P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 04/16/2013 AVERAGE SEVERITY GRADES[b]

Indole-3-carbinol

CAS Number: 700-06-1

Species/Strain: RATS/HSD

Test Type: CHRONIC

Route: GAVAGE

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

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Indole-3-carbinol Time Report Requested: 04/16/2013 Time Report Requested: 09:53:55

Test Type: CHRONIC
Route: GAVAGE

Experiment Number: 20006 - 03

Species/Strain: RATS/HSD

CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

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 [2.0]		
Epithelium, Hyperplasia		1 [1.0]		
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Hyperplasia, Lymphoid		1 [3.0]		
Necrosis	1 [3.0]	1 [4.0]		
Intestine Large, Colon	(50)	(50)	(50)	(50)
Erosion	1 [3.0]			
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Fibrosis				1 [1.0]
Intestine Small, Duodenum	(43)	(48)	(47)	(48)
Lymphatic, Ectasia			15 [1.5]	14 [1.4]
Intestine Small, Ileum	(35)	(43)	(42)	(38)
Intestine Small, Jejunum	(40)	(39)	(40)	(42)
Lymphatic, Ectasia		2 [1.0]	27 [1.7]	41 [2.0]
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 [3.0]			
Basophilic Focus	3		3	1
Cholangiofibrosis		1 [2.0]	3 [2.7]	1 [2.0]
Clear Cell Focus	14	13	18	9
Degeneration, Cystic			1 [3.0]	
Eosinophilic Focus	10	12	10	6
Hepatodiaphragmatic Nodule	2		1	1

