## Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC

## Toxicology Data Management System Tumor Incidence for Selected Control Animal Groups Route: GAVAGE Vehicle: CORN OIL

Study Summary									
Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical		
					Male				
Battelle Columbus Laboratory	052032003	07/25/07	727	50(3)	33(642)	662.9	Tetrabromobisphenol A		
					Female				
Battelle Columbus Laboratory	052032003	07/26/07	728	50(5)	34(678)	375.2	Tetrabromobisphenol A		

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC	S		Page: 5 Report Date: 06/12/2013					
			Male		Female			
#All Organs: Benign Tumors		30/50 (60%)				38/50 (76%)		
Overall Incidence	Total	30/50 (60%)	Mean 60%	SD 0%	Total	38/50 (76%)	Mean 76%	SD 0%
#All Organs: Malignant Tumors		8/50 (16%)				10/50 (20%)		
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total	10/50 (20%)	Mean 20%	SD 0%
#All Organs: Malignant and Benign Tun	nors	34/50 (68%)				40/50 (80%)		
Overall Incidence	Total	34/50 (68%)	Mean 68%	SD 0%	Total	40/50 (80%)	Mean 80%	SD 0%
#All Organs: Hemangioma	<b>T</b> . ( . )	1/50 (2%)	Mara 00/		Turi	0/50 (0%)	Mara 20/	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#All Organs: Hemangiosarcoma		3/50 (6%)				2/50 (4%)		
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
#All Organs: Hemangiosarcoma or Hen								
Overall Incidence	Total	4/50 (8%) 4/50 (8%)	Mean 8%	SD 0%	Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			<b>Toxic</b> o Tumor Incide	Page: 6 Report Date: 06/12/2013				
			Male				Female	
#All Organs: Leukemia: Lymphocytic, M	onocytic, Mo	nonuclear, or Undifferer 1/50 (2%)	ntiated			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#All Organs: Malignant Lymphoma: Hist		ohocytic, Mixed, NOS, or 0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#All Organs: Mesothelioma: Benign, Mal Overall Incidence	<b>ignant, NOS</b> Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#All Organs: Mesothelioma: Malignant		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#All Organs: Osteoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#All Organs: Osteosarcoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC				Page: 7 Report Date: 06/12/2013					
		<u>.</u>		Male		Female			
#All Organs: Osteosarcoma or Osteoma		0/50	(0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	. ,	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Adrenal Cortex: Adenoma			(0%)				1/50 (2%)		
Overall Incidence	Total	0/50 (0%)	(078)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
*Adrenal Cortex: Carcinoma		0/50 (	(0%)				1/50 (2%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
Adrenal Medulla: Pheochromocytoma Benign Overall Incidence	Total	0/49 ( 0/49 (0%)	(0%)	Mean 0%	SD 0%	Total	2/49 (4%) 2/49 (4.08%)	Mean 4.08%	SD 0%
Adrenal Medulla: Pheochromocytoma Maligna			(0%)				0/49 (0%)		
Overall Incidence	Total	0/49 (0%)	<b>、</b>	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%
Adrenal Medulla: Pheochromocytoma: Benign			(0%)				2/49 (4%)		
Overall Incidence	Total	0/49 (0%)	(370)	Mean 0%	SD 0%	Total	2/49 (4.08%)	Mean 4.08%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC				Page: 8 Report Date: 06/12/2013				
			Male		Female			
#Blood Vessel: Hemangiosarcoma	<b>T</b> .(.)	1/50 (2%)	Marca 00/		T-1-1	0/50 (0%)	M	05.00/
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Bone Marrow: Hemangiosarcoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Bone: Osteoma Overall Incidence	Total	0/50 (0%)		SD 0%	Total	0/50 (0%) 0/50 (0%)	Moon 0%	SD 0%
	TOLAI	0/50 (0%)	Mean 0%	SD 0%	TOLAI	0/50 (0%)	Mean 0%	SD 0%
#Bone: Osteosarcoma	Table	0/50 (0%)	Marca 00/		Tatal	0/50 (0%)	Marca 201	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Bone: Osteosarcoma or Osteoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Bone: Sarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 9 Report Date: 06/12/2013					
			Male		Female			
*Brain: Glioma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
'Brain: Glioma Malignant		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
'Brain: Granular Cell Tumor Benigr Overall Incidence		1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
Brain: Meningioma Malignant Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
Brain: Meningioma: Benign, Malig	nant, NOS	0/50 (00())				0/50 (0%)		
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
Brain: Oligodendroglioma, Glioma		t <b>oma</b> 0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 10 Report Dat	<b>te:</b> 06/12/2013				
			Male		Female			
*Clitoral/Preputial Gland: Carcinoma		0/50 (09/)						
