Experiment Number: 20006 - 03 Test Type: CHRONIC Route: GAVAGE Species/Strain: RATS/HSD

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol CAS Number: 700-06-1 Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

F1_HSD

NTP Study Number:	C20006B
Lock Date:	06/21/2010
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:	NONE

Test Type: CHRONIC Route: GAVAGE

Roule. GAVAGE

Species/Strain: RATS/HSD

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Disposition Summary					
Animals Initially In Study	50	50	50	50	
Early Deaths					
Dosing Accident				1	
Moribund Sacrifice	14	23	15	20	
Natural Death	16	14	18	17	
Survivors					
Terminal Sacrifice	20	13	17	12	
Animals Examined Microscopically	50	50	50	50	
ALIMENTARY SYSTEM					
Esophagus	(50)	(50)	(50)	(50)	
Inflammation		1 (2%)			
Epithelium, Hyperplasia		1 (2%)			
Intestine Large, Cecum	(50)	(50)	(50)	(50)	
Hyperplasia, Lymphoid		1 (2%)			
Necrosis	1 (2%)	1 (2%)			
Intestine Large, Colon	(50)	(50)	(50)	(50)	
Erosion	1 (2%)				
Intestine Large, Rectum	(50)	(50)	(50)	(50)	
Fibrosis			. ,	1 (2%)	
Intestine Small, Duodenum	(43)	(48)	(47)	(48)	
Lymphatic, Ectasia			15 (32%)	14 (29%)	
Intestine Small, Ileum	(35)	(43)	(42)	(38)	
Intestine Small, Jejunum	(40)	(39)	(40)	(42)	
Lymphatic, Ectasia		2 (5%)	27 (68%)	41 (98%)	
Liver	(50)	(50)	(50)	(50)	
Angiectasis	1 (2%)	•			
Basophilic Focus	3 (6%)		3 (6%)	1 (2%)	
Cholangiofibrosis	· · ·	1 (2%)	3 (6%)	1 (2%)	
Clear Cell Focus	14 (28%)	13 (26%)	18 (36%)	9 (18%)	
Degeneration, Cystic	· ·		1 (2%)		
Eosinophilic Focus	10 (20%)	12 (24%)	10 (20%)	6 (12%)	
Hepatodiaphragmatic Nodule	2 (4%)		1 (2%)	1 (2%)	

Test Type: CHRONIC Route: GAVAGE Species/Strain: RATS/HSD		Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/0 Lab: BAT			
Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Mixed Cell Focus	4 (8%)	2 (4%)	1 (2%)	2 (4%)	
Necrosis	3 (6%)	3 (6%)	5 (10%)	7 (14%)	
Artery, Inflammation, Chronic Active		1 (2%)	((
Bile Duct, Cyst		. ,	1 (2%)	5 (10%)	
Bile Duct, Cyst, Multiple			1 (2%)	. ,	
Bile Duct, Fibrosis	2 (4%)		1 (2%)	1 (2%)	
Bile Duct, Hyperplasia	7 (14%)	4 (8%)	3 (6%)	3 (6%)	
Oval Cell, Hyperplasia		. ,		1 (2%)	
Periportal, Inflammation, Chronic Active	1 (2%)				
Mesentery	(2)	(2)	(1)	(0)	
Artery, Inflammation, Chronic Active	1 (50%)				
Artery, Mineralization		1 (50%)			
Fat, Necrosis	1 (50%)				
Oral Mucosa	(50)	(50)	(50)	(50)	
Foreign Body		1 (2%)			
Hyperplasia, Squamous		1 (2%)	2 (4%)	1 (2%)	
Sebaceous Gland, Ectopic Tissue				1 (2%)	
Pancreas	(50)	(50)	(50)	(49)	
Angiectasis				1 (2%)	
Thrombosis		1 (2%)			
Acinus, Atrophy	1 (2%)	1 (2%)		2 (4%)	
Acinus, Hyperplasia	16 (32%)	10 (20%)	14 (28%)	10 (20%)	
Artery, Inflammation, Chronic Active	22 (44%)	32 (64%)	27 (54%)	21 (43%)	
Salivary Glands	(50)	(50)	(49)	(50)	
Metaplasia		1 (2%)		2 (4%)	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Erosion			1 (2%)		
Hyperplasia	19 (38%)	19 (38%)	19 (38%)	22 (44%)	
Inflammation	2 (4%)		4 (8%)	1 (2%)	
Necrosis	1 (2%)				
Ulcer	2 (4%)	1 (2%)	1 (2%)	1 (2%)	
Stomach, Glandular	(50)	(50)	(50)	(50)	
Epithelium, Amyloid Deposition			1 (2%)		