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Indole-3-carbinol

CAS Number: 700-06-1

Experiment Number: 20006 - 03

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: GAVAGE

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

Artery, Inflammation, Chronic Active 1 [4.0] Artery, Mineralization 1 [2.0] Fat, Necrosis 1 [3.0] Foreign Body 1 [2.0] Argentage (50) (50) (50) (50) (50) Argentage (50) (50) (50) (50) Argentage (50) (50) (50) (50) (50) Argentage (50) (50) (50) (50) (49) Argiectasis 1 [3.0] Acinus, Atrophy 1 [1.0] 1 [1.0] Acinus, Hyperplasia 16 [1.4] 10 [1.3] 14 [1.8] 10 [2.2] Artery, Inflammation, Chronic Active 22 [2.2] 32 [1.8] 27 [1.9] 21 [2.0] Adializary Glands (50) (50) (50) (49) (50) Metaplasia 1 [2.0] 2 [1.0] Attery, Inflammation (50) (50) (50) (50) (50) Erosion 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] Necrosis 1 [4.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [3.0]	Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
Artery, Inflammation, Chronic Active 1 [1.0] 5 [2.4] Bile Duct, Cyst, Multiple 1 [2.0] 5 [2.4] Bile Duct, Cyst, Multiple 1 [2.0] 1 [3.0] 1 [1.0] Bile Duct, Hyperplasia 7 [1.1] 4 [1.0] 3 [1.7] 3 [1.0] Oval Cell, Hyperplasia 7 [2.0] (2) (2) (1) (0) Periportal, Inflammation, Chronic Active 1 [2.0] 1 [2.0] 1 [2.0] 1 [2.0] desentery (2) (2) (2) (1) (0) Artery, Inflammation, Chronic Active 1 [4.0] 1 [2.0]	Mixed Cell Focus	4	2	1	2
Artery, Inflammation, Chronic Active 1 [1.0] 5 [2.4] Bile Duct, Cyst, Multiple 1 [2.0] 5 [2.4] Bile Duct, Cyst, Multiple 1 [2.0] 1 [3.0] 1 [1.0] Bile Duct, Hyperplasia 7 [1.1] 4 [1.0] 3 [1.7] 3 [1.0] Oval Cell, Hyperplasia 7 [1.1] 4 [1.0] 3 [1.7] 3 [1.0] Oval Cell, Hyperplasia 1 [2.0] 1 [1.0] 1 [1.0] Periportal, Inflammation, Chronic Active 1 [2.0] 2 (2) (1) (0) Artery, Inflammation, Chronic Active 1 [4.0] 1 [2.0] 1 [Necrosis	3 [2.3]	3 [1.3]	5 [2.0]	7 [2.3]
Bile Duct, Cyst 1 [2.0] 5 [2.4] Bile Duct, Cyst, Multiple 1 [2.0] 1 [3.0] Bile Duct, Fibrosis 2 [2.0] 1 [3.0] 1 [1.0] Bile Duct, Hyperplasia 7 [1.1] 4 [1.0] 3 [1.7] 3 [1.0] Oval Cell, Hyperplasia 1 [2.0] 1 [1.0] 1 [1.0] Periportal, Inflammation, Chronic Active 1 [2.0] 2 (2) (1) (0) Artery, Mineralization 1 [2.0] 2 (2.0) (1) (0) Fat, Necrosis 1 [3.0] (50) (50) (50) Foreign Body 1 1 1 1 Hyperplasia, Squamous (50) (50) (50) (50) (50) Sebaceous Gland, Ectopic Tissue 1 [2.0] 2 [2.5] 1 [3.0] 1	Artery, Inflammation, Chronic Active				
Bile Duct, Cyst, Multiple 1 [2.0] 1 [3.0] 1 [1.0] Bile Duct, Fibrosis 2 [2.0] 1 [3.0] 1 [1.0] Bile Duct, Hyperplasia 7 [1.1] 4 [1.0] 3 [1.7] 3 [1.0] Oval Cell, Hyperplasia 1 [2.0] 1 [1.0] 1 [1.0] Periportal, Inflammation, Chronic Active 1 [2.0] 2 (2) (1) (0) Artery, Inflammation, Chronic Active 1 [4.0] 3 [2.0] 4 [2.0]	Bile Duct, Cyst			1 [2.0]	5 [2.4]
Bile Duct, Fibrosis 2 [2.0] 1 [3.0] 1 [1.0] Bile Duct, Hyperplasia 7 [1.1] 4 [1.0] 3 [1.7] 3 [1.0] Oval Cell, Hyperplasia 1 [2.0] 1 [1.0] 1 [1.0] Periportal, Inflammation, Chronic Active 1 [2.0] 2 (2) (1) (0) Artery, Inflammation, Chronic Active 1 [4.0] 3 [2.0] 1 [2.0] 2 (2) 1 [2.0] 2 [2.0] 2 (2) 1 [2.0] 2 [2.0] 2 (2) 1 [2.0] 2 [2.0] 2 (2) 2 (
Bile Duct, Hyperplasia 7 [1.1] 4 [1.0] 3 [1.7] 3 [1.0] Oval Cell, Hyperplasia 1 [2.0] 1 [1.0] 1 [1.0] Mesentery (2) (2) (1) (0) Artery, Inflammation, Chronic Active 1 [4.0]	Bile Duct, Fibrosis	2 [2.0]			1 [1.0]
Oval Cell, Hyperplasia 1 [2.0] Periportal, Inflammation, Chronic Active desentery (2) (2) (1) (0) Artery, Inflammation, Chronic Active Artery, Inflammation, Chronic Active 1 [4.0]	Bile Duct, Hyperplasia		4 [1.0]		
Periportal, Inflammation, Chronic Active					
Mesentery (2) (2) (1) (0) Artery, Inflammation, Chronic Active 1 [4.0]		1 [2.0]			
Artery, Inflammation, Chronic Active 1 [4.0] Artery, Mineralization 1 [2.0] Fat, Necrosis 1 [3.0] Inal Mucosa (50) (50) (50) (50) Foreign Body 1 1 1 Hyperplasia, Squamous 1 [2.0] 2 [2.5] 1 [3.0] Sebaceous Gland, Ectopic Tissue 1 1 1 Paracreas (50) (50) (50) (49) Angiectasis 1 [3.0] 1 [3.0] 1 [1.0] 4 [1.0] 4 [1.0] 1 [1.0] 1 [1.0] 2 [1.0] 4 [1.0] 2 [1.0] 4 [1.0] 2 [1.0] 4 [1.0] 4 [1.0] 2 [1.0] 4 [Mesentery		(2)	(1)	(0)
Artery, Mineralization	•		. ,	()	()
Fat, Necrosis 1 [3.0] Oral Mucosa (50) (50) (50) (50) (50) (50) (50) (50) (50) (50) (50) (50) (50) (50) (50) (50) (49) (49) (49) (49) (49) (40) (49) (40)<			1 [2.0]		
Oral Mucosa (50) (50) (50) (50) Foreign Body 1 1		1 [3.0]			
Foreign Body Hyperplasia, Squamous Sebaceous Gland, Ectopic Tissue Aragicetasis Thrombosis Acinus, Atrophy Acinus, Hyperplasia Actinus, Hyperplasia Altery, Inflammation, Chronic Active Erosion Hyperplasia Inflammation Inflamma	Oral Mucosa		(50)	(50)	(50)
Hyperplasia, Squamous 1 [2.0] 2 [2.5] 1 [3.0] Sebaceous Gland, Ectopic Tissue 1 1 1 1 Pancreas (50) (50) (50) (50) (49) Angiectasis 1 [3.0] 1 1.0] Acinus, Atrophy 1 [1.0] 1 [1.0] 2 [1.0] Acinus, Atrophy 1 [1.0] 1 [1.0] 2 [1.0] Acinus, Hyperplasia 16 [1.4] 10 [1.3] 14 [1.8] 10 [2.2] Artery, Inflammation, Chronic Active 22 [2.2] 32 [1.8] 27 [1.9] 21 [2.0] Ealivary Glands (50) (50) (49) (50) Metaplasia 1 [2.0] 2 [1.0] Erosion (50) (50) (50) (50) Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Epithelium, Mnyloid Deposition 1 [3.0] 1 [3.0] Epithelium, Myperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 1 [3.0] Epithelium, Inflammation 1 [3.0] 1 [3.0] 1 [3.0] Epithelium, Inflammation 1 [3.0] 1 [3.0]	Foreign Body	,		,	,
