00605	00606	00607	00608	00609	00610	00611	00612	00613	00614	00615	00616	00617	00618	00619	00620	00621	00622	00623	00624	00625
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic																									
Metaplasia, Squamous	3	3	2	3	3	3	3	3	3	2	3	3	3	1	3	3	3	3	3	3	3	2	3	2	3
Epiglottis, Fibrosis																						1			
Epiglottis, Ulcer																						3			
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Lymphohistiocytic	1	1	2		2	2	2	2	2	2	2		2	1	2	2	2	2	2	2	1	2	2	1	2
Alveolar Epithelium, Hyperplasia						3					3		3		1		1			2					
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic					3	2		1	2	2			2				2		3	3			1	2	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body																									
Inflammation, Acute																									
Glands, Olfactory Epithelium, Hyperplasia	2	3	2	3	3	3	3	1	2	1	2	3	3	2	1	2	2	3	3	3	3	3	3	3	3
Goblet Cell, Hyperplasia		1				1			1	2	1	2	2		1	1	1	1	2	1	2	1	2	1	
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	4	4	4	4	4	4	3	3	4	4	4	4	3	3	3	4	4	4	4	4	4	4	3	4
Respiratory Epithelium, Accumulation, Hyaline Droplet					1	1				2	1	3	1				1	1	1	1	1	2	1	1	1
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SPECIAL SENSES SYSTEM																									
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cornea, Inflammation, Chronic Active																									
Retina, Atrophy																									
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

males (cont...)

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WISTAR HAN RATS MALE																										
100 mg/m3 DAY ON TEST	0704	0704	0595	0504	0731	0731	0730	0731	0730	0729	0725	0202	0646	0478	0730	0731	0675	0729	0730	0729	0722	0695	0704	0730	0731	**males (cont...)**
ANIMAL ID	00601	00602	00603	00604	00605	00606	00607	00608	00609	00610	00611	00612	00613	00614	00615	00616	00617	00618	00619	00620	00621	00622	00623	00624	00625	
Hyperplasia					1																			1		
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Infarct																										
Inflammation, Suppurative												3				2	2									
Nephropathy	2	1			2	2	2		3	3	2		2		2	2		1	3	3	2	2	1	1	1	
Renal Tubule, Hyperplasia																					1					
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active																	3									
Transitional Epithelium, Hyperplasia																	3									

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WISTAR HAN RATS MALE																										
100 mg/m3 DAY ON TEST	0729	0611	0730	0729	0729	0730	0729	0729	0729	0729	0395	0731	0457	0730	0635	0730	0730	0729	0627	0730	0729	0730	0731	0729	0729	
ANIMAL ID	00626	00627	00628	00629	00630	00631	00632	00633	00634	00635	00636	00637	00638	00639	00640	00641	00642	00643	00644	00645	00646	00647	00648	00649	00650	*** TOTALS**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**48**
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Inflammation, Chronic												3														**1 3.0**
Lymphatic, Angiectasis												4														**1 4.0**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis								2	1														2		1	**7 1.4**
Basophilic Focus			X			X					X			X		X	X	X	X	X			X		X	**18**
Clear Cell Focus	X	X	X			X	X		X	X		X					X	X		X	X	X				**26**
Fatty Change														2												**1 2.0**
Mixed Cell Focus			X																							**1**
Necrosis																										**1 1.0**
Bile Duct, Dilatation									3																	**4 3.5**
Mesentery		+																								**2**
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Atrophy		1																		2						**5 1.2**

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WISTAR HAN RATS MALE 100 mg/m3																										
DAY ON TEST	0729	0611	0730	0729	0729	0730	0729	0729	0729	0729	0395	0731	0457	0730	0635	0730	0730	0729	0627	0730	0729	0730	0731	0729	0729	
ANIMAL ID	00626	00627	00628	00629	00630	00631	00632	00633	00634	00635	00636	00637	00638	00639	00640	00641	00642	00643	00644	00645	00646	00647	00648	00649	00650	* TOTALS
Basophilic Focus																		X								1
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia, Squamous																										1 3.0
Ulcer																										2 3.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Tooth																										1
Dysplasia																										1 2.0
CARDIOVASCULAR SYSTEM																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cardiomyopathy				1	1	1	1	1		2		1		1			1	1		1		1	1			33 1.2
ENDOCRINE SYSTEM																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Degeneration, Cystic																					2		1			2 1.5
Hyperplasia	2	4			4		2	3	2	2						2	2				2	2		2	2	26 2.2
Hypertrophy	2		2			2										2	2	2	2	2			2			16 2.1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Angiectasis																										1 3.0
Hyperplasia	3																									1 3.0

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DAY ON TEST	0729	0611	0730	0729	0729	0730	0729	0729	0729	0729	0395	0731	0457	0730	0635	0730	0730	0729	0627	0730	0729	0730	0731	0729	0729	
WISTAR HAN RATS MALE 100 mg/m3 ANIMAL ID	00626	00627	00628	00629	00630	00631	00632	00633	00634	00635	00636	00637	00638	00639	00640	00641	00642	00643	00644	00645	00646	00647	00648	00649	00650	*** TOTALS**
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Parathyroid Gland	+	+	+	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**47**
Hyperplasia									2																	**1 2.0**
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Pars Distalis, Hyperplasia							2		2	2		2		2		2		2		1			2			**16 1.9**
Pars Intermedia, Hyperplasia														3									2			**4 2.3**
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
C-cell, Hyperplasia					1	1	1		2			1			4	2	1			1	1		1	1	2	**28 1.5**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland																										**1**
Inflammation, Chronic Active																										**1 3.0**
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active							2																			**3 2.7**
Duct, Ectasia												3														**1 3.0**
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Hyperplasia			2		1					2				2				3	2				3	2		**11 2.1**
Inflammation, Chronic Active															2											**2 2.5**

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WISTAR HAN RATS MALE

100 mg/m3

DAY ON TEST	0729	0611	0730	0729	0729	0730	0729	0729	0729	0729	0395	0731	0457	0730	0635	0730	0730	0729	0627	0730	0729	0730	0731	0729	0729		
ANIMAL ID	00626	00627	00628	00629	00630	00631	00632	00633	00634	00635	00636	00637	00638	00639	00640	00641	00642	00643	00644	00645	00646	00647	00648	00649	00650	* TOTALS	
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hyperplasia																											**1 2.0**
Inflammation, Chronic Active																											**1 3.0**
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Atrophy							3						2									1					**5 2.6**
Edema									2					3							2			3			**11 2.3**
Interstitial Cell, Hyperplasia																											**1 3.0**
HEMATOPOIETIC SYSTEM																											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Lymph Node																				+					+	**5**	
Axillary, Ectasia																									1		**1 1.0**
Iliac, Ectasia																											**1 3.0**
Renal, Ectasia																				1							**2 2.5**
Lymph Node, Bronchial	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	M	M	+	+	+	M	+	M	+	+	**35**	
Ectasia		4																									**1 4.0**
Hyperplasia, Lymphohistiocytic	1	2	1	4		4	3	3	3			2			2			2	2	3		2					**28 2.1**
Lymph Node, Mandibular	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	**45**	
Hyperplasia, Lymphoid																			3								**1 3.0**
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	**49**	
Hyperplasia, Lymphohistiocytic		2	1	1	3	1	4		2	1		1		1	1	3		4		4	4		2		3		**29 2.2**
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hemorrhage																											**1 4.0**

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WISTAR HAN RATS MALE 100 mg/m3																										
DAY ON TEST	072 9	061 1	073 0	072 9	072 9	073 0	072 9	072 9	072 9	072 9	039 5	073 1	045 7	073 0	063 5	073 0	073 0	072 9	062 7	073 0	072 9	073 0	073 1	072 9	072 9	
ANIMAL ID	006 26	006 27	006 28	006 29	006 30	006 31	006 32	006 33	006 34	006 35	006 36	006 37	006 38	006 39	006 40	006 41	006 42	006 43	006 44	006 45	006 46	006 47	006 48	006 49	006 50	* TOTALS
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis		2																								**1 2.0**
Hematopoietic Cell Proliferation		4																								**2 3.5**
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**46**
INTEGUMENTARY SYSTEM																										
Mammary Gland	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	**4**
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis																										**1 3.0**
Cyst Epithelial Inclusion																										**1**
Inflammation, Chronic Active				3	4	4						2			4		1						3	4		**22 3.5**
Thrombosis																										**1 3.0**
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Compression																										**1 2.0**
Peripheral Nerve											+				+											**6**
Spinal Cord											+				+											**6**
RESPIRATORY SYSTEM																										

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BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