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Experiment Number: 20006 - 03 Test Type: CHRONIC

Epithelium, Hyperplasia

Epithelium, Inflammation

Epithelium, Inflammation, Chronic Active

a - Number of animals examined microscopically at site and number of animals with lesion

2 (4%)

3 (6%)

7 (14%)

2 (4%)

3 (6%)

1 (2%)

5 (10%)

1 (2%)

4 (8%)

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55

Test Type: CHRONIC Route: GAVAGE Species/Strain: RATS/HSD	FUS. INCIDENCE R	Time Report Requested: 04/10/2 Time Report Requested: 09:53:4 First Dose M/F: 03/14/07 / 03/15, Lab: BAT			
Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Epithelium, Mineralization	7 (14%)	12 (24%)	6 (12%)	10 (20%)	
Epithelium, Necrosis	1 (2%)				
Epithelium, Ulcer		1 (2%)			
Epithelium, Muscularis, Hyperplasia, Focal	(-)	1 (2%)	(-)		
Tongue	(0)	(0)	(0)	(1)	
Tooth	(1)	(0)	(1)	(0)	
Malformation			1 (100%)		
Necrosis	1 (100%)				
CARDIOVASCULAR SYSTEM					
Blood Vessel	(50)	(50)	(50)	(50)	
Dilatation	1 (2%)				
Inflammation, Chronic Active	30 (60%)	38 (76%)	30 (60%)	29 (58%)	
Mineralization		2 (4%)	1 (2%)	1 (2%)	
Thrombosis			1 (2%)		
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	47 (94%)	48 (96%)	49 (98%)	48 (96%)	
Mineralization	1 (2%)			1 (2%)	
Atrium, Thrombosis	1 (2%)	3 (6%)	3 (6%)	3 (6%)	
Epicardium, Inflammation	1 (2%)	1 (2%)			
Pericardium, Inflammation			1 (2%)		
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(49)	(50)	(50)	
Atrophy				1 (2%)	
Degeneration, Cystic	4 (8%)	3 (6%)	5 (10%)	4 (8%)	
Degeneration, Fatty	8 (16%)	13 (27%)	5 (10%)	16 (32%)	
Hematopoietic Cell Proliferation			1 (2%)		
Hemorrhage			1 (2%)		
Hyperplasia	14 (28%)	19 (39%)	19 (38%)	6 (12%)	
Necrosis	1 (2%)			2 (4%)	
Thrombosis		1 (2%)			
Adrenal Medulla	(50)	(49)	(50)	(50)	

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Date Report Requested: 04/16/2013

a - Number of animals examined microscopically at site and number of animals with lesion

Experiment Number: 20006 - 03

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/HSD

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Iarlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
Angiectasis	1 (2%)			
Degeneration, Fatty		1 (2%)		
Hyperplasia	18 (36%)	22 (45%)	20 (40%)	19 (38%)
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	3 (6%)	6 (12%)	1 (2%)	3 (6%)
Parathyroid Gland	(43)	(46)	(50)	(47)
Hyperplasia	3 (7%)	10 (22%)	13 (26%)	8 (17%)
Pituitary Gland	(50)	(49)	(50)	(47)
Pars Distalis, Hyperplasia	17 (34%)	18 (37%)	19 (38%)	12 (26%)
Thyroid Gland	(50)	(46)	(48)	(47)
Thrombosis	1 (2%)			
C-cell, Hyperplasia	6 (12%)	4 (9%)	4 (8%)	5 (11%)
C-cell, Hypertrophy				1 (2%)
Follicular Cell, Hyperplasia		1 (2%)		
Follicular Cell, Hypertrophy	21 (42%)	34 (74%)	33 (69%)	36 (77%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(50)	(50)	(50)	(50)
Atrophy	1 (2%)			
Preputial Gland	(50)	(50)	(49)	(50)
Cyst	7 (14%)		3 (6%)	5 (10%)
Fibrosis	1 (2%)			
Inflammation	2 (4%)			1 (2%)
Prostate	(50)	(50)	(50)	(50)
Atrophy	1 (2%)	1 (2%)		
Fibrosis	1 (2%)	3 (6%)	2 (4%)	1 (2%)
Hyperplasia	3 (6%)	4 (8%)	7 (14%)	3 (6%)
Inflammation, Acute	1 (2%)	6 (12%)		6 (12%)
Inflammation, Chronic Active				1 (2%)
Necrosis	1 (2%)			

