Summary of the Incidence of Nonneoplastic Lesions in Male Rats in the 2-Year Feed Study of Fumonisin B₁^a

Ũ	-			Ū	=
	0 ppm	5 ppm	15 ppm	50 ppm	150 ppm
Disposition Summary					
6-Week evaluation	4	4	4	4	4
10-Week evaluation	4	4	4	4	4
14-Week evaluation	4	4	4	4	4
26-Week evaluation	4	4	4	4	4
Animala initially in 2 year study	40	40	48	10	10
Animals initially in 2-year study Early deaths	48	40	40	48	48
Removed from study	2			2	
Moribund	24	19	19	19	21
Natural deaths	6	4	4	9	2
Survivors					
Terminal sacrifice	16	17	25	18	25
Animals examined microscopically	64	56	64	64	64
6-Week Evaluation					
Kidney	(4)	(4)	(4)	(4)	(4)
Apoptosis, cortex, renal tubule			4 (100%)	4 (100%)	4 (100%)
Cyst, medulla	1 (25%)				
Cytoplas alter, cortex, renal tubule	1 (25%)				
liver	(4)	(4)	(4)	(4)	(4)
Fatty change, centrilobular Inflammation, chronic		1 (25%)			
		1 (25%)			
10-Week Evaluation					
Kidney	(4)	(4)	(4)	(4)	(4)
Apoptosis, cortex, renal tubule			4 (100%)	4 (100%)	4 (100%)
Cyst, medulla	(272.0)				1 (25%)
Inflammation, chronic, pelvis	1 (25%)	2 (50%)	1 (050/)	1 (050/)	
Nephropathy	1 (25%) (4)	1 (25%) (4)	1 (25%) (4)	1 (25%)	(4)
iver Angiectasis, focal, sinusoid	(4)	(4)	(4)	(4)	(4) 1 (25%)
Hyperplasia, bile duct					1 (25%)
Necrosis, focal		1 (25%)			1 (2070)
Aesentery		1 (2070)		(1)	
Necrosis, focal, fat				1 (100%)	
4 Week Evolution					
14-Week Evaluation	(4)	(4)	(\mathbf{A})	(4)	(A)
Kidney Apoptosis, cortex, renal tubule	(4)	(4)	(4) 4 (100%)	(4) 4 (100%)	(4) 4 (100%)
Cyst, medulla			4 (100%)	4 (100%) 1 (25%)	4 (10070)
Cyst, meduna Cytoplas alter, cortex, renal tubule	2 (50%)			1 (2J/0)	
Nephropathy	~ (3070)	3 (75%)	1 (25%)	1 (25%)	2 (50%)
liver	(4)	(4)	(4)	(4)	(4)
Hyperplasia, bile duct	\-/	2 (50%)	1 (25%)	1 (25%)	x-/
Inflammation, chronic		×/	1 (25%)	1 (25%)	
Necrosis, multifocal			1 (25%)		
INECTOSIS, IIIUIUIOCAI					
Testes Hemorrhage		(1) 1 (100%)			

 $^{\rm a}\,$ Number of animals examined microscopically at the site and the number of animals with lesion

Summary of the Incidence of Nonneoplastic Lesions in Male Rats in the 2-Year Feed Study of Fumonisin B₁

	0 ррт		5 ppm		15 ppm		50 ppm		150 ppm	
26-Week Evaluation										
Intestine large Hemorrhage, focal, cecum, submucosa Kidney Apoptosis, cortex, renal tubule	(4)		(4) 1	(25%)	(4)		(4) 4	(100%)	(1) 1 (4) 4	(100%) (100%)