Sebaceous Gland, Ectopic Tissue 1 Pancreas (50) (50) (50) (49) Angiectasis 1 [1.0] 1 [1.0] 1 [1.0] Thrombosis 1 [3.0] 2 [1.0] Acinus, Atrophy 1 [1.0] 1 [1.0] 2 [1.0] Acinus, Hyperplasia 16 [1.4] 10 [1.3] 14 [1.8] 10 [2.2] Artery, Inflammation, Chronic Active 22 [2.2] 32 [1.8] 27 [1.9] 21 [2.0] Palivary Glands (50) (50) (49) (50) Metaplasia 1 [2.0] 2 [1.0] 2 [1.0] Etomach, Forestomach (50) (50) (50) (50) Erosion 1 [1.0] 1 [1.0] 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Etomach, Glandular (50) (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] <			1 [2.0]	2 [2.5]	1 [3.0]
Angiectasis Thrombosis Acinus, Atrophy Acinus, Hyperplasia Acinus, Hyperplasia Acinus, Hyperplasia Activery, Inflammation, Chronic Active Activery, Inflammation, Active Activery, Inflammation, Active Activery, Inflammation, Active Activery, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation, Inflammation Activery, Inflammatic Active	Sebaceous Gland, Ectopic Tissue				
Angiectasis Thrombosis Acinus, Atrophy Acinus, Hyperplasia Acinus, Hyperplasia Acinus, Hyperplasia Activery, Inflammation, Chronic Active Activery, Inflammation, Active Activery, Inflammation, Active Activery, Inflammation, Active Activery, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation Activery, Inflammation, Inflammation Activery, Inflammation, Inflammation Activery, Inflammatic Active	Pancreas	(50)	(50)	(50)	(49)
Thrombosis 1 [3.0] Acinus, Atrophy 1 [1.0] 1 [1.0] 2 [1.0] Acinus, Hyperplasia 16 [1.4] 10 [1.3] 14 [1.8] 10 [2.2] Artery, Inflammation, Chronic Active 22 [2.2] 32 [1.8] 27 [1.9] 21 [2.0] Balivary Glands (50) (50) (49) (50) Metaplasia 1 [2.0] 2 [1.0] 2 [1.0] Berosion 1 [1.0] 1 [1.0] 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 1 [3.0] 3 [2.0]	Angiectasis				1 [1.0]
Acinus, Atrophy 1 [1.0] 1 [1.0] 2 [1.0] Acinus, Hyperplasia 16 [1.4] 10 [1.3] 14 [1.8] 10 [2.2] Artery, Inflammation, Chronic Active 22 [2.2] 32 [1.8] 27 [1.9] 21 [2.0] Salivary Glands (50) (50) (49) (50) Metaplasia 1 [2.0] 2 [1.0] 2 [1.0] Stomach, Forestomach (50) (50) (50) (50) Erosion 1 [1.0] 1 [1.0] 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 5 [2.0] 7 [2.0] 3 [2.0]			1 [3.0]		
Acinus, Hyperplasia 16 [1.4] 10 [1.3] 14 [1.8] 10 [2.2] Artery, Inflammation, Chronic Active 22 [2.2] 32 [1.8] 27 [1.9] 21 [2.0] Salivary Glands (50) (50) (49) (50) Metaplasia 1 [2.0] 2 [1.0] 2 [1.0] Stomach, Forestomach (50) (50) (50) (50) Erosion 1 [1.0] 1 [1.0] 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 7 [2.0] 3 [2.0]	Acinus, Atrophy	1 [1.0]			2 [1.0]
Artery, Inflammation, Chronic Active 22 [2.2] 32 [1.8] 27 [1.9] 21 [2.0] 21	Acinus, Hyperplasia			14 [1.8]	
Salivary Glands (50) (50) (49) (50) Metaplasia 1 [2.0] 2 [1.0] Stomach, Forestomach (50) (50) (50) (50) Erosion 1 [1.0] 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] (50) (50) (50) Etomach, Glandular (50) (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 1 [3.0] 1 [3.0]	Artery, Inflammation, Chronic Active	22 [2.2]		27 [1.9]	
Metaplasia 1 [2.0] 2 [1.0] Stomach, Forestomach (50) (50) (50) Erosion 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 7 [2.0] 3 [2.0]	Salivary Glands				
Stomach, Forestomach (50) (50) (50) (50) (50) Erosion 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0]	Metaplasia				
Erosion 1 [1.0] Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 1 [3.0] 1 [3.0] 1 [3.0]	Stomach, Forestomach	(50)		(50)	
Hyperplasia 19 [1.7] 19 [1.7] 19 [2.3] 22 [1.8] Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 7 [2.0] 3 [2.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 1 [3.0] 1 [3.0]		•	•		·
Inflammation 2 [2.0] 4 [1.3] 1 [1.0] Necrosis 1 [4.0] 1 [3.0] 1 [3.0] 1 [1.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 1 [3.0] 3 [2.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 1 [3.0] 3 [2.0]	Hyperplasia	19 [1.7]	19 [1.7]	19 [2.3]	22 [1.8]
Necrosis 1 [4.0] Ulcer 2 [1.5] 1 [3.0] 1 [3.0] 1 [1.0] Stomach, Glandular (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] 1 [3.0] 3 [2.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0] 1 [3.0]	Inflammation	2 [2.0]			
Stomach, Glandular (50) (Necrosis	1 [4.0]			
Stomach, Glandular (50) (50) (50) (50) (50) Epithelium, Amyloid Deposition 1 [3.0] Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0]	Ulcer	2 [1.5]	1 [3.0]	1 [3.0]	1 [1.0]
Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0]	Stomach, Glandular	(50)	(50)	(50)	(50)
Epithelium, Hyperplasia 2 [1.0] 5 [2.0] 7 [2.0] 3 [2.0] Epithelium, Inflammation 1 [3.0]	Epithelium, Amyloid Deposition			1 [3.0]	
	Epithelium, Hyperplasia	2 [1.0]	5 [2.0]	7 [2.0]	3 [2.0]
Epithelium, Inflammation, Chronic Active 3 [1.0] 4 [2.0] 2 [1.5] 1 [2.0]			1 [3.0]		
	Epithelium, Inflammation, Chronic Active	3 [1.0]	4 [2.0]	2 [1.5]	1 [2.0]