WISTAR HAN RATS MALE

100 mg/m3

DAY ON TEST	0729	0611	0730	0729	0729	0730	0729	0729	0729	0729	0395	0731	0457	0730	0635	0730	0730	0729	0627	0730	0729	0730	0731	0729	0729	
ANIMAL ID	00626	00627	00628	00629	00630	00631	00632	00633	00634	00635	00636	00637	00638	00639	00640	00641	00642	00643	00644	00645	00646	00647	00648	00649	00650	* TOTALS
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Chronic												2														1 2.0
Metaplasia, Squamous	3	3	3	2	3	3	3	3	2	3	3	2	2	3	3	3	3	3	2	2	3	3	3	2	3	50 2.7
Epiglottis, Fibrosis																										1 1.0
Epiglottis, Ulcer																										1 3.0
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Lymphohistiocytic	1	1	1	2	2	2	2	2	2	2	1	2		2	1	2	2	2	2	2	2	2	2	2	2	47 1.8
Alveolar Epithelium, Hyperplasia		4												3	3					2	4	1		1		13 2.4
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic		1			2	2		2	3						1			2		2						19 2.0
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Foreign Body																					X					1
Inflammation, Acute																					1					1 1.0
Glands, Olfactory Epithelium, Hyperplasia	3	3	3	3	3	2	3	3	2	2	2	3	3	3	3	3	3	2	3	2	3	3	2	3	3	50 2.6
Goblet Cell, Hyperplasia	1	1		2	1		1	2	1	1	2		1	1	1	1	1	1			1				1	34 1.3
Olfactory Epithelium, Accumulation, Hyaline Droplet	4	3	3	3	4	3	4	3	3	4	4	3	3	3	3	3	4	3	3	3	3	3	3	3	3	50 3.5
Respiratory Epithelium, Accumulation, Hyaline Droplet		1	1	1		1	1				2		1	2			1	1	1	1		1			1	29 1.2
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cornea, Inflammation, Chronic Active																			2							1 2.0
Retina, Atrophy				3																						1 3.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

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DAY ON TEST	0729	0611	0730	0729	0729	0730	0729	0729	0729	0729	0395	0731	0457	0730	0635	0730	0730	0729	0627	0730	0729	0730	0731	0729	0729	
WISTAR HAN RATS MALE																										
100 mg/m3																										
ANIMAL ID	0026	0027	0028	0029	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	0050	*** TOTALS**
Hyperplasia									2	1								1						1		**6 1.2**
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Infarct																				4						**1 4.0**
Inflammation, Suppurative													2													**4 2.3**
Nephropathy	1	2			1		2	2	3	3		1		3	2	1	2	3	1	2	1	1	2	3		**38 1.9**
Renal Tubule, Hyperplasia	1													2												**3 1.3**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	**49**
Inflammation, Chronic Active																										**1 3.0**
Transitional Epithelium, Hyperplasia																										**1 3.0**

*** END OF MALE DATA ***

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DAY ON TEST	059	073	061	073	073	069	073	073	073	071	073	073	058	073	073	064	073	073	073	073	073	073	069	070	073	
WISTAR HAN RATS FEMALE																										
Control																										
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**females (cont...)**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Acute																										
Necrosis																										
Intestine Large, Cecum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum	+	+	+	+	I	A	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Duodenum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Diverticulum																					2					
Inflammation, Acute																										
Necrosis																										
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																					1		2			
Basophilic Focus	X	X	X	X	X		X	X	X	X		X	X	X	X			X		X	X	X	X	X	X	
Clear Cell Focus	X	X		X				X				X			X			X			X					
Eosinophilic Focus			X																							
Fatty Change			2																3							
Hematopoietic Cell Proliferation																										
Hepatodiaphragmatic Nodule																										
Mixed Cell Focus																										

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WISTAR HAN RATS FEMALE

Control

DAY ON TEST	059	073	061	073	073	069	073	073	073	071	073	073	058	073	073	064	073	073	073	073	073	073	069	070	073	
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**females (cont...)**
Necrosis																										
Bile Duct, Cyst														X												
Bile Duct, Dilatation																										
Bile Duct, Hyperplasia				3																		1			2	
Bile Duct, Inflammation, Chronic Active																										
Mesentery		+					+				+						+				+					
Fat, Necrosis		2					2				2						2				2					
Pancreas	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy	2								1			1				2										
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Basophilic Focus		X																								
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Squamous																										
Inflammation, Acute																										
Ulcer																										
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Acute																										
Mineralization							1																			
Necrosis																										
Tongue									+																	
Inflammation, Granulomatous									2																	

CARDIOVASCULAR SYSTEM

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DAY ON TEST	059	073	061	073	073	069	073	073	073	071	073	073	058	073	073	064	073	073	073	073	073	073	069	070	073
WISTAR HAN RATS FEMALE	2	2	0	2	1	0	1	1	2	2	1	1	6	3	1	5	2	2	1	2	3	1	8	3	3
Control ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025
females (cont...)																									
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy					1	1			1	1			1				1	1		1					
Endocardium, Hyperplasia																			3						
ENDOCRINE SYSTEM																									
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Accessory Adrenal Cortical Nodule																									
Angiectasis								2																	
Degeneration, Cystic			2							2	3			3		3			4	2	1		1	1	
Hyperplasia		2		2	2				2			2								2		2	2		2
Hypertrophy									2	2		2						2		2					
Necrosis							2																		
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+
Hyperplasia											3														
Islets, Pancreatic	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Parathyroid Gland	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Hyperplasia		2													2		2								
Pars Intermedia, Hyperplasia																									
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
C-cell, Hyperplasia		2	3	2	1		2	2		2	1	3				2		1	2	3	1		3	4	3
Follicular Cell, Hyperplasia																									

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DAY ON TEST	059	073	061	073	073	069	073	073	073	071	073	073	058	073	073	064	073	073	073	073	073	073	069	070	073	
WISTAR HAN RATS FEMALE																										
Control																										
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**females (cont...)**
GENERAL BODY SYSTEM																										
NONE																										
GENITAL SYSTEM																										
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active		2		2									3		3								3			
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst	2			3								X			1		2		2			3				
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cervix, Hypertrophy																	2									
Endometrium, Hyperplasia, Cystic										2		4		1	2											
HEMATOPOIETIC SYSTEM																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node							+					+														
Lumbar, Pigmentation, Hemosiderin												3														
Renal, Ectasia							2																			
Renal, Pigmentation, Hemosiderin												4														
Lymph Node, Bronchial	+	M	M	+	+	+	+	+	+	+	+	M	+	+	M	+	+	+	+	+	+	M	+	+	+	
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	

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DAY ON TEST	059	073	061	073	073	069	073	073	073	071	073	073	058	073	073	064	073	073	073	073	073	073	069	070	073	
WISTAR HAN RATS FEMALE																										
Control																										
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**females (cont...)**
Lymph Node, Mesenteric	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ectasia																							3			
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hematopoietic Cell Proliferation																										
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
INTEGUMENTARY SYSTEM																										
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Galactocele				2																						
Hyperplasia																										
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis						4																				
Inflammation, Chronic Active											4															
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Callus	3																									
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Meninges, Hyperplasia													1													
Peripheral Nerve	+																									

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DAY ON TEST	059	073	061	073	073	069	073	073	073	071	073	073	058	073	073	064	073	073	073	073	073	073	069	070	073
WISTAR HAN RATS FEMALE	2	2	0	2	1	0	1	1	2	2	1	1	6	3	1	5	2	2	1	2	3	1	8	3	3
Control ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025
females (cont...)																									
Spinal Cord	+																								
RESPIRATORY SYSTEM																									
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Metaplasia, Squamous												2													
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Lymphohistiocytic																									
Alveolar Epithelium, Hyperplasia							4												1						
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active															1										
Thrombosis																									
Glands, Olfactory Epithelium, Hyperplasia																				1					
Olfactory Epithelium, Accumulation, Hyaline Droplet			1			2																		2	2
Respiratory Epithelium, Accumulation, Hyaline Droplet																									
Trachea	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SPECIAL SENSES SYSTEM																									
Eye	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Retina, Atrophy							1																		
Harderian Gland	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia		1																							
URINARY SYSTEM																									

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WISTAR HAN RATS FEMALE

Control

DAY ON TEST	059	073	061	073	073	069	073	073	073	071	073	073	058	073	073	064	073	073	073	073	073	073	069	070	073	females (cont...)
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Suppurative							4																			
Nephropathy	1				1		4		3	2	1					1				1					1	
Transitional Epithelium, Hyperplasia																										
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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WISTAR HAN RATS FEMALE

Control

DAY ON TEST	073	073	049	073	061	073	073	061	073	073	073	040	073	073	061	073	073	070	073	073	073	073	073	070	073		
ANIMAL ID	0012 6	0012 7	0012 8	0012 9	0013 0	0013 1	0013 2	0013 3	0013 4	0013 5	0013 6	0013 7	0013 8	0013 9	0014 0	0014 1	0014 2	0014 3	0014 4	0014 5	0014 6	0014 7	0014 8	0014 9	0015 0	* TOTALS	
ALIMENTARY SYSTEM																											
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Acute												4															**1 4.0**
Necrosis												4															**1 4.0**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	**46**	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Diverticulum																											**1 2.0**
Inflammation, Acute												4															**1 4.0**
Necrosis												4															**1 4.0**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Angiectasis							3				2																**4 2.0**
Basophilic Focus	X			X		X	X			X	X	X		X			X	X		X	X	X		X			**34**
Clear Cell Focus	X	X									X		X			X							X				**14**
Eosinophilic Focus																											**1**
Fatty Change			2																								**3 2.3**
Hematopoietic Cell Proliferation																								2			**1 2.0**
Hepatodiaphragmatic Nodule						X																					**1**
Mixed Cell Focus										X								X									**2**