Mineralization	2	(50%)						. ,	1	(25%)
Nephropathy	4	(100%)	3	(75%)	1	(25%)	3	(75%)	4	(100%)
Liver	(4)		(4)		(4)		(4)		(4)	
Devel malfor					1	(4%)				
Fatty change, centrilobular	4	(100%)	4	(100%)		(4	(100%)	4	(100%)
Hyperplasia, bile duct	1	(25%)	2	(50%)	3	(75%)	4	(100%)	2	(50%)
Inflammation, chronic	4	(100%)	3	(75%)	3	(75%)	3	(75%)	2	(50%)
Necrosis, focal	1	(25%)				(050())	1	(25%)		
Necrosis, multifocal Vacualiz cuto, focal	2	(50%)			1	(25%)	1	(950/)	1	(25%)
Vacuoliz cyto, focal	2	(50%)			1	(25%)	1	(25%)	1	(23%)
2-Year Study										
Adrenal gland	(47)		(22)		(25)		(31)		(47)	
Angiectasis, bilateral, cortex	()		()		()		()		1	(2%)
Angiectasis, cortex							1	(3%)		· ·
Hema cell prol, cortex							1	(3%)	1	(2%)
Hyperplasia, focal, bilateral, cortex									1	(2%)
Hyperplasia, focal, bilateral, medulla	1	(2%)	1	(5%)	1	(4%)	2	(6%)		
Hyperplasia, focal, cortex	5	(11%)	1	(5%)	1	(4%)	1	(3%)	1	(2%)
Hyperplasia, focal, medulla	7	(15%)	3	(14%)	2	(8%)	3	(10%)	5	(11%)
Infiltrat cell, lymphocytic	1	(2%)								
Vacuoliz cyto, diffuse, bilateral, cortex	1	(2%)					1	(3%)		
Vacuoliz cyto, diffuse, cortex	2	(4%)			1	(4%)			1	(2%)
Vacuoliz cyto, focal, bilateral, cortex	1	(2%)							1	(2%)
Vacuoliz cyto, focal, cortex	11	(23%)	4	(18%)			5	(17%)	8	(17%)
Blood vessel	(47)		(23)		(23)		(30)		(47)	
Inflammation, chronic, mesent artery			1	(4%)						
Bone	(48)		(23)		(23)		(30)		(48)	
Degen, epiphysis									1	(2%)
Degen, joint, cartilage			1	(4%)						
Hyperostosis, turbinate	1	(2%)								
Inflammation, chronic, joint							1	(3%)		
Bone, femur	(48)		(23)		(23)		(29)		(48)	
Hyperplasia, cartilage, epiphysis					2	(9%)				
Bone marrow	(47)		(23)		(23)		(30)		(48)	()
Angiectasis									1	(2%)
Atrophy		(00)			-	(100)	1	(3%)	-	(00)
Depletion	1	(2%)	_	(100.1)	3	(13%)	2	(7%)	3	(6%)
Hyperplasia	7	(15%)	3	(13%)	3	(13%)	7	(23%)	12	(25%)
Myelofibrosis	1	(2%)	/		/		/			
Brain	(48)	(222)	(24)	(222)	(23)	(0.0.0.1)	(31)	(0.00.1)	(48)	(22.0)
Compression, hypothalamus	11	(23%)	7	(29%)	6	(26%)	8	(26%)	4	(8%)
Hemorrhage, hypothalamus							1	(3%)		
Hemorrhage, ventricle							1	(3%)	-	(0.0.1)
Necrosis, hippocampus, neuron			/		/		/		1	(2%)
Brain, cerebrum	(48)		(24)		(23)		(31)		(48)	
Compression			1	(4%)						
Hemorrhage							1	(3%)		

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TABLE A4