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Clitoral/Preputial Gland: Carcinoma or Adenoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Heart: Schwannoma Benign		0/50 (0%)				1/50 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Intestine Small: Duodenum: Leiomyosarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
#Intestine Small: Jejunum: Leiomyosarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Site Unspeci Leiomyosarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 11 Report Date: 06/12/2013						
				Male		Female			
*Islets, Pancreatic: Adenoma		1/50	(2%)				0/50 (0%)		
Overall Incidence	Total	1/50 (2%)		Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Islets, Pancreatic: Carcinoma or Adenoma			(2%)				0/50 (0%)		
Overall Incidence	Total	1/50 (2%)		Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Kidney: Pelvis and Transition Papilloma		m:	(0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Adenoma		0/50	(0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Carcinoma or Adenoma			(0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	(370)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Lipoma		0/50					0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	(070)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 12 Report Date: 06/12/2013					
			Male		Female			
*Kidney: Renal Tubule: Liposarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Liver: Hepatocellular Adenoma		0/50 (0%)				1/50 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
*Liver: Hepatocellular Carcinoma o Overall Incidence	<b>r Hepatocel</b> Total	llular Adenoma 0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
<sup>•</sup> Liver: Hepatocellular Carcinoma, ł	lepatocellu	0/50 (0%)	blastoma			1/50 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
*Lung: Alveolar/Bronchiolar Adeno	ma	0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Lung: Alveolar/Bronchiolar Carcin		eolar/Bronchiolar Aden 0/50 (0%)				0/50 (0%)		
Overall Incidence *: Denominator is number of animals		0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 13 Report Date: 06/12/2013						
				Male		Female			
#Lymph Node, Mesenteric: Hemangioma Overall Incidence	Total		(2%)	Magn 20/	SD 0%	Total	0/50 (0%)	Maan 00/	SD 0%
	10tai	1/50 (2%)		Mean 2%	5D 0%	1 Otal	0/50 (0%)	Mean 0%	50 0%
#Lymph Node, Mesenteric: Hemangiosarcoma		1/50	(2%)				1/50 (2%)		
Overall Incidence	Total	1/50 (2%)		Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Mammary Gland: Adenoma Overall Incidence	Total		(0%)	Mean 0%	SD 0%	Total	4/50 (8%) 4/50 (8%)	Mean 8%	SD 0%
#Mammary Gland: Carcinoma							1/50 (2%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Mammary Gland: Carcinoma or Adenoma			(0%)				4/50 (8%)		
Overall Incidence	Total	0/50 (0%)	× - /	Mean 0%	SD 0%	Total	4/50 (8%)	Mean 8%	SD 0%
#Mammary Gland: Fibroadenoma		1/50	(2%)				8/50 (16%)		
Overall Incidence	Total	1/50 (2%)	( )-)	Mean 2%	SD 0%	Total	8/50 (16%)	Mean 16%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratorie Species: RATS Strain: Wistar Han Length of Study: CHRONIC	25		Toxic Tumor Incide	Page: 14 Report Date: 06/12/2013				
		· · · · · · · · · · · · · · · · · · ·	Male	<u> </u>		<u>.</u>	Female	
#Mammary Gland: Fibroma, Fibroadenoma c	or Adenoma	1/50 (2%)				12/50 (24%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	12/50 (24%)	Mean 24%	SD 0%
#Mammary Gland: Fibroma, Fibroadenoma, (		Adenoma 1/50 (2%)				12/50 (24%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	12/50 (24%)	Mean 24%	SD 0%
#Mesentery: Hemangiosarcoma Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Mesentery: Schwannoma Malignant Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Nose: Olfactory Neuroblastoma		0/50 (0%)				1/50 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Oral Cavity (Oral Mucosa, Squamous Cell Carcinom	Tongue, Phary	nx, Tooth, Gingiva):						
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			<b>Toxic</b> d Tumor Incide	Page: 15 Report Date: 06/12/2013				
			Male				Female	
#Oral Cavity (Oral Mucosa, To Squamous Cell Carcinoma		Pharynx, Tooth, Gingiva): oma Squamous, or Papilloma 0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Oral Mucosa: Squamous Cell Carcinoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Ovary: Granulosa Cell Tumor Beni						0/50 (0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
'Ovary: Granulosa Cell Tumor Mali	gnant					1/50 (2%)		
Overall Incidence					Total	1/50 (2%)	Mean 2%	SD 0%
*Ovary: Granulosa Cell Tumor: Ben								
Overall Incidence	-				Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
						1/30 (270)		
*Ovary: Sex Cord Stromal Tumor, E	Benign					2/50 (40/)		
Overall Incidence					Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%
*: Denominator is number of animal #: Denominator is number of animal		xamined microscopically						