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BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

WISTAR HAN RATS FEMALE

Control

DAY ON TEST	073	073	049	073	061	073	073	061	073	073	073	040	073	073	061	073	073	070	073	073	073	073	073	070	073		
ANIMAL ID	0012 6	0012 7	0012 8	0012 9	0013 0	0013 1	0013 2	0013 3	0013 4	0013 5	0013 6	0013 7	0013 8	0013 9	0014 0	0014 1	0014 2	0014 3	0014 4	0014 5	0014 6	0014 7	0014 8	0014 9	0015 0	* TOTALS	
Necrosis																								1		**1**	**1.0**
Bile Duct, Cyst																										**1**	
Bile Duct, Dilatation																			4							**1**	**4.0**
Bile Duct, Hyperplasia				1															2							**5**	**1.8**
Bile Duct, Inflammation, Chronic Active																	3									**1**	**3.0**
Mesentery		+							+																	**7**	
Fat, Necrosis		2							2																	**7**	**2.0**
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Atrophy					1			1																		**6**	**1.3**
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Basophilic Focus																										**1**	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hyperplasia, Squamous																			2							**1**	**2.0**
Inflammation, Acute												3														**1**	**3.0**
Ulcer												4														**1**	**4.0**
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Acute												2														**1**	**2.0**
Mineralization																										**1**	**1.0**
Necrosis												2												1		**2**	**1.5**
Tongue																										**1**	
Inflammation, Granulomatous																										**1**	**2.0**

CARDIOVASCULAR SYSTEM

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WISTAR HAN RATS FEMALE

Control

DAY ON TEST	073	073	049	073	061	073	073	061	073	073	073	040	073	073	061	073	073	070	073	073	073	073	073	070	073		
ANIMAL ID	001 26	001 27	001 28	001 29	001 30	001 31	001 32	001 33	001 34	001 35	001 36	001 37	001 38	001 39	001 40	001 41	001 42	001 43	001 44	001 45	001 46	001 47	001 48	001 49	001 50	* TOTALS	
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Cardiomyopathy	1			1		1					1		1	1							1			1		**16**	**1.0**
Endocardium, Hyperplasia																										**1**	**3.0**
ENDOCRINE SYSTEM																											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Accessory Adrenal Cortical Nodule										3																**1**	**3.0**
Angiectasis																										**1**	**2.0**
Degeneration, Cystic	2			2		3			2	2	3	2	3	4		1	1		3			3	2	2	3	**26**	**2.3**
Hyperplasia		2							2	2			2			2					2	3			2	**17**	**2.1**
Hypertrophy				2		2			2	2	3		2										2	2	2	**14**	**2.1**
Necrosis																										**1**	**2.0**
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Hyperplasia								1																		**2**	**2.0**
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	M	+	**47**	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Pars Distalis, Hyperplasia									3			2				1			4					3		**8**	**2.4**
Pars Intermedia, Hyperplasia											2															**1**	**2.0**
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
C-cell, Hyperplasia		3	1	2	1	2	2	1	1	1	3		4			1	1		2	2	1	1	1	2	3	**37**	**1.9**
Follicular Cell, Hyperplasia							1													2						**2**	**1.5**

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DAY ON TEST	073	073	049	073	061	073	073	061	073	073	073	040	073	073	061	073	073	070	073	073	073	073	073	070	073	
WISTAR HAN RATS FEMALE	3	2	9	3	0	1	2	9	2	2	2	2	1	3	9	2	3	3	3	2	1	2	2	9	3	
Control ANIMAL ID	026	027	028	029	030	031	032	033	034	035	036	037	038	039	040	041	042	043	044	045	046	047	048	049	050	*** TOTALS**
GENERAL BODY SYSTEM																										
NONE																										
GENITAL SYSTEM																										
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active																				3						**6 2.7**
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cyst				3										3							3		2			**11 2.4**
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cervix, Hypertrophy								3																		**2 2.5**
Endometrium, Hyperplasia, Cystic				2			2				1			1			2			1	1					**11 1.7**
HEMATOPOIETIC SYSTEM																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Lymph Node																										**2**
Lumbar, Pigmentation, Hemosiderin																										**1 3.0**
Renal, Ectasia																										**1 2.0**
Renal, Pigmentation, Hemosiderin																										**1 4.0**
Lymph Node, Bronchial	+	+	+	+	M	+	+	+	+	+	M	+	M	M	M	+	+	M	+	+	M	+	+	+	+	**38**
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**

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WISTAR HAN RATS FEMALE

Control

DAY ON TEST	073	073	049	073	061	073	073	061	073	073	073	040	073	073	061	073	073	070	073	073	073	073	073	070	073		
ANIMAL ID	0012 6	0012 7	0012 8	0012 9	0013 0	0013 1	0013 2	0013 3	0013 4	0013 5	0013 6	0013 7	0013 8	0013 9	0014 0	0014 1	0014 2	0014 3	0014 4	0014 5	0014 6	0014 7	0014 8	0014 9	0015 0	* TOTALS	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Ectasia																											**1 3.0**
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hematopoietic Cell Proliferation																								4			**1 4.0**
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	M	+	+	+	**48**	
INTEGUMENTARY SYSTEM																											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Galactocele											3								2								**3 2.3**
Hyperplasia											2																**1 2.0**
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Angiectasis																											**1 4.0**
Inflammation, Chronic Active		3																									**2 3.5**
MUSCULOSKELETAL SYSTEM																											
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Callus																											**1 3.0**
NERVOUS SYSTEM																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Meninges, Hyperplasia																											**1 1.0**
Peripheral Nerve																		+								**2**	

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WISTAR HAN RATS FEMALE

Control

DAY ON TEST	073	073	049	073	061	073	073	061	073	073	073	040	073	073	061	073	073	070	073	073	073	073	073	070	073		
ANIMAL ID	001 26	001 27	001 28	001 29	001 30	001 31	001 32	001 33	001 34	001 35	001 36	001 37	001 38	001 39	001 40	001 41	001 42	001 43	001 44	001 45	001 46	001 47	001 48	001 49	001 50	* TOTALS	
Spinal Cord																		+								**2**	
RESPIRATORY SYSTEM																											
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Metaplasia, Squamous																										**1**	**2.0**
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Lymphohistiocytic						1					1													1		**3**	**1.0**
Alveolar Epithelium, Hyperplasia												2									2					**4**	**2.3**
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Chronic Active																								1		**2**	**1.0**
Thrombosis			2																							**1**	**2.0**
Glands, Olfactory Epithelium, Hyperplasia																										**1**	**1.0**
Olfactory Epithelium, Accumulation, Hyaline Droplet			2		3	2	1	1		1			2		1				1	1		2	2			**16**	**1.6**
Respiratory Epithelium, Accumulation, Hyaline Droplet													1													**1**	**1.0**
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
SPECIAL SENSES SYSTEM																											
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Retina, Atrophy								1							2											**3**	**1.3**
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**	
Hyperplasia				2			2																			**3**	**1.7**
URINARY SYSTEM																											

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WISTAR HAN RATS FEMALE

Control

DAY ON TEST	733	732	499	733	610	731	732	619	732	732	732	402	731	733	619	732	733	703	733	732	731	732	732	709	733	* TOTALS	
ANIMAL ID	0012 6	0012 7	0012 8	0012 9	0013 0	0013 1	0013 2	0013 3	0013 4	0013 5	0013 6	0013 7	0013 8	0013 9	0014 0	0014 1	0014 2	0014 3	0014 4	0014 5	0014 6	0014 7	0014 8	0014 9	0015 0		
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Inflammation, Suppurative																										**1**	**4.0**
Nephropathy				1		1				2			1		1	1						1		1		**17**	**1.4**
Transitional Epithelium, Hyperplasia				4																						**1**	**4.0**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	

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WISTAR HAN RATS FEMALE																									
10 mg/m3 DAY ON TEST	073	070	063	068	068	048	073	073	056	073	073	073	073	073	073	073	073	073	073	073	068	061	073	073	073
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025
ALIMENTARY SYSTEM																									
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis				1					1									2	1						
Basophilic Focus	X	X	X	X	X	X	X				X				X	X	X	X	X	X	X	X			X
Clear Cell Focus							X				X			X	X				X	X					
Fatty Change			2																						
Necrosis						3																			
Bile Duct, Cyst																									
Bile Duct, Cyst, Multiple															X										
Bile Duct, Hyperplasia			1					1																	
Mesentery			+				+			+								+							
Fat, Necrosis			2				3			2								3							
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																									

females (cont...)