	0 ppm		5 pj	pm	15 p	15 ppm		pm	150 ppm	
2-Year Study (continued)										
Coagulating gland	(48)		(22)		(23)		(29)		(48)	
Atrophy	9	(19%)	2	(9%)	2	(9%)	1	(3%)	3	(6%)
Atrophy, bilateral	14	(29%)	4	(18%)	8	(35%)	6	(21%)	16	(33%)
Degen, bilateral					1	(4%)				
Infiltrat cell, lymphocytic									1	(2%)
Inflammation, acute							1	(3%)		
Inflammation, chronic active			1	(5%)						
Epididymis	(48)		(23)		(22)		(28)		(47)	
Atrophy									1	(2%)
Atrophy, bilateral	2	(4%)			3	(14%)	1	(4%)		
Degen, mucoid, bilateral, epithelium	2	(4%)	1	(4%)	1	(5%)			2	(4%)
Degen, mucoid, epithelium	6	(13%)			1	(5%)	1	(4%)	6	(13%)
Hyperplasia, epithelium			1	(4%)						
Inflammation, chronic	1	(2%)							1	(2%)
Esophagus	(48)		(22)		(23)		(30)		(48)	
Inflammation, chronic, muscularis							1	(3%)		
Eye	(47)		(24)		(26)		(35)		(48)	
Atrophy, bilateral, retina	32	(68%)	7	(29%)	14	(54%)	20	(57%)	27	(56%)
Atrophy, retina	5	(11%)	5	(21%)	3	(12%)	3	(9%)	5	(10%)
Cataract, bilateral, lens	21	(45%)	4	(17%)	7	(27%)	13	(37%)	15	(31%)
Cataract, lens	4	(9%)	1	(4%)	2	(9%)	3	(9%)	3	(6%)
Degen, optic nerve		. ,		. ,		. ,			1	(2%)
Inflammation, acute, cornea					1	(4%)				
Inflammation, acute, iris			1	(4%)		. ,				
Inflammation, chronic, cornea	1	(2%)		. ,						
Necrosis, optic nerve	1	(2%)								
Iarderian gland	(48)	. ,	(23)		(23)		(30)		(48)	
Atrophy, focal	2	(4%)	/		/		()		(- /	
Hyperplasia, focal		. ,					1	(3%)		
Infiltrat cell, lymphocytic	15	(31%)	4	(17%)	5	(22%)	11	(37%)	18	(38%)
Infiltrat cell, lymphocytic, bilateral	9	(19%)	3	(13%)	1	(4%)	2	(7%)	5	(10%)
Inflammation, chronic	2	· · · · · /	-	· · · · · /	-		$\tilde{2}$	(7%)	1	(2%)
leart	(48)		(23)		(24)		(30)		(48)	
Cardiomyopathy	42	(89%)	15	(65%)	14	(58%)	23	(77%)	37	(77%)
Inflammation, chronic, coron artery		·····/	1	(4%)		()		()		
Inflammation, chronic, epicardium			1	(4%)						
Inflammation, chronic, pericardium			1	(4%)						
Inflammation, chronic, valve			1	(4%)					3	(6%)
Thrombus, atrium	1	(2%)	2	(9%)	1	(4%)			1	(2%)
ntestine large, cecum	(45)	()	(23)	(****)	(23)	(/	(25)		(47)	()
Parasite meta	(10)		(~0)		(20)		(~0)		1	(2%)
ntestine large, colon	(47)		(23)		(23)		(28)		(47)	()
Hyperplasia, lymphoid	()		(~0)		(20)	(4%)	(20)		()	
Parasite meta					-	()			1	(2%)
Ulcer			1	(4%)					•	(2/0)