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC
Route: GAVAGE

Experiment Number: 20006 - 03

Species/Strain: RATS/HSD

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Epithelium, Mineralization	7 [2.4]	12 [2.5]	6 [2.3]	10 [1.8]	
Epithelium, Necrosis	1 [1.0]			• •	
Epithelium, Ulcer		1 [1.0]			
Epithelium, Muscularis, Hyperplasia, Focal		1 [2.0]			
Tongue	(0)	(0)	(0)	(1)	
Tooth	(1)	(0)	(1)	(0)	
Malformation	,	· /	1 [3.0]	,	
Necrosis	1 [3.0]				
CARDIOVASCULAR SYSTEM					
Blood Vessel	(50)	(50)	(50)	(50)	
Dilatation	1 [3.0]				
Inflammation, Chronic Active	30 [2.0]	38 [2.1]	30 [2.3]	29 [1.9]	
Mineralization		2 [3.0]	1 [3.0]	1 [3.0]	
Thrombosis			1		
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	47 [2.4]	48 [2.6]	49 [2.5]	48 [2.4]	
Mineralization	1 [2.0]			1 [3.0]	
Atrium, Thrombosis	1 [4.0]	3 [3.3]	3 [3.3]	3 [3.3]	
Epicardium, Inflammation	1 [2.0]	1 [3.0]			
Pericardium, Inflammation			1 [3.0]		
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(49)	(50)	(50)	
Atrophy				1 [3.0]	
Degeneration, Cystic	4 [2.0]	3 [2.3]	5 [1.8]	4 [2.0]	
Degeneration, Fatty	8 [2.0]	13 [1.8]	5 [1.6]	16 [1.8]	
Hematopoietic Cell Proliferation			1 [2.0]		
Hemorrhage			1 [3.0]		
Hyperplasia	14 [2.3]	19 [2.1]	19 [2.1]	6 [2.0]	
Necrosis	1 [1.0]			2 [1.5]	
Thrombosis	- ·	1 [2.0]			
Adrenal Medulla	(50)	(49)	(50)	(50)	

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 04/16/2013 AVERAGE SEVERITY GRADES[b]

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55
First Dose M/F: 03/14/07 / 03/15/07

Lab: BAT

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Angiectasis	1 [2.0]				
Degeneration, Fatty		1 [1.0]			
Hyperplasia	18 [2.2]	22 [2.2]	20 [1.9]	19 [1.5]	
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Hyperplasia	3 [2.0]	6 [2.0]	1 [2.0]	3 [2.0]	
Parathyroid Gland	(43)	(46)	(50)	(47)	
Hyperplasia	3 [3.0]	10 [2.2]	13 [2.0]	8 [2.5]	
Pituitary Gland	(50)	(49)	(50)	(47)	
Pars Distalis, Hyperplasia	17 [2.0]	18 [2.6]	19 [2.0]	12 [1.8]	
Thyroid Gland	(50)	(46)	(48)	(47)	
Thrombosis	1 [2.0]				
C-cell, Hyperplasia	6 [2.2]	4 [2.0]	4 [2.8]	5 [3.2]	
C-cell, Hypertrophy				1 [2.0]	
Follicular Cell, Hyperplasia		1 [4.0]			
Follicular Cell, Hypertrophy	21 [1.8]	34 [1.9]	33 [2.1]	36 [2.6]	

GENERAL BODY SYSTEM

None

GENITAL	SYSTEM

Epididymis	(50)	(50)	(50)	(50)
Atrophy	1 [3.0]			
Preputial Gland	(50)	(50)	(49)	(50)
Cyst	7 [2.6]		3 [3.3]	5 [2.8]
Fibrosis	1 [1.0]			
Inflammation	2 [3.0]			1 [3.0]
Prostate	(50)	(50)	(50)	(50)
Atrophy	1 [2.0]	1 [2.0]		
Fibrosis	1 [2.0]	3 [1.7]	2 [2.0]	1 [2.0]
Hyperplasia	3 [2.0]	4 [2.3]	7 [2.7]	3 [1.7]
Inflammation, Acute	1 [1.0]	6 [1.5]		6 [2.2]
Inflammation, Chronic Active				1 [1.0]
Necrosis	1 [3.0]			