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DAY ON TEST	073	070	063	068	068	048	073	073	056	073	073	073	073	073	073	073	073	073	073	073	068	061	073	073	073
WISTAR HAN RATS FEMALE 10 mg/m3 ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025
Basophilic Focus																									
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Basophilic Focus								X																	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																								4	
Ulcer																									
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
CARDIOVASCULAR SYSTEM																									
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy	1			1	1		1		1			1		1	1		1			1	1				
ENDOCRINE SYSTEM																									
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis											2														
Degeneration, Cystic	1	3											3			2	3		2				2	2	
Hyperplasia			2		2		2			2			2				2	2		2		2		2	
Hypertrophy			2										3		2	2		2	2	2	2	2		2	
Metaplasia, Osseous																									
Necrosis																									
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia	2																								

females (cont...)

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WISTAR HAN RATS FEMALE																										
10 mg/m3 DAY ON TEST	073	070	063	068	068	048	073	073	056	073	073	073	073	073	073	073	073	073	073	073	068	061	073	073	073	**females (cont...)**
ANIMAL ID	0030 1	0030 2	0030 3	0030 4	0030 5	0030 6	0030 7	0030 8	0030 9	0031 0	0031 1	0031 2	0031 3	0031 4	0031 5	0031 6	0031 7	0031 8	0031 9	0032 0	0032 1	0032 2	0032 3	0032 4	0032 5	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	+	+	+	+	+	M	+	+	+	M	M	+	+	+	+	M	+	+	+	+	+	+	+	+	M	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Hyperplasia											2		1	2		1			2				2			
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia	1	3	3	3	2	1	2	2	1	3	1	1	2	2	4	2	2	2	3	1		2	1	2	1	
GENERAL BODY SYSTEM																										
NONE																										
GENITAL SYSTEM																										
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	M	+	+	M	+	
Inflammation, Chronic Active		4		3			3																			
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst	4			3			2													2						
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Endometrium, Hyperplasia, Cystic														1				4					4			
Vagina																					+					
HEMATOPOIETIC SYSTEM																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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DAY ON TEST	073	070	063	068	068	048	073	073	056	073	073	073	073	073	073	073	073	073	073	073	068	061	073	073	073
WISTAR HAN RATS FEMALE 10 mg/m3 ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025
Lymph Node				+																		+			
Lumbar, Ectasia				2																					
Lumbar, Hemorrhage																						3			
Lymph Node, Bronchial	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	M	+	M	M	+	+	+
Lymph Node, Mandibular	+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia																									
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia																									
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hematopoietic Cell Proliferation						4																3			
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Tubular																			2						
INTEGUMENTARY SYSTEM																									
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Galactocele																					2				
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																									
Subcutaneous Tissue, Hemorrhage																									
Subcutaneous Tissue, Necrosis																									

females (cont...)

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DAY ON TEST	073	070	063	068	068	048	073	073	056	073	073	073	073	073	073	073	073	073	073	073	068	061	073	073	073	
WISTAR HAN RATS FEMALE																										
10 mg/m3																										
ANIMAL ID	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	**females (cont...)**
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Skeletal Muscle																						+				
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Peripheral Nerve			+	+	+																+					
Spinal Cord			+	+	+																+					
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Metaplasia, Squamous	1	2	2	1	2	2	2	2	2	2	1	1	3	2	2	2	1	2	2	1	1	2	1	1	2	
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Lymphohistiocytic		1								1	1						1	1				1	1			
Alveolar Epithelium, Hyperplasia		1																4				1				
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Glands, Olfactory Epithelium, Hyperplasia		1	2		1		1	1	1	2	1	2	2	1	2	2	2	2			2	3			2	
Goblet Cell, Hyperplasia	1					1				1	1	1	1			1	1				1	1				
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	2	3	2	2	3	2	3	3	4	2	3	3	2	3	2	3	3	2	2	3	3	3	1	3	
Respiratory Epithelium, Accumulation, Hyaline Droplet	1	1						1		1	1	1		1	1	1		1			1			1		

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WISTAR HAN RATS FEMALE																										
10 mg/m3 DAY ON TEST	073	070	063	068	068	048	073	073	056	073	073	073	073	073	073	073	073	073	073	073	068	061	073	073	073	**females (cont...)**
ANIMAL ID	0030 1	0030 2	0030 3	0030 4	0030 5	0030 6	0030 7	0030 8	0030 9	0031 0	0031 1	0031 2	0031 3	0031 4	0031 5	0031 6	0031 7	0031 8	0031 9	0032 0	0032 1	0032 2	0032 3	0032 4	0032 5	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Retina, Atrophy													2													
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																	1						1			
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst															4											
Hydronephrosis			3																							
Inflammation, Suppurative					2																					
Mineralization																					2					
Nephropathy	1		3				1			1		1	1		2		1							1	1	
Transitional Epithelium, Hyperplasia																					1					
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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WISTAR HAN RATS FEMALE

10 mg/m3

DAY ON TEST	0732	0732	0627	0732	0603	0731	0729	0731	0633	0530	0732	0731	0731	0653	0530	0681	0684	0732	0544	0732	0731	0731	0732	0732	0731	
ANIMAL ID	00326	00327	00328	00329	00330	00331	00332	00333	00334	00335	00336	00337	00338	00339	00340	00341	00342	00343	00344	00345	00346	00347	00348	00349	00350	* TOTALS
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis		1																								**5 1.2**
Basophilic Focus	X		X	X			X	X	X		X		X	X		X		X		X		X	X	X	X	**33**
Clear Cell Focus																										**6**
Fatty Change																										**1 2.0**
Necrosis																										**1 3.0**
Bile Duct, Cyst																X										**1**
Bile Duct, Cyst, Multiple	X						X		X																	**4**
Bile Duct, Hyperplasia																										**2 1.0**
Mesentery				+						+			+						+							**8**
Fat, Necrosis				2						2			2						2							**8 2.3**
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Atrophy																1				1	1			1		**4 1.0**

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WISTAR HAN RATS FEMALE																										
10 mg/m3 ANIMAL ID	00326	00327	00328	00329	00330	00331	00332	00333	00334	00335	00336	00337	00338	00339	00340	00341	00342	00343	00344	00345	00346	00347	00348	00349	00350	*** TOTALS**
Basophilic Focus		X																								**1**
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Basophilic Focus																										**1**
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active																										**1 4.0**
Ulcer															4											**1 4.0**
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
CARDIOVASCULAR SYSTEM																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cardiomyopathy										2		1	1			1	1				1					**17 1.1**
ENDOCRINE SYSTEM																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis																										**1 2.0**
Degeneration, Cystic		1	2	3		2	2		2					1		2	1	3	4	2			2	1	3	**23 2.1**
Hyperplasia				2					2		2	2	2				2	2		2	2	2				**20 2.0**
Hypertrophy			2	2			2		2	2						2		2					2	2	2	**20 2.1**
Metaplasia, Osseous								3																		**1 3.0**
Necrosis															2											**1 2.0**
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Hyperplasia																									2	**2 2.0**

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WISTAR HAN RATS FEMALE

10 mg/m3

DAY ON TEST	732	732	627	732	603	731	729	731	633	530	732	731	731	653	530	681	684	732	544	732	731	731	732	732	731		
ANIMAL ID	0032 6	0032 7	0032 8	0032 9	0033 0	0033 1	0033 2	0033 3	0033 4	0033 5	0033 6	0033 7	0033 8	0033 9	0034 0	0034 1	0034 2	0034 3	0034 4	0034 5	0034 6	0034 7	0034 8	0034 9	0035 0	* TOTALS		
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	44		
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Pars Distalis, Hyperplasia	2	2						2										3			3						11	2.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
C-cell, Hyperplasia	1	2	1	1		2	2	1	1			1	3	1	1	1		3	1		2	2	1	2	1		44	1.8
GENERAL BODY SYSTEM																												
NONE																												
GENITAL SYSTEM																												
Clitoral Gland	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46		
Inflammation, Chronic Active																									2		4	3.0
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Cyst										3		3	3									4			2		9	2.9
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Endometrium, Hyperplasia, Cystic											3																4	3.0
Vagina																										1		
HEMATOPOIETIC SYSTEM																												
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		

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WISTAR HAN RATS FEMALE

10 mg/m3

DAY ON TEST	732	732	627	732	603	731	729	731	633	530	732	731	731	653	530	681	684	732	544	732	731	731	732	732	731		
ANIMAL ID	0032 6	0032 7	0032 8	0032 9	0033 0	0033 1	0033 2	0033 3	0033 4	0033 5	0033 6	0033 7	0033 8	0033 9	0034 0	0034 1	0034 2	0034 3	0034 4	0034 5	0034 6	0034 7	0034 8	0034 9	0035 0	* TOTALS	
Lymph Node																										2	
Lumbar, Ectasia																											1 2.0
Lumbar, Hemorrhage																											1 3.0
Lymph Node, Bronchial	+	M	+	M	+	+	M	+	M	+	+	M	+	+	+	+	+	M	+	M	+	M	M	+	M	35	
Lymph Node, Mandibular	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Ectasia		3																									1 3.0
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	M	+	+	46	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Ectasia									2																		1 2.0
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hematopoietic Cell Proliferation																											2 3.5
Thymus	+	+	+	+	+	+	+	+	+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	+	+	48	
Hyperplasia, Tubular																											1 2.0