ntestine large, rectum	(48)		(23)	(1/0)	(23)		(30)		(47)	
Hemorrhage	(10)		(20)		(20)		(30)	(3%)	(11)	
Hyperplasia, focal, epithelium							1	(3%)		
Parasite meta							1	(070)	1	(2%)
ntestine small, ileum	(45)		(23)		(22)		(26)		(47)	(~ /0)
Hyperplasia, lymphoid	(45)		(23)		(22)	(5%)	(20)		(47)	
riyperpiasia, tynipii0iu					1	(370)				

2-Year Study (continued) Kidney Acc hyaline d, bilateral, renal tubule	(10)									
Kidney	(40)									
Acc hyaline d, bilateral, renal tubule	(48)		(40)		(48)		(48)		(48)	
	1	(2%)					1	(2%)	1	(2%)
Cyst	2	(4%)	1	(3%)			3	(6%)	7	(15%)
Cyst, bilateral									1	(2%)
Cytoplas alter, bilateral, renal tubule		(22)							1	(2%)
Hydronephrosis	1	(2%)		(00/)		(00/)	1.4	(000())	0	(170/)
Hyperplasia, focal, renal tubule	2	(4%)	1	(3%)	4	(8%)	14	(29%)	8	(17%)
Inflammation, acute, bilateral, pelvis					1	(90/)	1	(2%)		
Inflammation, chronic, artery Inflammation, chronic, artery, pelvis			1	(3%)	1	(2%)	1	(2%)		
Inflammation, chronic, altery, pervis	1	(2%)	1	(3%)	1	(2%)				
Mineralization	1	(2%)	1	(370)	1	(2%)	1	(2%)	1	(2%)
Mineralization, bilateral	1	(~ /0)	1	(3%)	1	(~ /0)	1	(~ / U)	1	(~ / U)
Nephropathy			1	(070)	1	(2%)	4	(8%)	3	(6%)
Nephropathy, bilateral	44	(92%)	38	(95%)	43	(90%)	34	(71%)	39	(81%)
Pigment, bilateral, renal tubule	13	(27%)	8	(20%)		(17%)	2	(4%)	6	(13%)
Pigment, renal tubule	15	(~. , 0)	1	(3%)	0	(1, , 0)	2 1	(2%)	1	(2%)
Lacrimal gland	(47)		(23)	(0,0)	(22)		(30)	(~, 0)	(48)	(~, 0)
Atrophy, diffuse	()		(20)	(4%)	(~~)		(00)		(10)	
Atrophy, focal			2	(9%)	1	(5%)	4	(13%)	1	(2%)
Cyst			-	(0.0)	-	(0.0)	-	()	1	(2%)
Hyperplasia, duct									1	(2%)
Infiltrat cell, lymphocytic	11	(23%)	11	(48%)	5	(23%)	9	(30%)	20	(42%)
Larynx	(46)	/	(21)	/	(22)		(29)	,	(46)	/
Cyst	2	(4%)	2	(10%)	2	(9%)			2	(4%)
Inflammation, chronic	1	(2%)	2	(10%)		. ,	1	(3%)	3	(7%)
Inflammation, chronic active	2	(4%)	1	(5%)						
liver	(48)		(40)		(48)		(48)		(48)	
Angiectasis, focal	1	(2%)	1	(3%)			1	(2%)		
Basoph focus	3	(6%)	11	(28%)	7	(15%)	9	(19%)	23	(48%)
Clear cl focus	5	(10%)	10	(25%)	14	(29%)	6	(13%)	10	(21%)
Congestion			1	(3%)	1	(2%)	1	(2%)		
Degen, cystic, focal	6	(13%)	4	(10%)	5	(10%)	3	(6%)	2	(4%)
Degen, cystic, focal, hepatocyte		(105.)	-	(1 = 0 - 1)	1	(2%)	_	(100.1)		(242)
Eosin focus	5	(10%)	6	(15%)	10	(21%)	5	(10%)	10	(21%)
Hdn	3	(6%)	3	(8%)	2	(4%)	3	(6%)	5	(10%)
