

Experiment Number: 08010 - 01

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Date Report Requested: 04/29/2016

Test Type: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

F1_Rev.1_RE

NTP Study Number: C08010
Lock Date: 07/12/2011
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: NONE

Test Type: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
----------------------	---------	----------	----------	--------	--------	---------

Disposition Summary

Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10

ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Epithelium, Degeneration	1 [1.0]					
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mixed Cell	2 [1.0]					
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Atrophy	1 [1.0]					2 [1.0]
Inflammation, Chronic Active	1 [1.0]					
Acinus, Apoptosis	1 [1.0]					1 [2.0]
Acinus, Eosinophilic Focus	1					
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
Tooth	(2)	(0)	(1)	(0)	(0)	(0)
Dysplasia	2					
Peridontal Tissue, Abscess			1			

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
--------------	------	-----	-----	-----	-----	------

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	1 [1.0]					4 [1.0]
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(1)	(10)
Accessory Adrenal Cortical Nodule	1					1
Hypertrophy						1 [1.0]
Inflammation, Lymphoid					1 [2.0]	
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(10)	(0)	(0)	(0)	(0)	(9)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Cyst	1 [1.0]					
Pars Distalis, Cyst	1					
Pars Distalis, Hyperplasia						1 [1.0]
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell	1 [1.0]					
Inflammation, Chronic	1 [1.0]					
Ultimobranchial Cyst	3					1
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(10)	(0)	(0)	(0)	(0)	(10)
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	7 [1.0]					7 [1.0]
Prostate	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	3 [1.3]					2 [1.0]
Seminal Vesicle	(10)	(0)	(0)	(0)	(0)	(10)
Testes	(10)	(0)	(0)	(0)	(0)	(10)

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Edema	6 [1.0]					7 [1.0]
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Bronchial	(10)	(0)	(0)	(0)	(0)	(9)
Hyperplasia, Plasma Cell						1 [1.0]
Pigmentation						1 [1.0]
Lymph Node, Mandibular	(6)	(0)	(0)	(0)	(0)	(9)
Hyperplasia, Plasma Cell						2 [2.0]
Lymph Node, Mediastinal	(9)	(0)	(0)	(0)	(0)	(10)
Pigmentation						4 [2.0]
Lymph Node, Mesenteric	(10)	(0)	(1)	(0)	(0)	(10)
Hemorrhage			1 [2.0]			
Hyperplasia, Histiocytic	3 [1.0]					6 [1.0]
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Pigmentation	6 [1.3]					6 [2.0]
Thymus	(10)	(0)	(0)	(0)	(0)	(10)
INTEGUMENTARY SYSTEM						
Mammary Gland	(2)	(0)	(0)	(0)	(0)	(3)
Hyperplasia						1 [1.0]
Skin	(10)	(1)	(0)	(0)	(0)	(10)
Inflammation, Acute		1 [1.0]				1 [1.0]
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
RESPIRATORY SYSTEM						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Suppurative					2 [1.0]	
Inflammation, Chronic Active	1 [1.0]					4 [1.0]
Respiratory Epithelium, Hyperplasia		1 [1.0]		1 [1.0]	7 [1.0]	3 [1.7]
Respiratory Epithelium, Metaplasia, Squamous	1 [1.0]	1 [1.0]	1 [1.0]	5 [1.0]	10 [1.7]	10 [3.0]
Respiratory Epithelium, Necrosis						2 [1.0]
Respiratory Epithelium, Regeneration					1 [1.0]	2 [1.0]
Respiratory Epithelium, Ulcer						1 [1.0]
Squamous Epithelium, Hyperplasia						7 [1.1]
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Fibrosis, Focal						1 [1.0]
Infiltration Cellular, Histiocyte	5 [1.2]	3 [1.0]		2 [2.0]	3 [1.3]	9 [1.6]
Inflammation, Eosinophil	3 [1.0]	3 [1.0]	1 [1.0]	5 [1.0]	3 [1.0]	10 [2.0]
Inflammation, Chronic Active			1 [1.0]			
Metaplasia, Osseous	1 [1.0]	2 [1.0]	1 [1.0]	3 [1.0]		
Mineralization, Focal					1 [1.0]	
Alveolar Epithelium, Hyperplasia	1 [1.0]					
Alveolar Epithelium, Hyperplasia, Focal	1 [1.0]					
Alveolus, Infiltration Cellular, Polymorphonuclear						1 [1.0]
Bronchiole, Epithelium, Hyperplasia					3 [1.0]	10 [2.2]
Bronchus, Epithelium, Hyperplasia						5 [1.6]
Bronchus, Epithelium, Metaplasia, Squamous						3 [1.3]
Bronchus, Epithelium, Regeneration					1 [1.0]	9 [2.8]
Bronchus, Epithelium, Goblet Cell, Metaplasia						1 [1.0]
Perivascular, Infiltration Cellular, Mononuclear Cell	2 [1.0]	1 [1.0]				
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Foreign Body						1
Hyperplasia, Lymphoid		1 [1.0]	1 [1.0]	1 [1.0]	7 [1.1]	5 [1.6]
Inflammation, Suppurative				2 [1.0]	10 [2.3]	10 [3.0]
Lamina Propria, Nasopharyngeal Duct, Mineralization	1 [1.0]					