Experiment Number: 20006 - 03 Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: GAVAGE

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

larlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Seminal Vesicle	(49)	(50)	(50)	(50)	
Hypoplasia			1 (2%)		
Inflammation, Acute				2 (4%)	
Testes	(49)	(50)	(50)	(50)	
Atrophy	30 (61%)	37 (74%)	35 (70%)	33 (66%)	
Pigmentation, Hemosiderin			1 (2%)		
Artery, Inflammation, Chronic Active	28 (57%)	34 (68%)	33 (66%)	33 (66%)	
Interstitial Cell, Hyperplasia	1 (2%)		1 (2%)	2 (4%)	
HEMATOPOIETIC SYSTEM	· · · · · · · · · · · · · · · · · · ·				
Bone Marrow	(50)	(50)	(50)	(50)	
Hyperplasia	1 (2%)	2 (4%)	4 (8%)	3 (6%)	
Lymph Node	(4)	(8)	(8)	(6)	
Angiectasis				1 (17%)	
Bronchial, Hemorrhage		1 (13%)	1 (13%)		
Deep Cervical, Hemorrhage		1 (13%)			
Deep Cervical, Hyperplasia, Plasma Cell		1 (13%)			
Deep Cervical, Inflammation		1 (13%)			
Iliac, Infiltration Cellular, Histiocyte			1 (13%)		
Lumbar, Hemorrhage			2 (25%)		
Mediastinal, Ectasia		1 (13%)	1 (13%)		
Mediastinal, Hemorrhage	1 (25%)	2 (25%)	3 (38%)	1 (17%)	
Mediastinal, Hyperplasia, Lymphoid		1 (13%)			
Mediastinal, Infiltration Cellular, Lipocyte				1 (17%)	
Mediastinal, Infiltration Cellular, Histiocyte		1 (13%)			
Mediastinal, Pigmentation, Hemosiderin				1 (17%)	
Pancreatic, Hemorrhage		1 (13%)		1 (17%)	
Renal, Ectasia	2 (50%)	. ,			
Renal, Hemorrhage	1 (25%)	2 (25%)			
Renal, Pigmentation, Hemosiderin	· · · ·	· · ·		1 (17%)	
Lymph Node, Mandibular	(50)	(50)	(49)	(50)	
Ectasia		1 (2%)	1 (2%)	1 (2%)	
Hemorrhage			1 (2%)		
Hyperplasia, Plasma Cell	1 (2%)				

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/HSD

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Ectasia		1 (2%)			
Hemorrhage		1 (2%)			
Hyperplasia, Lymphoid	1 (2%)			1 (2%)	
Lymphatic, Ectasia			1 (2%)	5 (10%)	
Spleen	(50)	(50)	(50)	(50)	
Atrophy				1 (2%)	
Hematopoietic Cell Proliferation	28 (56%)	33 (66%)	28 (56%)	29 (58%)	
Inflammation	1 (2%)	(, , , , , , , , , , , , , , , , , , ,	(, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	
Necrosis			1 (2%)		
Thymus	(46)	(49)	(49)	(47)	
Atrophy	41 (89%)	41 (84%)	42 (86%)	41 (87%)	
Hemorrhage	(/	(- · · /	1 (2%)		
Epithelial Cell, Hyperplasia	1 (2%)				
NTEGUMENTARY SYSTEM	()	()			
Mammary Gland	(50)	(50)	(50)	(50)	
Fibrosis			1 (2%)		
Inflammation				1 (2%)	
Skin	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion	5 (10%)	3 (6%)	2 (4%)	2 (4%)	
Inflammation	3 (6%)	2 (4%)		2 (4%)	
Necrosis		2 (4%)			
Epidermis, Ulcer	1 (2%)				
Sebaceous Gland, Hyperplasia				1 (2%)	
MUSCULOSKELETAL SYSTEM					
	(50)	(50)	(50)	(50)	
Bone	(50)	(00)			
Bone Fibrous Osteodystrophy	(50) 12 (24%)	19 (38%)	13 (26%)	8 (16%)	