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Galactocele																											1 2.0
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic Active			4				2													3	4						4 3.3
Subcutaneous Tissue, Hemorrhage																			1								1 1.0
Subcutaneous Tissue, Necrosis																			3								1 3.0

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10 mg/m3 DAY ON TEST	0732	0732	0627	0732	0603	0731	0729	0731	0633	0530	0732	0731	0731	0653	0530	0681	0684	0732	0544	0732	0731	0731	0732	0732	0731	
ANIMAL ID	00326	00327	00328	00329	00330	00331	00332	00333	00334	00335	00336	00337	00338	00339	00340	00341	00342	00343	00344	00345	00346	00347	00348	00349	00350	*** TOTALS**
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Skeletal Muscle																										**1**
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Peripheral Nerve			+						+							+	+		+							**9**
Spinal Cord			+						+							+	+		+							**9**
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Metaplasia, Squamous	1	2	1	2	1	1	1	2	2	2	2	2	3	1	2	1	2	2	2	2	2	2	2	2	1	**50 1.7**
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Lymphohistiocytic		1	1				1	1		1	1						1	1	1	1	1	1	1			**20 1.0**
Alveolar Epithelium, Hyperplasia																										**3 2.0**
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Glands, Olfactory Epithelium, Hyperplasia		2				2	1	2		1		2		2			2		1	1	1	1	2		1	**32 1.6**
Goblet Cell, Hyperplasia	1			1		1		1	1	1	1	1	1	1	1	1			1	1		1				**25 1.0**
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	3	2	2	2	3	2	4	3	4	2	3	3	3	4	2	2	2	4	2	2	3	3	2	2	**50 2.6**
Respiratory Epithelium, Accumulation, Hyaline Droplet	1					1		2	1	2				1	1	1				1	1		1		1	**24 1.1**

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2) Mild 4) Marked

DAY ON TEST	732	732	627	732	603	731	729	731	633	530	732	731	731	653	530	681	684	732	544	732	731	731	732	732	731	
WISTAR HAN RATS FEMALE 10 mg/m3 ANIMAL ID	0032 6	0032 7	0032 8	0032 9	0033 0	0033 1	0033 2	0033 3	0033 4	0033 5	0033 6	0033 7	0033 8	0033 9	0034 0	0034 1	0034 2	0034 3	0034 4	0034 5	0034 6	0034 7	0034 8	0034 9	0035 0	*** TOTALS**
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Retina, Atrophy												2					2					2				**4 2.0**
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Hyperplasia								1																		**3 1.0**
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cyst																										**1 4.0**
Hydronephrosis																										**1 3.0**
Inflammation, Suppurative		1																								**2 1.5**
Mineralization																										**1 2.0**
Nephropathy	1		1	1				1										1		1						**16 1.2**
Transitional Epithelium, Hyperplasia				1																			1			**3 1.0**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**

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DAY ON TEST	0732	0673	0708	0690	0732	0731	0660	0732	0731	0733	0732	0732	0731	0683	0731	0731	0598	0733	0731	0642	0732	0733	0731	0719	0732	
WISTAR HAN RATS FEMALE																										
30 mg/m3 ANIMAL ID	00501	00502	00503	00504	00505	00506	00507	00508	00509	00510	00511	00512	00513	00514	00515	00516	00517	00518	00519	00520	00521	00522	00523	00524	00525	**females (cont...)**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Muscularis, Hypertrophy, Focal																				2						
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active																								2		
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis										2	2					2									1	
Basophilic Focus		X	X	X	X		X	X	X		X				X	X	X	X	X	X			X		X	
Clear Cell Focus				X	X					X	X		X		X	X			X						X	
Eosinophilic Focus																						X				
Fatty Change							1										2									
Hepatodiaphragmatic Nodule											X															
Necrosis		1																								
Bile Duct, Cyst, Multiple									X																	
Bile Duct, Dilatation	4										4															
Bile Duct, Hyperplasia														2								2				
Mesentery					+							+			+		+				+				+	

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WISTAR HAN RATS FEMALE																										
30 mg/m3 DAY ON TEST	0732	0673	0708	0690	0732	0731	0660	0732	0731	0733	0732	0732	0731	0683	0731	0731	0598	0733	0731	0642	0732	0733	0731	0719	0732	
ANIMAL ID	00501	00502	00503	00504	00505	00506	00507	00508	00509	00510	00511	00512	00513	00514	00515	00516	00517	00518	00519	00520	00521	00522	00523	00524	00525	**females (cont...)**
Fat, Necrosis					2							2			2		2				2				2	
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy			1														2									
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Acute														3										2		
Inflammation, Chronic Active																										
Ulcer																								3		
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mineralization																										
CARDIOVASCULAR SYSTEM																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy								1			1				1	1						1	1		1	
ENDOCRINE SYSTEM																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																					2					
Degeneration, Cystic			1				3	1	2	2	3	3			1		2					3			3	
Hyperplasia		3			2			2		2	2	2			2	2					2		2		2	
Hypertrophy	2		2		2			2					2	1	2	2			2			2				
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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WISTAR HAN RATS FEMALE																										
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ANIMAL ID	00501	00502	00503	00504	00505	00506	00507	00508	00509	00510	00511	00512	00513	00514	00515	00516	00517	00518	00519	00520	00521	00522	00523	00524	00525	**females (cont...)**
Hyperplasia																2										
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																										
Parathyroid Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	M	+	M	+	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Hyperplasia					3				3										2						2	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia	2	3	1	3	3	2	3		3	2	1	2	2	1	3	3	2	1		4	3	2	2	2	1	
Follicular Cell, Hyperplasia																										

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic																										
Inflammation, Chronic Active																										
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst						2		2																		
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenomyosis															3											
Cervix, Cyst, Squamous																										
Cervix, Hypertrophy																				2						

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WISTAR HAN RATS FEMALE																									
30 mg/m3 DAY ON TEST	0732	0673	0708	0690	0732	0731	0660	0732	0731	0733	0732	0732	0731	0683	0731	0731	0598	0733	0731	0642	0732	0733	0731	0719	0732
ANIMAL ID	00501	00502	00503	00504	00505	00506	00507	00508	00509	00510	00511	00512	00513	00514	00515	00516	00517	00518	00519	00520	00521	00522	00523	00524	00525
Endometrium, Hyperplasia, Cystic						2		2															3		
HEMATOPOIETIC SYSTEM																									
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node																									
Lumbar, Hyperplasia, Lymphoid																									
Lymph Node, Bronchial	+	+	+	M	+	M	M	M	M	M	+	+	+	+	+	+	+	+	+	+	+	M	+	M	+
Hyperplasia, Lymphohistiocytic											1		1		1					2					
Lymph Node, Mandibular	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mediastinal	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage			2																						
Hyperplasia, Lymphohistiocytic	1																								
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hematopoietic Cell Proliferation		3																							
Thymus	+	+	+	+	I	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																									
INTEGUMENTARY SYSTEM																									
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Galactocele																									

females (cont...)

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WISTAR HAN RATS FEMALE																										
30 mg/m3 DAY ON TEST	0732	0673	0708	0690	0732	0731	0660	0732	0731	0733	0732	0732	0731	0683	0731	0731	0598	0733	0731	0642	0732	0733	0731	0719	0732	
ANIMAL ID	00501	00502	00503	00504	00505	00506	00507	00508	00509	00510	00511	00512	00513	00514	00515	00516	00517	00518	00519	00520	00521	00522	00523	00524	00525	**females (cont...)**
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active						4										3			3					4		
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Peripheral Nerve			+														+			+						
Spinal Cord			+														+			+						
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Metaplasia, Squamous	3	3	3	3	3	3	2	3	3	2	2	1	3	2	3	1	2	3	3	2	3	3	3	2	2	
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Lymphohistiocytic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1			1	1	1	1		1	
Alveolar Epithelium, Hyperplasia																								3		
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active			1																							
Glands, Olfactory Epithelium, Hyperplasia	2	1	2	3	2	2	2	2	1	3	2	1	2	1	1	1	2	2	3	2	1		2	3	2	
Goblet Cell, Hyperplasia	1	1	2	1		1	1	1	1	1	1		1	1		1		1		1				1	1	
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	2	1	3	3	2	4	3	3	3	2	2	2	2	3	3	3	1	3	4	3	2	3	4	4	