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Nasolacrimal Duct, Inflammation, Chronic Active		1 [2.0]				
Nasopharyngeal Duct, Foreign Body						1
Nasopharyngeal Duct, Mineralization	1 [1.0]					
Olfactory Epithelium, Accumulation, Hyaline Droplet	2 [1.0]			1 [1.0]		
Olfactory Epithelium, Atrophy	1 [1.0]	1 [1.0]		4 [1.0]	10 [1.0]	10 [1.0]
Olfactory Epithelium, Degeneration	2 [1.0]			2 [1.0]	10 [1.4]	3 [1.7]
Olfactory Epithelium, Metaplasia, Respiratory	2 [1.0]		2 [1.0]	1 [1.0]	8 [1.0]	10 [1.0]
Olfactory Epithelium, Squamous Metaplasia						2 [1.0]
Respiratory Epithelium, Degeneration	1 [2.0]					
Respiratory Epithelium, Hyperplasia		1 [1.0]	2 [1.0]	9 [1.0]	10 [2.1]	10 [2.9]
Respiratory Epithelium, Metaplasia, Squamous			1 [1.0]		10 [1.1]	10 [2.0]
Respiratory Epithelium, Necrosis					2 [1.0]	10 [2.1]
Respiratory Epithelium, Regeneration						10 [1.5]
Turbinate, Atrophy					2 [1.5]	10 [2.0]
Vomerolnasal Organ, Inflammation, Suppurative	1 [3.0]					
Trachea	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Suppurative					1 [3.0]	
Inflammation, Acute				1 [1.0]		3 [1.0]
Epithelium, Hyperplasia						8 [2.5]
Epithelium, Metaplasia, Squamous						3 [1.7]
Epithelium, Necrosis						1 [1.0]
Epithelium, Regeneration		1 [1.0]	1 [1.0]		8 [1.4]	10 [2.8]

SPECIAL SENSES SYSTEM

Eye	(10)	(10)	(9)	(10)	(10)	(10)
Phthisis Bulbi					1	
Anterior Chamber, Inflammation, Acute					2 [1.0]	
Ciliary Body, Inflammation, Acute					3 [1.3]	
Conjunctiva, Inflammation, Acute			2 [1.0]		1 [1.0]	
Cornea, Inflammation, Acute					3 [1.0]	3 [1.3]
Cornea, Neovascularization						2 [1.0]
Cornea, Ulcer					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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Cornea, Epithelium, Hyperplasia						1 [3.0]
Cornea, Epithelium, Vacuolation						2 [2.5]
Iris, Inflammation, Acute					2 [1.0]	
Lens, Cataract		1				
Retina, Atrophy		1 [3.0]			1 [3.0]	
Retina, Dysplasia				2		1
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
Concretion	5					4
Hyperplasia	3 [1.0]					1 [1.0]
Inflammation, Chronic Active	3 [1.0]					1 [1.0]