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/HSD

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion			()	1 (2%)	
Gliosis		2 (4%)			
Necrosis				2 (4%)	
Spinal Cord	(0)	(2)	(1)	(0)	
Degeneration		2 (100%)	1 (100%)		
RESPIRATORY SYSTEM					
Lung	(49)	(50)	(50)	(50)	
Edema			1 (2%)	1 (2%)	
Fibrosis				1 (2%)	
Foreign Body		1 (2%)	1 (2%)		
Hemorrhage			1 (2%)	1 (2%)	
Hemorrhage, Multifocal	3 (6%)	3 (6%)	7 (14%)	7 (14%)	
Inflammation, Granulomatous			1 (2%)		
Inflammation, Chronic	17 (35%)	21 (42%)	24 (48%)	23 (46%)	
Mineralization				1 (2%)	
Necrosis	1 (2%)				
Alveolar Epithelium, Hyperplasia	1 (2%)		1 (2%)	1 (2%)	
Alveolus, Infiltration Cellular, Histiocyte	19 (39%)	22 (44%)	19 (38%)	13 (26%)	
Alveolus, Mineralization	1 (2%)	2 (4%)	1 (2%)	1 (2%)	
Nose	(50)	(50)	(50)	(50)	
Foreign Body	4 (8%)	12 (24%)	11 (22%)	10 (20%)	
Fungus	1 (2%)				
Inflammation	1 (2%)				
Inflammation, Chronic Active	11 (22%)	15 (30%)	16 (32%)	15 (30%)	
Thrombosis		1 (2%)			
Respiratory Epithelium, Hyperplasia	2 (4%)	2 (4%)	4 (8%)	7 (14%)	
Respiratory Epithelium, Metaplasia, Squamous			2 (4%)		
Trachea	(50)	(50)	(50)	(50)	
Inflammation	1 (2%)	1 (2%)	1 (2%)		

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a) Indole-3-carbinol

CAS Number: 700-06-1

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/HSD

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
SPECIAL SENSES SYSTEM					
Ear	(0)	(0)	(1)	(0)	
External Ear, Hyperplasia, Squamous			1 (100%)		
Eye	(50)	(50)	(49)	(49)	
Cataract				1 (2%)	
Anterior Chamber, Inflammation, Acute	2 (4%)	1 (2%)	4 (8%)	3 (6%)	
Cornea, Inflammation, Acute	20 (40%)	25 (50%)	17 (35%)	21 (43%)	
Retina, Fibrosis				1 (2%)	
Harderian Gland	(50)	(50)	(49)	(50)	
Angiectasis				1 (2%)	
Pigmentation, Porphyrin	1 (2%)				
Lacrimal Gland	(1)	(2)	(4)	(0)	
Degeneration	1 (100%)	2 (100%)	4 (100%)		
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	
Cyst				1 (2%)	
Metaplasia, Osseous		1 (2%)			
Nephropathy	50 (100%)	49 (98%)	49 (98%)	50 (100%)	
Renal Tubule, Dilatation	· · ·	· · ·	1 (2%)		
Urinary Bladder	(50)	(50)	(50)	(50)	
Hemorrhage	·	·		1 (2%)	
Inflammation				1 (2%)	

*** END OF MALE ***

Experiment Number: 20006 - 03 Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: GAVAGE