Hema cell prol		(00/)			1	(2%)	1	(2%)		
Hemorrhage	1	(2%)	05	(000())		(0.40/)	10	(000())	10	(000/)
Hyperplasia, bile duct	38	(79%) (4%)	35	(88%)	45	(94%)	42	(88%) (2%)	43	(90%)
Inflammation, chronic	2	(4%)	4	(10%)	2	(4%)	1	(2%)	4	(8%) (10%)
Mixed cl focus	5	(10%)	6	(15%)	5	(10%)	4	(8%) (10%)	9	(19%) (2%)
Necrosis Pigment	4	(8%)			1	(2%)	5	(10%)	1	(2%) (2%)
Tension lipoid	3	(6%)	5	(13%)	7	(15%)	7	(15%)	1	(2%)
Thrombus, vein	3	(0/0)	J	(1370)	1	(13%)	1	(13/0)	1	(13/0)
Vacuoliz cyto, hepatocyte	13	(27%)	8	(20%)	12	(25%)	9	(19%)	13	(27%)
Jung	(48)	(~1/0)	(24)	(~0/0)	(23)	(~0/0)	(32)	(1370)	(48)	(~1/0)
Congestion	(40)		(24)		(23)		(32)		(40)	(2%)
Foreign body					1	(4%)			1	(w /0)
Hyperplasia, focal, alveolar epith			1	(4%)	1	(1/0)	2	(6%)	1	(2%)
Infiltrat cell, histiocytic			1	(4%)	1	(4%)	2 1	(3%)	1	(2%)
Infiltrat cell, lymphocytic			1	(1/0)	1	(1/0)	1	(0/0)	1	(2%)
Inflammation, chronic, interstitium	1	(2%)			1	(4%)	2	(6%)	1	(2%)
Lung, bronchus	(48)	(~ /0)	(24)		(23)	(1/0)	(31)	(0/0)	(48)	(w /0)
Inflammation, chronic active	(10)		(~1)		(23)	(4%)	(01)		(10)	

	0 p j	0 ppm 5 ppm		pm	15 ppm		50 ppm		150 ppm	
2-Year Study (continued)										
Lymph node	(48)		(24)		(27)		(33)		(48)	
Degen, cystic, deep cervical	()		()		1	(4%)	()		()	
Degen, cystic, mediastinal			1	(4%)	-	(2.3)				
Degen, cystic, renal			1	(4%)						
Lymph node, mandibular	(48)		(23)	()	(26)		(32)		(48)	
Degen, cystic	6	(13%)	(20)		2	(8%)	3	(9%)	6	(13%)
Hemorrhage	1	(2%)			~	(070)	3	(9%)	1	(2%)
Hyperplasia, lymphoid	5	(10%)	4	(17%)			5	(16%)	10	(21%)
Infiltrat cell, histiocytic	1	(2%)	1	(4%)			2	(6%)	10	(2170)
Lymph node, mesenteric	(47)	(270)	(23)	(1)0)	(23)		(30)	(0/0)	(48)	
Atrophy	1	(2%)	(20)		(20)	(4%)	(50)	(3%)	(40)	
Degen, cystic	3	(6%)	1	(4%)	1	(4%)	1	(3%)	3	(6%)
Hemorrhage	1	(2%)	1	(4%)	2	(9%)	3	(10%)	1	(2%)
Hyperplasia, lymphoid	1	(270)	1	(4%)	2	(370)	2	(10%)	1	(270)
Infiltrat cell, histiocytic	27	(57%)	9	(39%)	11	(48%)	15	(7%)	27	(56%)
Inflammation, chronic	21	(01/0)	ษ	(33/0)	11	(10/0)	15	(00/0)	27	(36%)
,	(40)		(90)		(94)		(94)			(270)
Mammary gland	(40)	(900/)	(20)	(150/)	(24)	(190/)	(24)	(910/)	(42)	(100/)
Cyst	11	(28%)	3	(15%)	3	(13%)	5	(21%)	4	(10%)
Galactocele	5	(13%)	3	(15%)	7	(29%)	1	(40/)	8	(19%)
Hyperplasia, epithelium					1	(4%)	1	(4%)	1	(90/)
Hyperplasia, focal, epithelium			(0)		(0)				1	(2%)