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WISTAR HAN RATS FEMALE																										
30 mg/m3 DAY ON TEST	0732	0673	0708	0690	0732	0731	0660	0732	0731	0733	0732	0732	0731	0683	0731	0731	0598	0733	0731	0642	0732	0733	0731	0719	0732	
ANIMAL ID	00501	00502	00503	00504	00505	00506	00507	00508	00509	00510	00511	00512	00513	00514	00515	00516	00517	00518	00519	00520	00521	00522	00523	00524	00525	**females (cont...)**
Respiratory Epithelium, Accumulation, Hyaline Droplet	1	1		1		1	1	1	1	1				1	1	1		1		1	1			1		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cataract																					4					
Retina, Atrophy																										
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia				1												2										
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst											2															
Nephropathy			1	1				1	1		2			1		1					2	2				
Transitional Epithelium, Hyperplasia																										
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

DAY ON TEST	0732	0732	0733	0731	0705	0733	0681	0563	0732	0733	0733	0731	0603	0732	0733	0732	0731	0684	0732	0732	0731	0733	0732	0732	0646	
WISTAR HAN RATS FEMALE																										
30 mg/m3																										
ANIMAL ID	00526	00527	00528	00529	00530	00531	00532	00533	00534	00535	00536	00537	00538	00539	00540	00541	00542	00543	00544	00545	00546	00547	00548	00549	00550	*** TOTALS**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Rectum	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**47**
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Muscularis, Hypertrophy, Focal																										**1 2.0**
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active																										**1 2.0**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis																			2							**5 1.8**
Basophilic Focus	X	X	X	X	X		X		X	X	X	X	X			X	X		X	X		X	X	X	X	**35**
Clear Cell Focus			X	X							X	X			X	X			X				X			**17**
Eosinophilic Focus																										**1**
Fatty Change																										**2 1.5**
Hepatodiaphragmatic Nodule																										**1**
Necrosis																										**1 1.0**
Bile Duct, Cyst, Multiple																										**1**
Bile Duct, Dilatation																										**2 4.0**
Bile Duct, Hyperplasia													2													**3 2.0**
Mesentery					+									+												**8**

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WISTAR HAN RATS FEMALE 30 mg/m3																											
DAY ON TEST	073 2	073 2	073 3	073 1	070 5	073 3	068 1	056 3	073 2	073 3	073 3	073 1	060 3	073 2	073 3	073 2	073 1	068 4	073 2	073 2	073 1	073 3	073 2	073 2	064 6		
ANIMAL ID	005 26	005 27	005 28	005 29	005 30	005 31	005 32	005 33	005 34	005 35	005 36	005 37	005 38	005 39	005 40	005 41	005 42	005 43	005 44	005 45	005 46	005 47	005 48	005 49	005 50	* TOTALS	
Fat, Necrosis					2									2												8	2.0
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Atrophy																										2	1.5
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Acute																										2	2.5
Inflammation, Chronic Active														3												1	3.0
Ulcer																										1	3.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Mineralization														2												1	2.0
CARDIOVASCULAR SYSTEM																											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy				1					1	1				1	1	2			2	1	1					16	1.1
ENDOCRINE SYSTEM																											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Angiectasis																										1	2.0
Degeneration, Cystic	2	1	4	3	4		3				2	1	3	2	3	2	1		2	2		2	3	3		29	2.3
Hyperplasia	2	2	2			2	2		2	2	2			2		2		3	2	2		2	2	2		27	2.1
Hypertrophy		1	2	3			2				2		2			2	2	2	2	2		2	2	2		24	2.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	

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1-4 .. Lesion qualified as:
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2) Mild 4) Marked

WISTAR HAN RATS FEMALE 30 mg/m3																										
DAY ON TEST	0732	0732	0733	0731	0705	0733	0681	0563	0732	0733	0733	0731	0603	0732	0733	0732	0731	0684	0732	0732	0731	0733	0732	0732	0646	
ANIMAL ID	0052 6	0052 7	0052 8	0052 9	0053 0	0053 1	0053 2	0053 3	0053 4	0053 5	0053 6	0053 7	0053 8	0053 9	0054 0	0054 1	0054 2	0054 3	0054 4	0054 5	0054 6	0054 7	0054 8	0054 9	0055 0	* TOTALS
Hyperplasia																										1 2.0
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia							2																			1 2.0
Parathyroid Gland	+	+	+	+	+	+	+	+	+	M	+	M	+	+	M	+	+	+	+	+	M	+	M	+	+	40
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pars Distalis, Hyperplasia	2											2	3		2			2	3							10 2.4
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Hyperplasia	2	1	4	2		4	3		2	2	2	1	2	3	1	2	2	1		2	2	4	4			43 2.3
Follicular Cell, Hyperplasia																			1							1 1.0
GENERAL BODY SYSTEM																										
NONE																										
GENITAL SYSTEM																										
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Chronic									3																	1 3.0
Inflammation, Chronic Active																				3						1 3.0
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cyst					2											3			2							5 2.2
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenomyosis																										1 3.0
Cervix, Cyst, Squamous			3																							1 3.0
Cervix, Hypertrophy																										1 2.0

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2) Mild 4) Marked

WISTAR HAN RATS FEMALE 30 mg/m3																											
DAY ON TEST	073 2	073 2	073 3	073 1	070 5	073 3	068 1	056 3	073 2	073 3	073 3	073 1	060 3	073 2	073 3	073 2	073 1	068 4	073 2	073 2	073 1	073 3	073 2	073 2	064 6		
ANIMAL ID	005 26	005 27	005 28	005 29	005 30	005 31	005 32	005 33	005 34	005 35	005 36	005 37	005 38	005 39	005 40	005 41	005 42	005 43	005 44	005 45	005 46	005 47	005 48	005 49	005 50	* TOTALS	
Endometrium, Hyperplasia, Cystic														3		3					1	2	3	2		9	2.3
HEMATOPOIETIC SYSTEM																											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node							+																			1	
Lumbar, Hyperplasia, Lymphoid							1																			1	1.0
Lymph Node, Bronchial	+	+	M	+	+	+	M	+	+	M	+	M	+	M	M	M	+	+	+	M	+	M	+	M	+	32	
Hyperplasia, Lymphohistiocytic	1					1															1					7	1.1
Lymph Node, Mandibular	+	+	+	M	+	+	+	+	+	+	+	+	M	I	M	+	+	+	+	+	+	M	+	+	+	43	
Lymph Node, Mediastinal	+	M	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	M	+	+	+	M	+	+	+	45	
Hemorrhage																										1	2.0
Hyperplasia, Lymphohistiocytic	1					2	1																			4	1.3
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hematopoietic Cell Proliferation							2																		3	3	2.7
Thymus	+	+	+	+	+	+	+	+	+	M	+	+	+	+	M	+	+	+	+	+	+	M	+	+	+	45	
Cyst						4																				1	4.0
INTEGUMENTARY SYSTEM																											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Galactocele						3																			3	2	3.0

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DAY ON TEST	0732	0732	0733	0731	0705	0733	0681	0563	0732	0733	0733	0731	0603	0732	0733	0732	0731	0684	0732	0732	0731	0733	0732	0732	0646	
WISTAR HAN RATS FEMALE																										
30 mg/m3 ANIMAL ID	00526	00527	00528	00529	00530	00531	00532	00533	00534	00535	00536	00537	00538	00539	00540	00541	00542	00543	00544	00545	00546	00547	00548	00549	00550	*** TOTALS**
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active													4													**5 3.6**
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Peripheral Nerve																		+		+						**5**
Spinal Cord																		+		+						**5**
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Metaplasia, Squamous	3	2	3	3	3	3	3	3	3	2	3	2	2	3	2	2	2	3	3	2	3	2	3	2	2	**50 2.5**
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Lymphohistiocytic	1	1	1		1	1	1		1	1		1	1	1	1	1	1	1	1	1	1	1	1		1	**42 1.0**
Alveolar Epithelium, Hyperplasia																										**1 3.0**
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Inflammation, Chronic Active																										**1 1.0**
Glands, Olfactory Epithelium, Hyperplasia	2	2	2	1	1	1	2	3		3	3	2	2	2	2	2	3	2	2	2	3	3	1	2	2	**48 2.0**
Goblet Cell, Hyperplasia		1			2	1	2		1	1		1	1	2		1	1	1	1	1	1	1			1	**34 1.1**
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	4	4	3	2	2	3	4	2	3	2	3	3	3	2	4	3	3	2	4	3	4	3	3	3	**50 2.9**