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 16 Report Date: 06/12/2013					
			Male				Female	
*Pancreas: Adenoma								
		1/50 (2%)				0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Pancreas: Carcinoma or Adenoma		(70)				0/50 (00/)		
Overall Incidence	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Distalis Adenoma								
		21/50 (42%)				21/50 (42%)		
Overall Incidence	Total	21/50 (42%)	Mean 42%	SD 0%	Total	21/50 (42%)	Mean 42%	SD 0%
*Pituitary Gland: Pars Distalis Carcinoma or Adenoma		ified Site:						
Overall Incidence	Total	21/50 (42%) 21/50 (42%)	Mean 42%	SD 0%	Total	21/50 (42%) 21/50 (42%)	Mean 42%	SD 0%
*Pituitary Gland: Pars Interme Adenoma								
		2/50 (4%)				4/50 (8%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	4/50 (8%)	Mean 8%	SD 0%
*Pituitary Gland: Pars Interme Carcinoma or Adenoma	dia:	2/50 (4%)				4/50 (8%)		
Overall Incidence	Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%	Total	4/50 (8%) 4/50 (8%)	Mean 8%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 17 Report Date: 06/12/2013						
			Male			Female			
*Prostate: Adenoma		0/50 (0%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%					
*Prostate: Carcinoma or Adenoma		0/50 (0%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%					
*Salivary Glands: Myoepithelioma		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
*Salivary Glands: Schwannoma Malignant Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Seminal Vesicle:						0,00 (0,0)			
Adenoma		0/50 (0%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%					
#Skeletal Muscle: Sarcoma		4/50 (001)				0/50 (0)()			
Overall Incidence	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
*: Denominator is number of animals									

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 18 Report Date: 06/12/2013					
			Male	<u> </u>		· · · · · · · · · · · · · · · · · · ·	Female	
#Skin: Basal Cell Adenoma		2/50 (4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal Cell Adenoma or Ba						0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal Cell Adenoma, Baso	-	2/50 (4%)	-		Tatal	0/50 (0%)	Maan 00/	
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal Cell Carcinoma Overall Incidence	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
	TOLAI			30 0%				50 0%
#Skin: Basal Cell Carcinoma or B	asosquamou	s Tumor (malignant or N 1/50 (2%)	IOS)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal Cell Carcinoma, Bas NOS), or Trichoepitheliom;	al Cell Adenc					0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laborator Species: RATS Strain: Wistar Han Length of Study: CHRONIC				Page: 19 Report Date: 06/12/2013						
			Male				Female			
#Skin: Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma 7/50 (14%) 0/50 (0%)										
Overall Incidence	Total	7/50 (14%)	Mean 14%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
∜Skin: Fibroma										
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Skin: Fibroma, Fibrosarcoma, Overall Incidence	Sarcoma, Myxo	oma, Myxosarcoma, or F 0/50 (0%) 0/50 (0%)	brous Histiocytoma Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
Skin: Fibrosarcoma		0/50 (0%)				0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
¥Skin: Fibrosarcoma, Sarcoma	, Myxosarcoma	, or Fibrous Histiocytom 0/50 (0%)	a			0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
/Skin:						0/50 (0%)				
Hamartoma		0/50 (0%)								

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC				Page: 20 Report Date: 06/12/2013				
			Male				Female	
#Skin: Hemangiosarcoma		0/50 (0%)				1/50 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Skin: Keratoacanthoma		4/50 (8%)				0/50 (0%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Lipoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Liposarcoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Neurofibrosarcoma or Schw	/annoma (m	alignant or NOS) 2/50 (4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
¥Skin: Neurofibrosarcoma, Neurofi		cchwannoma (benign, ma 2/50 (4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*: Denominator is number of animals #: Denominator is number of animals		xamined microscopically						

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Page: 21 Report Date: 06/12/2013					
			Male		Female			
#Skin: Schwannoma Malignant		2/50 (4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Carcinoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Carcinoma, or Carcinoma Overall Incidence	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
≮Skin: Squamous Cell Papilloma		1/50 (2%)				0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Papilloma o	r Papilloma	1/50 (2%)				0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Papilloma, F		quamous Cell Carcinor 5/50 (10%)				0/50 (0%)		
		(.0/0)						