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC
Route: GAVAGE

Experiment Number: 20006 - 03

Species/Strain: RATS/HSD

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Seminal Vesicle	(49)	(50)	(50)	(50)	
Hypoplasia			1 [2.0]		
Inflammation, Acute				2 [4.0]	
Testes	(49)	(50)	(50)	(50)	
Atrophy	30 [2.1]	37 [2.0]	35 [1.7]	33 [1.6]	
Pigmentation, Hemosiderin			1 [1.0]		
Artery, Inflammation, Chronic Active	28 [2.3]	34 [2.1]	33 [2.3]	33 [2.2]	
Interstitial Cell, Hyperplasia	1 [1.0]		1 [1.0]	2 [2.5]	
HEMATOPOIETIC SYSTEM			_		
Bone Marrow	(50)	(50)	(50)	(50)	
Hyperplasia	1 [3.0]	2 [2.0]	4 [2.3]	3 [2.0]	
Lymph Node	(4)	(8)	(8)	(6)	
Angiectasis	. ,			1 [2.0]	
Bronchial, Hemorrhage		1 [3.0]	1 [3.0]		
Deep Cervical, Hemorrhage		1 [3.0]			
Deep Cervical, Hyperplasia, Plasma Cell		1 [3.0]			
Deep Cervical, Inflammation		1 [4.0]			
Iliac, Infiltration Cellular, Histiocyte		,	1 [2.0]		
Lumbar, Hemorrhage			2 [3.0]		
Mediastinal, Ectasia		1 [3.0]	1 [3.0]		
Mediastinal, Hemorrhage	1 [3.0]	2 [2.5]	3 [3.0]	1 [2.0]	
Mediastinal, Hyperplasia, Lymphoid	. [0.0]	1 [4.0]	0 [0.0]	. [=.0]	
Mediastinal, Infiltration Cellular, Lipocyte		. [•]		1 [3.0]	
Mediastinal, Infiltration Cellular, Histiocyte		1 [3.0]		. [6.0]	
Mediastinal, Pigmentation, Hemosiderin		1 [0.0]		1 [3.0]	
Pancreatic, Hemorrhage		1 [2.0]		1 [3.0]	
Renal, Ectasia	2 [3.5]	ا رحان		1 [0.0]	
Renal, Hemorrhage	2 [3.0] 1 [3.0]	2 [3.0]			
Renal, Pigmentation, Hemosiderin	راه.دا	[ن.ن]		1 [3.0]	
Lymph Node, Mandibular	(50)	(50)	(49)	(50)	
Ectasia	(30)	1 [3.0]	1 [3.0]	1 [3.0]	
Hemorrhage		1 [5.0]	1 [3.0]	1 [0.0]	
Hyperplasia, Plasma Cell	1 [2.0]		1 [3.0]		

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 04/16/2013 AVERAGE SEVERITY GRADES[b]

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55

First Dose M/F: 03/14/07 / 03/15/07

Lab: BAT

Route: GAVAGE Species/Strain: RATS/HSD

Test Type: CHRONIC

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 [3.0]			
Hemorrhage		1 [1.0]			
Hyperplasia, Lymphoid	1 [3.0]			1 [2.0]	
Lymphatic, Ectasia			1 [3.0]	5 [1.4]	
Spleen	(50)	(50)	(50)	(50)	
Atrophy				1 [3.0]	
Hematopoietic Cell Proliferation	28 [2.1]	33 [2.2]	28 [2.0]	29 [2.0]	
Inflammation	1 [2.0]				
Necrosis			1 [3.0]		
Thymus	(46)	(49)	(49)	(47)	
Atrophy	41 [2.2]	41 [2.6]	42 [2.4]	41 [2.5]	
Hemorrhage			1 [3.0]		
Epithelial Cell, Hyperplasia	1 [2.0]				
INTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(50)	(50)	(50)	
Fibrosis	, ,	, ,	1 [2.0]	, ,	
Inflammation				1 [3.0]	
Skin	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion	5	3	2	2	
Inflammation	3 [2.3]	2 [3.0]		2 [3.5]	
Necrosis		2 [3.5]			
Epidermis, Ulcer	1 [3.0]				
Sebaceous Gland, Hyperplasia				1 [3.0]	
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
		19 [3.0]	13 [3.1]	8 [3.1]	
Fibrous Osteodystrophy	12 [3.0]	19 [3.0]	13 [3.1]	0 [3.1]	