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DAY ON TEST	732	732	733	731	705	733	681	563	732	733	733	731	603	732	733	732	731	684	732	732	731	733	732	732	646		
WISTAR HAN RATS FEMALE 30 mg/m3 ANIMAL ID	0052 6	0052 7	0052 8	0052 9	0053 0	0053 1	0053 2	0053 3	0053 4	0053 5	0053 6	0053 7	0053 8	0053 9	0054 0	0054 1	0054 2	0054 3	0054 4	0054 5	0054 6	0054 7	0054 8	0054 9	0055 0	* TOTALS	
Respiratory Epithelium, Accumulation, Hyaline Droplet		1			3	1	1	1	1			1	1			1	1			1	1	2	1	1	1	**31**	**1.1**
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
SPECIAL SENSES SYSTEM																											
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Cataract																										**1**	**4.0**
Retina, Atrophy						2					2					3						2				**4**	**2.3**
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hyperplasia		2		1																1						**5**	**1.4**
URINARY SYSTEM																											
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Cyst																									2	**2**	**2.0**
Nephropathy	1		1	1	1				1						1		1		1		1				1	**19**	**1.2**
Transitional Epithelium, Hyperplasia													1													**1**	**1.0**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	

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DAY ON TEST	0715	0731	0703	0633	0732	0732	0663	0523	0717	0703	0733	0731	0635	0731	0732	0691	0732	0733	0725	0733	0630	0731	0586	0670	0639	
WISTAR HAN RATS FEMALE 100 mg/m3 ANIMAL ID	0070 1	0070 2	0070 3	0070 4	0070 5	0070 6	0070 7	0070 8	0070 9	0071 0	0071 1	0071 2	0071 3	0071 4	0071 5	0071 6	0071 7	0071 8	0071 9	0072 0	0072 1	0072 2	0072 3	0072 4	0072 5	**females (cont...)**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Intestine Large, Rectum	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	A	+	+	+	+	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																		2								
Basophilic Focus		X		X	X	X	X		X	X		X	X					X	X	X	X	X	X	X	X	
Clear Cell Focus	X	X							X	X		X						X		X	X					
Degeneration, Cystic																										
Eosinophilic Focus												X														
Fatty Change																										
Bile Duct, Cyst									X																	
Bile Duct, Cyst, Multiple												X											X			
Bile Duct, Dilatation												4														
Bile Duct, Hyperplasia										1				2		1										
Mesentery					+																					
Inflammation, Chronic Active																										

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DAY ON TEST	0715	0731	0703	0633	0732	0732	0663	0523	0717	0703	0733	0731	0635	0731	0732	0691	0732	0733	0725	0733	0630	0731	0586	0670	0639
WISTAR HAN RATS FEMALE 100 mg/m3 ANIMAL ID	0070 1	0070 2	0070 3	0070 4	0070 5	0070 6	0070 7	0070 8	0070 9	0071 0	0071 1	0071 2	0071 3	0071 4	0071 5	0071 6	0071 7	0071 8	0071 9	0072 0	0072 1	0072 2	0072 3	0072 4	0072 5
Fat, Necrosis					2																				
Oral Mucosa																			+						
Developmental Malformation																			X						
Inflammation, Chronic Active																			4						
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy					1			1			1	3													
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ulcer																3									
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active							2																		
CARDIOVASCULAR SYSTEM																									
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy	1						2										1				1	1			
Mineralization							2																		
ENDOCRINE SYSTEM																									
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																		2							
Degeneration, Cystic	1		3	2		2	1			2	3		1	2		2	2		2	2	2		3	1	2
Hyperplasia								2		2	2				2			2				2			2

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WISTAR HAN RATS FEMALE 100 mg/m3 ANIMAL ID	0070 1	0070 2	0070 3	0070 4	0070 5	0070 6	0070 7	0070 8	0070 9	0071 0	0071 1	0071 2	0071 3	0071 4	0071 5	0071 6	0071 7	0071 8	0071 9	0072 0	0072 1	0072 2	0072 3	0072 4	0072 5
Hypertrophy		2			2					2	2	2			2					3	2	2			
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia										3															
Parathyroid Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Hyperplasia												1		2	2										
Pars Intermedia, Hyperplasia																		2							
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+
C-cell, Hyperplasia	2	1	2		1	1		1	1	2	1	1	1		1		1	2	1	1		2	1		
Follicular Cell, Hyperplasia																									

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																				4					
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst				3					1		2														2
Interstitial Cell, Hyperplasia																									3
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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WISTAR HAN RATS FEMALE																									
100 mg/m3 DAY ON TEST	0715	0731	0703	0633	0732	0732	0663	0523	0717	0703	0733	0731	0635	0731	0732	0691	0732	0733	0725	0733	0630	0731	0586	0670	0639
ANIMAL ID	00701	00702	00703	00704	00705	00706	00707	00708	00709	00710	00711	00712	00713	00714	00715	00716	00717	00718	00719	00720	00721	00722	00723	00724	00725
Cervix, Hypertrophy																									
Endometrium, Hyperplasia, Cystic	4	1								3															
Vagina																									
HEMATOPOIETIC SYSTEM																									
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Bronchial	M	+	M	M	+	M	M	+	+	+	+	+	+	M	M	M	+	+	+	+	+	M	+	+	+
Hyperplasia, Lymphohistiocytic		1			2			1	2	1	3	1	1				1	1	4	1	3		1		1
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia										2		3													
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	M	+
Hyperplasia, Lymphohistiocytic		1	1						2				1	2			2	2							
Hyperplasia, Lymphoid																									3
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia																									
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hematopoietic Cell Proliferation	4																								
Thymus	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+
INTEGUMENTARY SYSTEM																									
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Galactocele																			4						

females (cont...)

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
\+ .. Tissue examined microscopically
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2) Mild 4) Marked

DAY ON TEST	0715	0731	0703	0633	0732	0732	0663	0523	0717	0703	0733	0731	0635	0731	0732	0691	0732	0733	0725	0733	0630	0731	0586	0670	0639	
WISTAR HAN RATS FEMALE 100 mg/m3 ANIMAL ID	00701	00702	00703	00704	00705	00706	00707	00708	00709	00710	00711	00712	00713	00714	00715	00716	00717	00718	00719	00720	00721	00722	00723	00724	00725	**females (cont...)**
Hyperplasia									2																	
Inflammation, Chronic Active																										
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active		4			2																					
MUSCULOSKELETAL SYSTEM																										
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
NERVOUS SYSTEM																										
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Meninges, Hyperplasia																										
Peripheral Nerve									+	+													+		+	
Spinal Cord									+	+													+		+	
RESPIRATORY SYSTEM																										
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Foreign Body																			X							
Inflammation, Acute																			1				1	1		
Metaplasia, Squamous	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Lymphohistiocytic	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Alveolar Epithelium, Hyperplasia					2														4				1			
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic											1		1		1					1						

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WISTAR HAN RATS FEMALE																										
100 mg/m3 DAY ON TEST	0715	0731	0703	0633	0732	0732	0663	0523	0717	0703	0733	0731	0635	0731	0732	0691	0732	0733	0725	0733	0630	0731	0586	0670	0639	
ANIMAL ID	0070 1	0070 2	0070 3	0070 4	0070 5	0070 6	0070 7	0070 8	0070 9	0071 0	0071 1	0071 2	0071 3	0071 4	0071 5	0071 6	0071 7	0071 8	0071 9	0072 0	0072 1	0072 2	0072 3	0072 4	0072 5	**females (cont...)**
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Acute																										
Glands, Olfactory Epithelium, Hyperplasia	2		2	2	3	3	2	3	3	2	3	3	3	3	2	3	3	2	3	3	3	2	2	3	3	
Goblet Cell, Hyperplasia	1	1	1		1	1	1	2		1	1	2		1	1	1	1	2		2	1	1	1	1	2	
Olfactory Epithelium, Accumulation, Hyaline Droplet	4	2	4	4	4	4	4	4	4	2	3	4	4	4	3	3	4	3	3	3	4	3	3	4	4	
Respiratory Epithelium, Accumulation, Hyaline Droplet			1		1	1	1	1			3	1	1		1	1	1			1	1	1	1	2		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cornea, Inflammation, Chronic Active																			4							
Retina, Atrophy																										
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																										
Zymbal's Gland																			+							
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hydronephrosis		3																								
Mineralization																										
Nephropathy	1	2					4			2			1			1			1			1	1			
Renal Tubule, Hyperplasia																										

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WISTAR HAN RATS FEMALE																										
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ANIMAL ID	00701	00702	00703	00704	00705	00706	00707	00708	00709	00710	00711	00712	00713	00714	00715	00716	00717	00718	00719	00720	00721	00722	00723	00724	00725	**females (cont...)**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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DAY ON TEST	0732	0733	0730	0725	0681	0673	0731	0732	0733	0733	0732	0733	0733	0645	0731	0719	0731	0731	0732	0731	0733	0731	0731	0732	0722	
WISTAR HAN RATS FEMALE																										
100 mg/m3 ANIMAL ID	0072 6	0072 7	0072 8	0072 9	0073 0	0073 1	0073 2	0073 3	0073 4	0073 5	0073 6	0073 7	0073 8	0073 9	0074 0	0074 1	0074 2	0074 3	0074 4	0074 5	0074 6	0074 7	0074 8	0074 9	0075 0	*** TOTALS**
ALIMENTARY SYSTEM																										
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	**46**
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Angiectasis																										**1 2.0**
Basophilic Focus				X		X		X		X		X	X	X		X	X	X	X	X	X		X	X		**32**
Clear Cell Focus				X			X	X				X			X									X		**14**
Degeneration, Cystic																2										**1 2.0**
Eosinophilic Focus																										**1**
Fatty Change						2																				**1 2.0**
Bile Duct, Cyst																										**1**
Bile Duct, Cyst, Multiple																						X				**3**
Bile Duct, Dilatation														4								3				**3 3.7**
Bile Duct, Hyperplasia							1					1										2				**6 1.3**
Mesentery						+		+				+						+								**5**
Inflammation, Chronic Active						2																				**1 2.0**