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Disposition Summary					
Animals Initially In Study	50	50	50	50	
Early Deaths					
Dosing Accident		1		1	
Moribund Sacrifice	24	22	23	11	
Natural Death	5	8	7	8	
Survivors					
Moribund Sacrifice		1	1		
Terminal Sacrifice	21	18	19	30	
Animals Examined Microscopically	50	50	50	50	
ALIMENTARY SYSTEM		-			
Esophagus	(50)	(50)	(50)	(50)	
Inflammation	(00)	2 (4%)	(00)	(00)	
Perforation		2 (170)		1 (2%)	
Intestine Large, Cecum	(50)	(50)	(50)	(48)	
Intestine Large, Colon	(50)	(50)	(50)	(48)	
Intestine Large, Rectum	(50)	(50)	(50)	(50)	
Metaplasia	(00)	(00)	1 (2%)	(00)	
Intestine Small, Duodenum	(48)	(47)	(48)	(47)	
Lymphatic, Ectasia	(10)	()	16 (33%)	38 (81%)	
Intestine Small, Ileum	(47)	(47)	(48)	(47)	
Intestine Small, Jejunum	(47)	(46)	(48)	(48)	
Lymphatic, Ectasia	()	()	30 (63%)	47 (98%)	
Liver	(50)	(50)	(50)	(48)	
Angiectasis	1 (2%)	(20)	2 (4%)	3 (6%)	
Basophilic Focus	14 (28%)	6 (12%)	11 (22%)	14 (29%)	
Cholangiofibrosis		1 (2%)			
Clear Cell Focus	6 (12%)	7 (14%)	4 (8%)	18 (38%)	
Eosinophilic Focus	- (/	4 (8%)	5 (10%)	6 (13%)	
Hepatodiaphragmatic Nodule		- (- /-)	3 (6%)	2 (4%)	
Inflammation, Chronic			- (-,-)	1 (2%)	
Mixed Cell Focus	5 (10%)	1 (2%)	5 (10%)	4 (8%)	
Necrosis	1 (2%)	2 (4%)	- (- · · ·)	()	

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: GAVAGE

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Pigmentation	1 (2%)				
Thrombosis		1 (2%)			
Bile Duct, Cyst	2 (4%)	1 (2%)	4 (8%)	4 (8%)	
Bile Duct, Cyst, Multiple	2 (4%)	1 (2%)	2 (4%)	2 (4%)	
Bile Duct, Hyperplasia	2 (4%)				
Centrilobular, Degeneration		1 (2%)			
Mesentery	(0)	(2)	(2)	(1)	
Artery, Inflammation, Chronic Active	(-)	1 (50%)	(-)		
Oral Mucosa	(50)	(50)	(50)	(50)	
Hyperplasia, Squamous	(00)	(00)	1 (2%)	2 (4%)	
Pancreas	(50)	(49)	(49)	(48)	
Acinus, Hyperplasia	1 (2%)	3 (6%)	(57)	1 (2%)	
Active Active	1 (2%)	4 (8%)	3 (6%)	6 (13%)	
Salivary Glands	(50)	(49)	(48)	(50)	
Inflammation	(50) 1 (2%)	(43)	(40)	(50)	
Stomach, Forestomach	(50)	(50)	(50)	(49)	
			(50) 7 (14%)	(49) 3 (6%)	
Hyperplasia	2 (4%)	5 (10%)	1 (14%)	. ,	
Inflammation	1 (2%)	4 (00()		1 (2%)	
Pigmentation, Melanin	4 (00()	1 (2%)			
Ulcer	1 (2%)	(()		(12)	
Stomach, Glandular	(50)	(49)	(50)	(49)	
Erosion			1 (2%)		
Ulcer	1 (2%)				
Epithelium, Hyperplasia	1 (2%)		1 (2%)		
Epithelium, Mineralization			1 (2%)		
Tongue	(1)	(1)	(0)	(1)	
Cyst				1 (100%)	
Erosion	1 (100%)				
Inflammation		1 (100%)			
Tooth	(0)	(1)	(0)	(0)	
CARDIOVASCULAR SYSTEM					
Blood Vessel Degeneration, Focal	(50)	(50)	(50) 1 (2%)	(50)	