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC
Route: GAVAGE

Experiment Number: 20006 - 03

Species/Strain: RATS/HSD

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

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	
Gliosis		2 [1.0]		·	
Necrosis		-[]		2 [2.5]	
Spinal Cord	(0)	(2)	(1)	(0)	
Degeneration	(0)	2 [2.5]	1 [2.0]	(5)	
RESPIRATORY SYSTEM					
Lung	(49)	(50)	(50)	(50)	
Edema	,	,	1 [3.0]	1 [2.0]	
Fibrosis				1 [2.0]	
Foreign Body		1	1	,	
Hemorrhage			1 [1.0]	1 [1.0]	
Hemorrhage, Multifocal	3 [1.3]	3 [1.0]	7 [1.6]	7 [1.9]	
Inflammation, Granulomatous			1 [2.0]		
Inflammation, Chronic	17 [1.6]	21 [1.9]	24 [1.8]	23 [1.8]	
Mineralization	1	,	1	1 [4.0]	
Necrosis	1 [3.0]			,	
Alveolar Epithelium, Hyperplasia	1 [4.0]		1 [1.0]	1 [1.0]	
Alveolus, Infiltration Cellular, Histiocyte	19 [1.2]	22 [1.1]	19 [1.4]	13 [1.2]	
Alveolus, Mineralization	1 [3.0]	2 [2.5]	1 [3.0]	1 [2.0]	
Nose	(50)	(50)	(50)	(50)	
Foreign Body	4	12	11	10	
Fungus	1				
Inflammation	1 [2.0]				
Inflammation, Chronic Active	11 [1.5]	15 [1.3]	16 [1.7]	15 [1.5]	
Thrombosis	[]	1 [1.0]	[]	[]	
Respiratory Epithelium, Hyperplasia	2 [2.0]	2 [1.0]	4 [1.8]	7 [1.7]	
Respiratory Epithelium, Metaplasia, Squamous	- []	-[0]	2 [1.0]	. []	
Trachea	(50)	(50)	(50)	(50)	
Inflammation	1 [2.0]	1 [2.0]	1 [2.0]	(00)	

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: GAVAGE

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 04/16/2013 AVERAGE SEVERITY GRADES[b]

Indole-3-carbinol **CAS Number:** 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

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 [3.0]	, ,	
Eye	(50)	(50)	(49)	(49)	
Cataract				1 [2.0]	
Anterior Chamber, Inflammation, Acute	2 [1.0]	1 [3.0]	4 [2.3]	3 [2.0]	
Cornea, Inflammation, Acute	20 [2.1]	25 [2.1]	17 [2.3]	21 [1.9]	
Retina, Fibrosis				1 [3.0]	
Harderian Gland	(50)	(50)	(49)	(50)	
Angiectasis				1 [2.0]	
Pigmentation, Porphyrin	1 [3.0]				
Lacrimal Gland	(1)	(2)	(4)	(0)	
Degeneration	1 [2.0]	2 [3.0]	4 [2.5]		
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	
Cyst	,	,	()	1 [2.0]	
Metaplasia, Osseous		1 [2.0]			
Nephropathy	50 [3.2]	49 [3.3]	49 [3.4]	50 [3.4]	
Renal Tubule, Dilatation			1 [3.0]		
Urinary Bladder	(50)	(50)	(50)	(50)	
Hemorrhage				1 [2.0]	
Inflammation				1 [1.0]	

^{***} END OF MALE ***

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC
Route: GAVAGE

Experiment Number: 20006 - 03

Species/Strain: RATS/HSD

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

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	, ,	2 [2.0]	, ,	, ,	
Perforation				1	
Intestine Large, Cecum	(50)	(50)	(50)	(48)	
Intestine Large, Colon	(50)	(50)	(50)	(48)	
Intestine Large, Rectum	(50)	(50)	(50)	(50)	
Metaplasia			1 [2.0]		
Intestine Small, Duodenum	(48)	(47)	(48)	(47)	
Lymphatic, Ectasia			16 [1.2]	38 [1.5]	
Intestine Small, Ileum	(47)	(47)	(48)	(47)	
Intestine Small, Jejunum	(47)	(46)	(48)	(48)	
Lymphatic, Ectasia			30 [1.7]	47 [2.5]	
Liver	(50)	(50)	(50)	(48)	
Angiectasis	1 [1.0]		2 [2.0]	3 [1.7]	
Basophilic Focus	14	6	11	14	
Cholangiofibrosis		1 [1.0]			
Clear Cell Focus	6	7	4	18	
Eosinophilic Focus		4	5	6	
Hepatodiaphragmatic Nodule			3	2	
Inflammation, Chronic				1 [2.0]	
Mixed Cell Focus	5	1	5	4	
Necrosis	1 [2.0]	2 [3.5]			

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

Experiment Number: 20006 - 03

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Pigmentation	1 [3.0]				
Thrombosis		1 [2.0]			
Bile Duct, Cyst	2 [2.5]	1 [2.0]	4 [2.5]	4 [2.5]	
Bile Duct, Cyst, Multiple	2 [2.5]	1 [2.0]	2 [2.0]	2 [2.5]	
Bile Duct, Hyperplasia	2 [1.5]				
Centrilobular, Degeneration		1 [3.0]			
Mesentery	(0)	(2)	(2)	(1)	
Artery, Inflammation, Chronic Active		1 [3.0]			
Oral Mucosa	(50)	(50)	(50)	(50)	
Hyperplasia, Squamous			1 [1.0]	2 [2.0]	
Pancreas	(50)	(49)	(49)	(48)	
Acinus, Hyperplasia	1 [2.0]	3 [1.3]		1 [1.0]	
Artery, Inflammation, Chronic Active	1 [3.0]	4 [1.5]	3 [2.7]	6 [2.2]	
Salivary Glands	(50)	(49)	(48)	(50)	
Inflammation	1 [2.0]				
Stomach, Forestomach	(50)	(50)	(50)	(49)	
Hyperplasia	2 [2.0]	5 [2.4]	7 [2.1]	3 [2.3]	
Inflammation	1 [1.0]			1 [3.0]	
Pigmentation, Melanin		1 [2.0]			
Ulcer	1 [2.0]				
Stomach, Glandular	(50)	(49)	(50)	(49)	
Erosion			1 [3.0]		
Ulcer	1 [2.0]				
Epithelium, Hyperplasia	1 [2.0]		1 [2.0]		
Epithelium, Mineralization			1 [1.0]		
Tongue	(1)	(1)	(0)	(1)	
Cyst				1 [3.0]	
Erosion	1 [3.0]				
Inflammation		1 [3.0]			
Tooth	(0)	(1)	(0)	(0)	
CARDIOVASCULAR SYSTEM					
Blood Vessel	(50)	(50)	(50)	(50)	
Degeneration, Focal			1 [2.0]		