Mesentery	(4)		(3)	(000)	(3)		(4)		(4)	
Accessory spln			1	(33%)						
Inflammation, chronic, artery		(******)	1	(33%)		(1000)		(******)		(77.0.0)
Necrosis, fat	3	(75%)	1	(33%)	3	(100%)	3	(75%)	3	(75%)
Nose	(48)		(23)		(23)		(29)		(48)	(
Cytoplas alter, olfactory epi	20	(42%)	7	(30%)	10	(43%)	6	(21%)	18	(38%)
Foreign body	2	(4%)	3	(13%)	1	(4%)	1	(3%)	3	(6%)
Inflammation, acute					1	(4%)	1	(3%)	1	(2%)
Inflammation, acute, nasolacrim dct	1	(2%)	1	(4%)	1	(4%)	2	(7%)	1	(2%)
Inflammation, chronic	1	(2%)	2	(9%)	1	(4%)	1	(3%)		
Inflammation, chronic active	1	(2%)	2	(9%)	1	(4%)	2	(7%)	2	(4%)
Inflammation, chronic active,										
nasolacrim dct	5	(10%)	4	(17%)			3	(10%)	10	(21%)
Inflammation, chronic, nasolacrim dct	7	(15%)	2	(9%)	4	(17%)			4	(8%)
ancreas	(47)		(24)		(25)		(30)		(48)	
Atrophy, diffuse, acinar cell	2	(4%)	1	(4%)	2	(8%)	1	(3%)	1	(2%)
Atrophy, focal, acinar cell	20	(43%)	8	(33%)	9	(36%)	13	(43%)	28	(58%)
Basoph focus, acinar cell				. ,	1	(4%)		. ,	2	(4%)
Hyperplasia, focal			1	(4%)	1	(4%)			1	(2%)
Hyperplasia, focal, acinar cell	1	(2%)		. /		. ,			1	(2%)
Hyperplasia, focal, duct	1	(2%)								
Infiltrat cell, lymphocytic	-						1	(3%)	2	(4%)
Inflammation, chronic, artery	1	(2%)	1	(4%)	1	(4%)	-	(- / 0)	2	(4%)
Necrosis, focal		(/ 0)	1	(4%)	-	()			~	(
Parathyroid gland	(46)		(21)	(1/0)	(22)		(26)		(47)	
Hyperplasia, focal	(10)		(~1)		(~~)		(~0)		(47)	(2%)
Pigment									1	(2%)
Pituitary gland	(43)		(28)		(33)		(33)		(45)	(~,0)
Angiectasis, pars distalis	(43)		(20)		(33)		(33)	(3%)	(43)	(2%)
Atypical cells, pars nervosa							1	(0/0)	1	(2%)
Cyst, pars distalis									2	(2%)
	1	(9 0/)							2 1	(4%) (2%)
Cyst, pars intermed	1	(2%)								
Cyst, pars nervosa									1	(2%)
Cyst, Rathke's cleft	4	(00/)					4	(00/)	1	(2%)
Hemorrhage	1	(2%)					1	(3%)		
Hemorrhage, pars distalis	~	(70.)		(10)	~	(00)	1	(3%)	_	(100)
Hyperplasia, focal, pars distalis	3	(7%)	1	(4%)	2	(6%)	1	(3%)	7	(16%)
Hypertrophy, focal, pars distalis			1	(4%)	2	(6%)			1	(2%)

Summary of the Incidence of Nonneoplastic Lesions in Male Rats in the 2-Year Feed Study of Fumonisin B₁

	0 ррт		5 ppm		15 ppm		50 ppm		150 ppm	
2-Year Study (continued)										
Preputial gland Foreign body	(43)		(19)		(20)		(30)		(44) 1	(2%)
Hyperplasia, focal	3	(7%)							1	(270)
Inflammation, acute	1	(2%)								