Experiment Number: 20006 - 03 Test Type: CHRONIC Route: GAVAGE Species/Strain: RATS/HSD Harlan Sprague Dawley RATS FEMALE	P03: INCIDENCE R	Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT			
	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Inflammation, Chronic Active Thrombosis	1 (2%)	3 (6%)	4 (8%) 1 (2%)	7 (14%)	
Heart	(50)	(50)	(50)	(49)	
Cardiomyopathy Atrium, Thrombosis	24 (48%)	24 (48%) 1 (2%)	24 (48%)	24 (49%)	
Epicardium, Inflammation	1 (2%)	3 (6%)		1 (2%)	
Pericardium, Inflammation			2 (4%)		
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(48)	
Degeneration, Cystic	16 (32%)	12 (24%)	11 (22%)	15 (31%)	
Degeneration, Fatty	5 (10%)	3 (6%)		1 (2%)	
Hyperplasia	18 (36%)	11 (22%)	18 (36%)	15 (31%)	
Hypertrophy	1 (2%)				
Inflammation		1 (2%)		1 (2%)	
Necrosis			1 (2%)	1 (2%)	
Thrombosis		1 (2%)	1 (2%)		
Bilateral, Degeneration, Cystic	1 (2%)				
Adrenal Medulla	(50)	(50)	(50)	(48)	
Hyperplasia	15 (30%)	13 (26%)	11 (22%)	12 (25%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Parathyroid Gland	(47)	(49)	(46)	(49)	
Hyperplasia		2 (4%)			
Pituitary Gland	(50)	(50)	(50)	(49)	
Pars Distalis, Hyperplasia	19 (38%)	14 (28%)	18 (36%)	24 (49%)	
Thyroid Gland	(49)	(49)	(48)	(47)	
C-cell, Hyperplasia	7 (14%)	5 (10%)	6 (13%)	5 (11%)	
Follicular Cell, Hyperplasia	1 (2%)		1 (2%)	1 (2%)	
Follicular Cell, Hypertrophy	27 (55%)	23 (47%)	24 (50%)	30 (64%)	

GENERAL BODY SYSTEM

None

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/HSD

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
			,		
GENITAL SYSTEM					
Clitoral Gland	(50)	(50)	(50)	(50)	
Cyst	5 (10%)	2 (4%)	3 (6%)	4 (8%)	
Inflammation	1 (2%)			2 (4%)	
Ovary	(50)	(50)	(50)	(49)	
Angiectasis				1 (2%)	
Atrophy	40 (80%)	23 (46%)	37 (74%)	30 (61%)	
Cyst	17 (34%)	13 (26%)	16 (32%)	16 (33%)	
Inflammation, Acute			1 (2%)	1 (2%)	
Inflammation, Chronic			(1 (2%)	
Inflammation, Chronic Active	1 (2%)	1 (2%)		1 (2%)	
Necrosis, Fibrinoid			1 (2%)		
Uterus	(50)	(50)	(50)	(50)	
Cyst			2 (4%)		
Dilatation	9 (18%)	9 (18%)	7 (14%)	5 (10%)	
Inflammation, Histiocytic, Focal	1 (2%)		(- ()	
Inflammation, Acute	5 (10%)	12 (24%)	6 (12%)	9 (18%)	
Thrombosis		(1 (2%)	1 (2%)	
Endometrium, Hyperplasia, Cystic	29 (58%)	28 (56%)	29 (58%)	21 (42%)	
Endometrium, Metaplasia, Squamous	12 (24%)	18 (36%)	20 (40%)	11 (22%)	
Vagina	(2)	(1)	(0)	(2)	
HEMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(50)	(50)	(50)	
Atrophy		1 (2%)	1 (2%)		
Hyperplasia	21 (42%)	20 (40%)	23 (46%)	17 (34%)	
Lymph Node	(7)	(6)	(4)	(3)	
Axillary, Hyperplasia, Lymphoid	. ,		. ,	1 (33%)	
lliac, Hyperplasia, Lymphoid		1 (17%)		· ·	
Iliac, Infiltration Cellular, Histiocyte		· · · ·		1 (33%)	
Inguinal, Hemorrhage		1 (17%)			
Inguinal, Hyperplasia, Lymphoid	1 (14%)		1 (25%)		
 Number of onimals examined microscopic 					