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Indole-3-carbinol
CAS Number: 700-06-1

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	
Inflammation, Chronic Active	1 [3.0]	3 [1.3]	4 [2.5]	7 [1.9]	
Thrombosis			1 [3.0]		
Heart	(50)	(50)	(50)	(49)	
Cardiomyopathy	24 [1.2]	24 [1.7]	24 [1.8]	24 [1.4]	
Atrium, Thrombosis		1 [4.0]			
Epicardium, Inflammation	1 [2.0]	3 [2.3]		1 [3.0]	
Pericardium, Inflammation			2 [2.5]		
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(48)	
Degeneration, Cystic	16 [2.3]	12 [2.1]	11 [2.4]	15 [2.3]	
Degeneration, Fatty	5 [2.4]	3 [2.0]		1 [2.0]	
Hyperplasia	18 [2.3]	11 [2.0]	18 [1.9]	15 [1.9]	
Hypertrophy	1 [1.0]				
Inflammation		1 [1.0]		1 [1.0]	
Necrosis			1 [2.0]	1 [3.0]	
Thrombosis		1 [2.0]	1 [3.0]		
Bilateral, Degeneration, Cystic	1 [4.0]				
Adrenal Medulla	(50)	(50)	(50)	(48)	
Hyperplasia	15 [1.1]	13 [1.8]	11 [1.9]	12 [1.7]	
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Parathyroid Gland	(47)	(49)	(46)	(49)	
Hyperplasia		2 [1.0]			
Pituitary Gland	(50)	(50)	(50)	(49)	
Pars Distalis, Hyperplasia	19 [2.5]	14 [2.1]	18 [3.3]	24 [2.0]	
Thyroid Gland	(49)	(49)	(48)	(47)	
C-cell, Hyperplasia	7 [2.0]	5 [2.0]	6 [2.3]	5 [2.6]	
Follicular Cell, Hyperplasia	1 [2.0]		1 [2.0]	1 [3.0]	
Follicular Cell, Hypertrophy	27 [1.6]	23 [1.7]	24 [1.7]	30 [2.0]	

GENERAL BODY SYSTEM

Experiment Number: 20006 - 03

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: GAVAGE

None

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC **Route:** GAVAGE

Species/Strain: RATS/HSD

Experiment Number: 20006 - 03

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

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 [2.8]	2 [2.5]	3 [3.0]	4 [3.0]	
Inflammation	1 [1.0]			2 [3.0]	
Ovary	(50)	(50)	(50)	(49)	
Angiectasis				1 [3.0]	
Atrophy	40 [2.0]	23 [2.0]	37 [2.0]	30 [1.9]	
Cyst	17 [2.0]	13 [2.4]	16 [2.5]	16 [2.3]	
Inflammation, Acute			1 [3.0]	1 [2.0]	
Inflammation, Chronic				1 [2.0]	
Inflammation, Chronic Active	1 [2.0]	1 [3.0]		1 [1.0]	
Necrosis, Fibrinoid			1 [4.0]		
Uterus	(50)	(50)	(50)	(50)	
Cyst			2 [2.5]		
Dilatation	9 [2.6]	9 [3.4]	7 [3.6]	5 [2.8]	
Inflammation, Histiocytic, Focal	1 [1.0]				
Inflammation, Acute	5 [1.2]	12 [2.1]	6 [1.8]	9 [1.8]	
Thrombosis			1 [2.0]	1 [3.0]	
Endometrium, Hyperplasia, Cystic	29 [1.8]	28 [1.6]	29 [2.0]	21 [1.9]	
Endometrium, Metaplasia, Squamous	12 [1.9]	18 [2.2]	20 [2.1]	11 [1.8]	
Vagina	(2)	(1)	(0)	(2)	
HEMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(50)	(50)	(50)	
Atrophy	, ,	1 [3.0]	1 [2.0]	, ,	
Hyperplasia	21 [2.4]	20 [2.0]	23 [2.2]	17 [1.9]	
Lymph Node	(7)	(6)	(4)	(3)	
Axillary, Hyperplasia, Lymphoid	()	` '	` '	1 [3.0]	
Iliac, Hyperplasia, Lymphoid		1 [2.0]			
Iliac, Infiltration Cellular, Histiocyte				1 [3.0]	
Inguinal, Hemorrhage		1 [3.0]			
Inguinal, Hyperplasia, Lymphoid	1 [3.0]		1 [2.0]		