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC				Page: 22 Report Date: 06/12/2013				
			Male				Female	
#Skin: Squamous Cell Papilloma, F	-	5/50 (10%)	Marca 400/	05.00	T-1-1	0/50 (0%)	Mara 00/	05.00/
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Sebaceous Gland: Adenoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Sebaceous Gland: Carcinoma or Adenoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Spleen: Hemangiosarcoma		1/50 (2%)				0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Stomach, Forestomach: Leiomyoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Stomach, Forestomach: Leiomyosarcoma						0/50 (09/.)		
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC				Page: 23 Report Date: 06/12/2013					
			Male				Female		
#Stomach, Forestomach: Sarcoma	0/50 (0%) 0/50 (0%)					0/50 (0%)	)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
#Stomach, Forestomach: Squamous Cell Carcinoma		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
#Stomach, Forestomach: Squamous Cell Carcinoma c Overall Incidence	or <b>Papillom</b> a Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Stomach, Glandular: Leiomyosarcoma		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%	
#Stomach, Glandular: Sarcoma		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
'Testes: Adenoma		0/50 (0%)							
		0/50 (0%)							

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC				Page: 24 Report Date: 06/12/2013				
			Male	Female				
*Thymus: Sarcoma		0/49 (0%)				1/50 (2%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
*Thymus: Thymoma Benign		1/49 (2%)				1/50 (2%)		
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
*Thymus: Thymoma: Benign, Maligna Overall Incidence		1/49 (2%) 1/49 (2.04%)	Mean 2.04%	SD 0%	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
*Thyroid Gland: C-Cell: Adenoma		5/50 (10%)						
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
*Thyroid Gland: C-Cell: Carcinoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Thyroid Gland: C-Cell: Carcinoma or Adenoma		5/50 (10%)				7/50 (14%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC			Toxic Tumor Incide		Page: 25 Report Date: 06/12/2013			
			Male				Female	
*Thyroid Gland: Follicular Cell: Adenoma		0/50 (0%)				0/50 (00/)		
Overall Incidence	Total	3/50 (6%) 3/50 (6%)	Mean 6%	SD 0%	Total	3/50 (6%) 3/50 (6%)	Mean 6%	SD 0%
*Thyroid Gland: Follicular Cell: Carcinoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
Thyroid Gland: Follicular Cell: Carcinoma or Adenoma Overall Incidence		3/50 (6%) 3/50 (6%)	Mean 6%	SD 0%	Total	3/50 (6%) 3/50 (6%)	Mean 6%	SD 0%
Urinary Bladder: Carcinoma or Papilloma		1/50 (2%)				1/50 (2%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
*Urinary Bladder: Papilloma		1/50 (2%)				1/50 (2%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Uterus: Carcinoma						3/50 (6%)		
Overall Incidence					Total	3/50 (6%)	Mean 6%	SD 0%
*: Denominator is number of animals v #: Denominator is number of animals v		xamined microscopically						••••••

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC	Toxicology Data Managemen Tumor Incidence for Selected Control Route: GAVAGE Vehicle: CORN OIL		Page: 26 Report Date: 06/12/2013		
	Male		Female		
#Uterus:					
Polyp Stromal			2/50 (4%)		
Overall Incidence		Total	2/50 (4%)	Mean 4%	SD 0%
#Uterus:					
Sarcoma Stromal			0/50 (00()		
Overall Incidence		Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Uterus:					
Sarcoma Stromal or Polyp Stromal					
Overall Incidence		Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%
#Uterus:					
Schwannoma Malignant					
-			0/50 (0%)		
Overall Incidence		Total	0/50 (0%)	Mean 0%	SD 0%
#Uterus:					
Squamous Cell Papilloma			- / />		
Overall Incidence		Total	0/50 (0%)	Moon 0%	SD 09/
		10tai	0/50 (0%)	Mean 0%	SD 0%
#Vagina:					
Leiomyoma			1/50 (20/)		
Overall Incidence		Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
*: Denominator is number of animals with tissues examined microso #: Denominator is number of animals pectopsied	opically				

Version: Jun2013 Contract/Lab: All Laboratories Species: RATS Strain: Wistar Han Length of Study: CHRONIC	5		Page: 27 Report Date: 06/12/2013					
			Male				Female	
#Vagina: Polyp								
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Zymbal's Gland: Carcinoma		0/50 (00/)				0/50 (00/)		
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Zymbal's Gland: Carcinoma or Adenoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%