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: GAVAGE

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Indole-3-carbinol

CAS Number: 700-06-1

Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT

0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
2 (29%)	1 (17%)			
	. ,			
()		1 (25%)		
	(),			
2 (29%)				
	(49)	(49)	(50)	
1 (2%)				
		1 (2%)	15 (31%)	
(50)	(50)			
	- ()			
	1 (2%)	1 (2%)	()	
1 (2%)	4 (8%)	3 (6%)		
(50)	(50)	(50)	(50)	
	3 (6%)	7 (14%)	7 (14%)	
		()		
	< - /			
	(50)	(50)	(50)	
()		()		
	(_,_)			
			. ,	
(50)	(50)	(50)	(50)	
	1 (2%)	1 (2%)		
	$\begin{array}{c} 2 \ (29\%) \\ 1 \ (14\%) \\ \\ 2 \ (29\%) \\ 1 \ (14\%) \\ (50) \\ (50) \\ (50) \\ 1 \ (2\%) \\ \\ (50) \\ 36 \ (72\%) \\ (47) \\ 38 \ (81\%) \\ \\ 1 \ (2\%) \\ \\ 1 \ (2\%) \\ 8 \ (16\%) \\ 1 \ (2\%) \\ 8 \ (16\%) \\ 1 \ (2\%) \\ 1 \ (2\%) \\ 1 \ (2\%) \\ (50) \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Experiment Number: 20006 - 03 Test Type: CHRONIC Route: GAVAGE Species/Strain: RATS/HSD Harlan Sprague Dawley RATS FEMALE	P03: INCIDENCE R	ATES OF NON-NEOP Indole-3 CAS Numb	Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT		
	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Skeletal Muscle Degeneration	(1)	(0)	(1) 1 (100%)	(1)	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Gliosis		1 (2%)			
Hemorrhage		4 (651)		1 (2%)	
Inflammation	4 (00()	1 (2%)		4 (00/)	
Necrosis Maningga Digmontation Lingfuggin	1 (2%)	1 (20()		1 (2%)	
Meninges, Pigmentation, Lipofuscin Peripheral Nerve	(0)	1 (2%)	(0)	(0)	
Spinal Cord	(0) (0)	(2) (1)	(0) (0)	(0) (0)	
Hemorrhage	(0)	1 (100%)	(0)	(0)	
Necrosis		1 (100%)			
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(49)	
Atelectasis	(00)	1 (2%)	(00)	(10)	
Foreign Body		2 (4%)			
Inflammation, Granulomatous	1 (2%)	x /			
Inflammation, Chronic	34 (68%)	30 (60%)	38 (76%)	35 (71%)	
Alveolar Epithelium, Hyperplasia	. ,	· ·		1 (2%)	
Alveolar Epithelium, Metaplasia, Squamous				1 (2%)	
Alveolus, Infiltration Cellular, Histiocyte	13 (26%)	16 (32%)	11 (22%)	9 (18%)	
Bronchiole, Hyperplasia		1 (2%)	1 (2%)		
Mediastinum, Inflammation		1 (2%)			
Pleura, Inflammation, Chronic Active		1 (2%)			
Nose	(49)	(50)	(49)	(50)	
Angiectasis			1 (2%)		
Foreign Body	3 (6%)	2 (4%)	3 (6%)	3 (6%)	
Inflammation, Chronic Active	5 (10%)	4 (8%)	5 (10%)	6 (12%)	
Glands, Olfactory Epithelium, Hyperplasia		1 (2%)			
Olfactory Epithelium, Atrophy			2 (4%)	5 (10%)	

Experiment Number: 20006 - 03 Test Type: CHRONIC Route: GAVAGE Species/Strain: RATS/HSD	P03: INCIDENCE R	ATES OF NON-NEOP Indole-3 CAS Numb	Date Report Requested: 04/16/2013 Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07 Lab: BAT		
Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Olfactory Epithelium, Degeneration	1 (2%)		1 (2%)		
Respiratory Epithelium, Hyperplasia			3 (6%)	2 (4%)	
Respiratory Epithelium, Metaplasia, Squamous			1 (2%)	1 (2%)	
Trachea	(50)	(50)	(50)	(50)	
Epithelium, Necrosis		1 (2%)			
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(50)	
Cataract	1 (2%)				
Inflammation		1 (2%)	1 (2%)		
Harderian Gland	(50)	(50)	(50)	(50)	
Hyperplasia, Focal	()	()	1 (2%)	()	
Inflammation		1 (2%)	. (=)		
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(48)	
Nephropathy	45 (90%)	41 (82%)	42 (84%)	43 (90%)	
Pelvis, Inflammation	· · ·	· · · ·	· · · ·	1 (2%)	
Urinary Bladder	(49)	(50)	(50)	(50)	
Hyperplasia		· · /	1 (2%)	~ /	

*** END OF REPORT ***