Inflammation, chronic	18	(42%)	6	(32%)	9	(45%)	15	(50%)	13	(30%)
Inflammation, chronic active					1	(5%)			4	(9%)
Inflammation, chronic active, bilateral			2	(11%)			2	(7%)	2	(5%)
Inflammation, chronic, bilateral	7	(16%)	3	(16%)	6	(30%)	5	(17%)	9	(20%)
Prostate	(48)		(22)		(23)		(30)		(48)	
Atrophy	10	(21%)	4	(18%)	5	(22%)	6	(20%)	12	(25%)
Cyst			1	(5%)						
Cytoplas alter, epithelium									1	(2%)
Fibrosis	-	(00)			1	(4%)	_	(105.)	_	(00)
Hyperplasia, focal, epithelium	1	(2%)	~	(1.10.1)	~	(00)	3	(10%)	3	(6%)
Inflammation, acute	7	(15%)	3	(14%)	2	(9%)	7	(23%)	6	(13%)
Inflammation, chronic	3	(6%)	~	(0.00())	3	(13%)	2	(7%)	2	(4%)
Inflammation, chronic active	11	(23%)	8	(36%)	4	(17%)	3	(10%)	10	(21%)
Salivary glands	(48)	(10()	(23)	(10)	(23)	(400())	(30)	(00)	(48)	(00)
Atrophy, diffuse, parotid gland	2	(4%)	1	(4%)	3	(13%)	1	(3%)	4	(8%)
Cyst		(00())	1	(4%)						(00/)
Cytoplas alter, focal, submandibul gland Infiltrat cell, lymphocytic	1	(2%)							1 1	(2%) (2%)
Inflammation, chronic,										
submandibul gland									1	(2%)
Seminal vesicle	(48)		(23)		(24)		(30)		(48)	
Atrophy	8	(17%)	1	(4%)	2	(8%)	1	(3%)	5	(10%)
Atrophy, bilateral	19	(40%)	11	(48%)	13	(54%)	10	(33%)	18	(38%)
Skeletal muscle, thigh	(48)		(23)		(24)		(30)		(48)	
Degen			1	(4%)			1	(3%)	1	(2%)
Hemorrhage					1	(4%)				
Skin	(48)		(27)		(28)		(32)		(48)	
Atrophy, hair follicle									1	(2%)
Inflammation, chronic	1	(2%)					1	(3%)		
Spinal cord, thoracic	(47)	(00)	(23)		(23)		(30)		(48)	
Hemorrhage	1	(2%)	(0.0)		(22)				(
Spleen	(48)	(00/)	(29)		(33)	(00/)	(41)	(00/)	(48)	
Atrophy, lymph follic	1	(2%)		(00/)	2	(6%)	1	(2%)	~	(00/)
Congestion	2	(4%)	1	(3%)	1	(3%)	1	(2%)	3	(6%)
Depletion, focal	1	(2%)	0	(70/)			2	(5%)	0	(40/)
Fibrosis, focal	1	(2%)	2	(7%)	0	(00/)	3	(7%)	2	(4%)
Hema cell prol	5	(10%)	4	(14%)	3	(9%)	5	(12%)	6	(13%)
Infarct, focal					1	(3%)	1	(90/)		
Inflammation, chronic active	1	(90/)			1	(20/)	1	(2%)		
Inflammation, chronic, capsule	1	(2%)			1	(3%)	0	(70/)	0	(40/)
Pigment	4	(8%)	(00)		4	(12%)	3	(7%)	2	(4%)
Stomach, forestomach	(48)	(40/)	(23)		(23)		(30)	(20/)	(48)	(90/)
Edema Errorian facal	2	(4%)					1	(3%)	1	(2%)
Erosion, focal	1	(2%)	0	(190/)	4	(170/)	0	(100/)		(00/)
Hyperplasia, epithelium	8	(17%)	3	(13%)	4	(17%)	3	(10%)	4	(8%)
Inflammation, acute	4	(00/)	0	(00/)	0	(00/)	1	(3%)	1	(90/)