URINARY SYSTEM

Kidney	(10)	(0)	(0)	(0)	(1)	(10)
Infiltration Cellular, Mononuclear Cell	1 [1.0]					1 [1.0]
Nephropathy	3 [1.0]					2 [1.5]
Cortex, Cyst	1					
Pelvis, Dilatation					1 [1.0]	2 [1.0]
Pelvis, Inflammation, Chronic Active						1 [1.0]
Pelvis, Transitional Epithelium, Hyperplasia						1 [1.0]
Renal Tubule, Casts Protein	1 [1.0]					
Renal Tubule, Hyperplasia	1 [1.0]					
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

*** 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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
ALIMENTARY SYSTEM						
Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mixed Cell						2 [1.0]
Infiltration Cellular, Mononuclear Cell	2 [1.0]					
Mesentery	(0)	(0)	(0)	(0)	(1)	(0)
Fat, Necrosis					1 [2.0]	
Pancreas	(10)	(1)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Parotid Gland, Atrophy						1 [1.0]
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Epithelium, Hyperplasia						1 [1.0]
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy						1 [1.0]

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Accessory Adrenal Cortical Nodule	2					1
Accessory Adrenal Cortical Nodule, Multifocal	1					
Hypertrophy	1 [1.0]					
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(9)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(8)	(0)	(0)	(0)	(0)	(9)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Cyst						1 [1.0]
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
Ultimobranchial Cyst						4
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Clitoral Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	4 [1.0]					5 [1.0]
Duct, Ectasia	1 [3.0]					
Ovary	(10)	(0)	(1)	(0)	(0)	(10)
Cyst	1 [1.0]		1 [2.0]			
Uterus	(10)	(0)	(0)	(0)	(0)	(10)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Bronchial	(8)	(0)	(0)	(0)	(0)	(10)
Hyperplasia, Plasma Cell						1 [2.0]
Pigmentation	2 [3.0]					2 [2.0]
Lymph Node, Mandibular	(10)	(0)	(0)	(0)	(0)	(10)

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Hyperplasia, Plasma Cell Lymph Node, Mediastinal	4 [2.0] (9)	(0)	(0)	(0)	(0)	2 [1.5] (9)
Hyperplasia, Plasma Cell Pigmentation Lymph Node, Mesenteric	6 [2.0] (10)	(0)	(0)	(0)	(0)	2 [1.5] 4 [2.3] (10)
Hyperplasia, Histiocytic Pigmentation Spleen	2 [1.0] 1 [1.0] (10)	(0)	(0)	(0)	(0)	3 [1.0] (10)
Pigmentation Thymus	6 [2.5] (10)	(0)	(0)	(0)	(0)	6 [2.2] (10)
Cyst Ectopic Parathyroid Gland	2 [1.0] 1	(0)	(0)	(0)	(0)	1 (10)
Epithelial Cell, Hyperplasia						1 [1.0]
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
Ventricle, Dilatation	1 [2.0]					
RESPIRATORY SYSTEM						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active Respiratory Epithelium, Hyperplasia			1 [1.0]	1 [1.0]	2 [1.0]	5 [1.4] 1 [1.0]