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC **Route:** GAVAGE

Species/Strain: RATS/HSD

Experiment Number: 20006 - 03

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Lumbar, Hemorrhage	2 [3.0]	1 [3.0]			
Lumbar, Hyperplasia, Lymphoid	1 [3.0]	1 [3.0]			
Lumbar, Infiltration Cellular, Histiocyte		1 [2.0]	1 [3.0]		
Mediastinal, Ectasia			1 [3.0]		
Mediastinal, Hemorrhage	2 [3.5]		1 [3.0]		
Mediastinal, Infiltration Cellular, Histiocyte	1 [2.0]				
Lymph Node, Mandibular	(50)	(49)	(49)	(50)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(48)	
Hemorrhage				1 [3.0]	
Pigmentation, Hemosiderin	1 [2.0]				
Lymphatic, Ectasia			1 [1.0]	15 [1.7]	
Spleen	(50)	(50)	(50)	(48)	
Hematopoietic Cell Proliferation	36 [2.5]	32 [2.4]	40 [2.3]	33 [2.2]	
Thymus	(47)	(50)	(49)	(50)	
Atrophy	38 [2.2]	31 [2.3]	34 [2.2]	38 [2.3]	
Hemorrhage				1 [2.0]	
Inflammation		1 [3.0]	1 [2.0]		
Epithelial Cell, Hyperplasia	1 [3.0]	4 [3.3]	3 [2.0]		
INTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(50)	(50)	(50)	
Galactocele	1				
Hyperplasia	8 [1.3]	3 [1.0]	7 [1.4]	7 [1.4]	
Inflammation	1 [4.0]	1 [3.0]			
Inflammation, Chronic	1 [3.0]				
Duct, Dilatation	1 [3.0]				
Skin	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion		1		1 [1.0]	
Fibrosis				1 [1.0]	
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Fibrous Osteodystrophy		1 [3.0]	1 [3.0]		

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

Experiment Number: 20006 - 03

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
Skeletal Muscle	(1)	(0)	(1)	(1)
Degeneration	()	、 /	1 [1.0]	、 ,
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Gliosis		1 [2.0]		
Hemorrhage				1 [2.0]
Inflammation		1 [2.0]		
Necrosis	1 [3.0]			1 [2.0]
Meninges, Pigmentation, Lipofuscin		1 [1.0]		
Peripheral Nerve	(0)	(2)	(0)	(0)
Spinal Cord	(0)	(1)	(0)	(0)
Hemorrhage		1 [2.0]		
Necrosis		1 [2.0]		
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(49)
Atelectasis	,	1	()	,
Foreign Body		2		
Inflammation, Granulomatous	1 [1.0]			
Inflammation, Chronic	34 [2.3]	30 [2.2]	38 [2.3]	35 [2.3]
Alveolar Epithelium, Hyperplasia				1 [1.0]
Alveolar Epithelium, Metaplasia, Squamous				1 [1.0]
Alveolus, Infiltration Cellular, Histiocyte	13 [1.5]	16 [1.5]	11 [1.5]	9 [1.1]
Bronchiole, Hyperplasia		1 [3.0]	1 [1.0]	
Mediastinum, Inflammation		1 [3.0]		
Pleura, Inflammation, Chronic Active		1 [2.0]		
Nose	(49)	(50)	(49)	(50)
Angiectasis			1 [2.0]	
Foreign Body	3	2	3	3
Inflammation, Chronic Active	5 [1.4]	4 [1.8]	5 [1.6]	6 [1.3]
Glands, Olfactory Epithelium, Hyperplasia		1 [1.0]		
Olfactory Epithelium, Atrophy			2 [1.0]	5 [1.6]

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 04/16/2013 AVERAGE SEVERITY GRADES[b]

Indole-3-carbinol CAS Number: 700-06-1

Time Report Requested: 09:53:55 First Dose M/F: 03/14/07 / 03/15/07

Lab: BAT

Species/Strain: RATS/HSD

Test Type: CHRONIC

Route: GAVAGE

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg	
Olfactory Epithelium, Degeneration	1 [1.0]		1 [1.0]		
Respiratory Epithelium, Hyperplasia			3 [2.0]	2 [1.0]	
Respiratory Epithelium, Metaplasia, Squamous			1 [1.0]	1 [1.0]	
Trachea	(50)	(50)	(50)	(50)	
Epithelium, Necrosis	, ,	1 [2.0]	, ,	, ,	
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(50)	
Cataract	1 [2.0]				
Inflammation		1 [3.0]	1 [3.0]		
Harderian Gland	(50)	(50)	(50)	(50)	
Hyperplasia, Focal	. ,	, ,	1 [1.0]	` '	
Inflammation		1 [2.0]			
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(48)	
Nephropathy	45 [1.7]	41 [2.0]	42 [2.2]	43 [2.0]	
Pelvis, Inflammation				1 [3.0]	
Urinary Bladder	(49)	(50)	(50)	(50)	
Hyperplasia	,	` '	1 [3.0]	,	

^{***} END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)