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WISTAR HAN RATS FEMALE 100 mg/m3																											
DAY ON TEST	0732	0733	0730	0725	0681	0673	0731	0732	0733	0733	0732	0733	0733	0645	0731	0719	0731	0731	0732	0731	0733	0731	0731	0732	0722		
ANIMAL ID	0072 6	0072 7	0072 8	0072 9	0073 0	0073 1	0073 2	0073 3	0073 4	0073 5	0073 6	0073 7	0073 8	0073 9	0074 0	0074 1	0074 2	0074 3	0074 4	0074 5	0074 6	0074 7	0074 8	0074 9	0075 0	* TOTALS	
Fat, Necrosis								2				2						2								4	2.0
Oral Mucosa																										1	
Developmental Malformation																										1	
Inflammation, Chronic Active																										1	4.0
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Atrophy																						2				5	1.6
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Ulcer						3																				2	3.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic Active																										1	2.0
CARDIOVASCULAR SYSTEM																											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy			1	2	1		1	1						1	1					1				1		14	1.1
Mineralization																										1	2.0
ENDOCRINE SYSTEM																											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Angiectasis												2														2	2.0
Degeneration, Cystic		3		4	2	2			3	2	1		2	2	1	2	2	4		2	1		3	3	3	35	2.1
Hyperplasia	2		2		2			2		2	2	2	2		2		2		2	2		2	2	2		22	2.0

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WISTAR HAN RATS FEMALE 100 mg/m3																										
DAY ON TEST	0732	0733	0730	0725	0681	0673	0731	0732	0733	0733	0732	0733	0733	0645	0731	0719	0731	0731	0732	0731	0733	0731	0731	0732	0722	
ANIMAL ID	0072 6	0072 7	0072 8	0072 9	0073 0	0073 1	0073 2	0073 3	0073 4	0073 5	0073 6	0073 7	0073 8	0073 9	0074 0	0074 1	0074 2	0074 3	0074 4	0074 5	0074 6	0074 7	0074 8	0074 9	0075 0	* TOTALS
Hypertrophy		2	2				2	2		2	2	2		2		3			2	2			2			**21 2.1**
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Hyperplasia																										**1 3.0**
Parathyroid Gland	+	+	+	+	M	+	M	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	I	+	+	**42**
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Pars Distalis, Hyperplasia		3			3		2								2		2	2								**9 2.1**
Pars Intermedia, Hyperplasia																										**1 2.0**
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
C-cell, Hyperplasia	1	3	1	1			2	1	1			2	1	2	2			1		1		3	2	4	2	**35 1.5**
Follicular Cell, Hyperplasia																								2		**1 2.0**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**49**
Inflammation, Chronic Active																										**1 4.0**
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**
Cyst			2	2							2	2					3			2				2		**11 2.1**
Interstitial Cell, Hyperplasia																										**1 3.0**
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**

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WISTAR HAN RATS FEMALE 100 mg/m3																											
DAY ON TEST	073 2	073 3	073 0	072 5	068 1	067 3	073 1	073 2	073 3	073 3	073 2	073 3	073 3	064 5	073 1	071 9	073 1	073 1	073 2	073 1	073 3	073 1	073 1	073 2	072 2		
ANIMAL ID	007 26	007 27	007 28	007 29	007 30	007 31	007 32	007 33	007 34	007 35	007 36	007 37	007 38	007 39	007 40	007 41	007 42	007 43	007 44	007 45	007 46	007 47	007 48	007 49	007 50	* TOTALS	
Cervix, Hypertrophy																		2								**1**	**2.0**
Endometrium, Hyperplasia, Cystic												1					3									**5**	**2.4**
Vagina															+											**1**	
HEMATOPOIETIC SYSTEM																											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Lymph Node, Bronchial	+	+	+	+	M	+	+	+	M	+	+	+	M	+	M	+	M	+	+	M	+	+	+	+	+	**35**	
Hyperplasia, Lymphohistiocytic	1		2	2		2	1				1			2		3		2	1		2	1	2	1	2	**30**	**1.6**
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	**49**	
Ectasia																										**2**	**2.5**
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	**47**	
Hyperplasia, Lymphohistiocytic	2		1	3	2	1	1	1		2	3		2			1	1		2			2	1		2	**23**	**1.7**
Hyperplasia, Lymphoid																										**1**	**3.0**
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Ectasia										2																**1**	**2.0**
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Hematopoietic Cell Proliferation																										**1**	**4.0**
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	M	+	I	+	+	I	+	M	+	+	+	+	+	**45**	
INTEGUMENTARY SYSTEM																											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**	
Galactocele																										**1**	**4.0**

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DAY ON TEST	0732	0733	0730	0725	0681	0673	0731	0732	0733	0733	0732	0733	0733	0645	0731	0719	0731	0731	0732	0731	0733	0731	0731	0732	0722		
ANIMAL ID	0072 6	0072 7	0072 8	0072 9	0073 0	0073 1	0073 2	0073 3	0073 4	0073 5	0073 6	0073 7	0073 8	0073 9	0074 0	0074 1	0074 2	0074 3	0074 4	0074 5	0074 6	0074 7	0074 8	0074 9	0075 0	* TOTALS	
Hyperplasia																										1	2.0
Inflammation, Chronic Active																		2				2				2	2.0
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic Active			2											3												4	2.8
MUSCULOSKELETAL SYSTEM																											
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
NERVOUS SYSTEM																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Meninges, Hyperplasia																					1					1	1.0
Peripheral Nerve														+		+										6	
Spinal Cord														+		+										6	
RESPIRATORY SYSTEM																											
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Foreign Body																										1	
Inflammation, Acute																			1							4	1.0
Metaplasia, Squamous	3	3	3	3	3	2	3	3	3	3	3	3	3	2	2	3	2	1	3	3	3	2	3	3	3	50	2.8
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Lymphohistiocytic	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	1	2	2	1	2	2	2	50	1.9
Alveolar Epithelium, Hyperplasia							1										4						1		2	7	2.1
Bronchus-associated Lymphoid Tissue, Hyperplasia, Lymphohistiocytic									1																	5	1.0

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WISTAR HAN RATS FEMALE

100 mg/m3

DAY ON TEST	732	733	730	725	681	673	731	732	733	733	732	733	733	645	731	719	731	731	732	731	733	731	731	732	722	
ANIMAL ID	0072 6	0072 7	0072 8	0072 9	0073 0	0073 1	0073 2	0073 3	0073 4	0073 5	0073 6	0073 7	0073 8	0073 9	0074 0	0074 1	0074 2	0074 3	0074 4	0074 5	0074 6	0074 7	0074 8	0074 9	0075 0	* TOTALS
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Acute																1										1 1.0
Glands, Olfactory Epithelium, Hyperplasia	3	3	3	2	1	2	3	3	3	3	3	2	2	3	2	2	3	3	3	2	3	3	3	3	1	49 2.6
Goblet Cell, Hyperplasia		1	1		1	1	2	2	1	1	1	1	1	2	1	1		1	1	1		1	1	1	1	42 1.2
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	4	4	4	4	4	4	4	3	3	3	3	4	3	4	3	3	3	3	3	3	3	4	4	4	50 3.5
Respiratory Epithelium, Accumulation, Hyaline Droplet		1	2		1	1	2	2	1	1	1	1	1		1			1	1	1		1	1		1	34 1.2
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
SPECIAL SENSES SYSTEM																										
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cornea, Inflammation, Chronic Active																										1 4.0
Retina, Atrophy							3													2						2 2.5
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia				2		1		1															1			4 1.3
Zymbal's Gland																										1
URINARY SYSTEM																										
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hydronephrosis																										1 3.0
Mineralization																				2						1 2.0
Nephropathy	1		1	2						1	1				1					1			1		1	18 1.3
Renal Tubule, Hyperplasia					1																					1 1.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
\+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

WISTAR HAN RATS FEMALE																										
DAY ON TEST	073	073	073	072	068	067	073	073	073	073	073	073	073	064	073	071	073	073	073	073	073	073	073	072		
100 mg/m3	2	3	0	5	1	3	1	2	3	3	2	3	3	5	1	9	1	1	2	1	3	1	1	2		
ANIMAL ID	026	027	028	029	030	031	032	033	034	035	036	037	038	039	040	041	042	043	044	045	046	047	048	049	050	*** TOTALS**
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	**50**

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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