Inflammation, chronic	4	(8%)	2	(9%)	2	(9%)	5	(17%)	1	(2%)
Inflammation, chronic active	1	(2%)					0	(70/)	1	(2%)
Ulcer	1	(2%)					2	(7%)	2	(4%)

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TABLE A4

	0 p	pm	5 p	5 ppm 15 pj		pm	50 p	pm 150		ррт
2-Year Study (continued)										
Stomach, glandular	(48)		(23)		(23)		(30)		(48)	
Cyst	3	(6%)	2	(9%)			()		(-)	
Edema		(1	(4%)					1	(2%)
Erosion					1	(4%)				
Erosion, focal	1	(2%)			2	(9%)				
Inflammation, acute	1	(2%)								
Inflammation, chronic	1	(2%)	1	(4%)	1	(4%)	1	(3%)		
Necrosis	1	(2%)							1	(2%)
Testes	(48)	()	(39)		(46)		(46)		(48)	(
Atrophy, bilateral, germinal epith	3	(6%)	()		2	(4%)	(()	
Atrophy, germinal epith	6	(13%)	1	(3%)	10	(22%)	6	(13%)	9	(19%)
Granloma sperm	1	(2%)	-		-		-	/	-	
Hyperplasia, focal, bilateral,	-									
interstit cell	2	(4%)	2	(5%)			1	(2%)		
Hyperplasia, focal, interstit cell	4	(8%)	6	(15%)	10	(22%)	5	(11%)	2	(4%)
Inflammation, chronic, artery	1	(2%)		()		(()		()
Mineralization	-	()	1	(3%)	1	(2%)			1	(2%)
Thymus	(37)		(19)	(0.0)	(21)	(1.1.5)	(24)		(41)	(
Atrophy	13	(35%)	5	(26%)		(43%)	8	(33%)	19	(46%)
Cyst	1	(3%)	-	(-	()	-	(00.0)	1	(2%)
Hemorrhage	2	(5%)					3	(13%)	4	(10%)
Hyperplasia, lymphoid	~	(0/0)			1	(5%)	Ŭ	(10/0)	-	(10/0)
Thyroid gland	(48)		(24)		(25)	(0,0)	(31)		(48)	
Cyst, follicle	(10)		(~ 1)		(20)		2	(6%)	(10)	
Hyperplasia, focal, c cell	10	(21%)	6	(25%)	5	(20%)	3	(10%)	9	(19%)
Inflammation, chronic	10	(2%)	Ŭ	(2070)	Ū	(2070)	Ŭ	(10/0)	0	(1070)
Ultimobra cyst	2	(4%)	1	(4%)					1	(2%)
Fissue NOS	(2)	(1/0)	1	(1/0)	(2)		(1)		(1)	(~ / U)
Cyst	(2)	(50%)			(~)		(1)		(1)	
Inflammation, chronic	1	(00/0)			1	(50%)				
Inflammation, chronic, mediastinum					1	(00/0)			1	(100%)
Fongue	(48)		(23)		(23)		(30)		(48)	(100/0)
Inflammation, chronic	(01)		(23)		(23)	(4%)	(00)		(40)	(2%)
Inflammation, chronic, artery			1	(4%)	1	(1/0)			1	(~ /U)
Frachea	(48)		(23)	(1/0)	(23)		(30)		(48)	
Inflammation, chronic	(40)		(23)	(4%)	(20)		(30)		(48)	(2%)
Urinary bladder	(47)		(22)	(4/0)	(23)		(30)		(48)	(~/0)
Dilatation	(47)		(22)		(23)		(30)	(3%)	(40)	
			1	(5%)			1	(3/0)		
Hyperplasia, transit epithe Infiltrat cell, lymphocytic	2	(4%)	1 2	(5%) (0%)					1	(90/)
	2	(470)	L	(9%)			2	(70/)	1	(2%)
Inflammation, acute			1	(50/)			Z	(7%)		
Inflammation, chronic			1	(5%)						