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Respiratory Epithelium, Metaplasia, Squamous				4 [1.0]	10 [1.5]	10 [3.0]
Respiratory Epithelium, Necrosis						1 [1.0]
Respiratory Epithelium, Regeneration						1 [1.0]
Respiratory Epithelium, Ulcer				1 [1.0]		
Squamous Epithelium, Hyperplasia						9 [1.0]
Squamous Epithelium, Necrosis						5 [1.2]
Squamous Epithelium, Ulcer						4 [2.3]
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Fibrosis, Focal						2 [1.0]
Infiltration Cellular, Histiocyte	8 [1.1]	1 [1.0]	3 [1.0]	4 [1.0]	6 [1.0]	9 [1.8]
Inflammation, Eosinophil	4 [1.3]	3 [1.0]	4 [1.0]	3 [1.0]	5 [1.0]	10 [1.7]
Metaplasia, Osseous					2 [1.0]	
Mineralization, Focal						1 [1.0]
Alveolar Epithelium, Hyperplasia			1 [2.0]			
Alveolus, Infiltration Cellular, Polymorphonuclear						2 [1.0]
Bronchiole, Epithelium, Hyperplasia						7 [1.1]
Bronchus, Epithelium, Hyperplasia						4 [1.5]
Bronchus, Epithelium, Regeneration						8 [1.8]
Bronchus, Epithelium, Goblet Cell, Metaplasia						3 [2.3]
Perivascular, Infiltration Cellular, Mononuclear Cell			1 [1.0]			
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Hyperplasia, Lymphoid				1 [1.0]		3 [1.0]
Inflammation, Suppurative					10 [1.9]	10 [3.0]
Olfactory Epithelium, Accumulation, Hyaline Droplet			1 [1.0]			
Olfactory Epithelium, Atrophy	1 [1.0]		1 [1.0]	1 [1.0]	10 [1.0]	9 [1.0]
Olfactory Epithelium, Degeneration		1 [1.0]			4 [1.3]	5 [1.6]
Olfactory Epithelium, Metaplasia, Respiratory			1 [1.0]	1 [1.0]	8 [1.0]	9 [1.2]
Respiratory Epithelium, Hyperplasia	1 [1.0]			3 [1.0]	10 [2.0]	10 [3.0]
Respiratory Epithelium, Metaplasia, Squamous					10 [1.1]	10 [2.0]
Respiratory Epithelium, Necrosis					1 [1.0]	10 [2.1]
Respiratory Epithelium, Regeneration					3 [1.0]	10 [1.9]
Respiratory Epithelium, Ulcer						1 [1.0]
Turbinate, Atrophy					2 [1.0]	9 [2.0]
Trachea	(10)	(10)	(9)	(10)	(10)	(10)

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: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE	Control	6.25 ppm	12.5 ppm	25 ppm	50 ppm	100 ppm
Inflammation, Suppurative						1 [1.0]
Inflammation, Acute						2 [1.0]
Epithelium, Hyperplasia				1 [2.0]		4 [3.0]
Epithelium, Metaplasia, Squamous						2 [1.0]
Epithelium, Necrosis						2 [1.0]
Epithelium, Regeneration		3 [1.0]			7 [1.6]	10 [3.0]

SPECIAL SENSES SYSTEM

Eye	(10)	(10)	(10)	(9)	(9)	(10)
Anterior Chamber, Inflammation, Acute					3 [1.0]	
Bilateral, Retina, Dysplasia			1			
Ciliary Body, Inflammation, Acute					5 [1.2]	2 [1.0]
Conjunctiva, Inflammation, Acute			1 [1.0]		1 [1.0]	
Cornea, Inflammation, Acute			1 [1.0]		5 [1.2]	6 [1.3]
Cornea, Necrosis						1 [1.0]
Cornea, Neovascularization						1 [1.0]
Cornea, Ulcer						1 [2.0]
Cornea, Epithelium, Hyperplasia						1 [1.0]
Cornea, Epithelium, Vacuolation					1 [2.0]	
Fat, Retrobulbar, Inflammation, Acute					1 [1.0]	
Retina, Dysplasia					1 [1.0]	
Retina, Pigmentation	1 [2.0]				1 [1.0]	
Sclera, Inflammation, Acute					2 [1.5]	
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
Concretion	4					3
Hyperplasia	2 [1.0]					1 [1.0]
Inflammation, Chronic	1 [2.0]					
Inflammation, Chronic Active						2 [1.0]

URINARY SYSTEM

Kidney	(10)	(0)	(1)	(0)	(0)	(10)
Renal Tubule, Hyperplasia	1 [1.0]					
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

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)

Experiment Number: 08010 - 01

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Date Report Requested: 04/29/2016

Test Type: 90-DAY

2,3-Pentanedione

Time Report Requested: 09:07:39

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 600-14-6

First Dose M/F: 09/13/10 / 09/14/10

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE

Control

6.25 ppm

12.5 ppm

25 ppm

50 ppm

100 ppm

*** 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)