

**Experiment Number:** 88124-01

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

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

**Test Compound:** Indium phosphide

**CAS Number:** 22398-80-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 07:29:03

**First Dose M/F:** NA / NA

**Lab:** BNW

<b>C Number:</b>	C88124
<b>Lock Date:</b>	01/24/1996
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat MALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
<b>Disposition Summary</b>						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Natural Death						1
Survivors						
Terminal Sacrifice	10	10	10	10	10	9
Animals Examined Microscopically	10	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(9)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(9)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(9)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(9)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(9)
Liver	(10)	(1)	(1)	(1)	(0)	(10)
Bile Duct, Hyperplasia						2 (20%)
Centrilobular, Hepatocyte, Atrophy						6 (60%)
Centrilobular, Hepatocyte, Necrosis						5 (50%)
Eosinophilic Focus						1 (10%)
Hematopoietic Cell Proliferation						1 (10%)
Hepatodiaphragmatic Nodule	1 (10%)	1 (100%)	1 (100%)	1 (100%)		4 (40%)
Infiltration Cellular, Mononuclear CI						1 (10%)
Pigmentation, Hemosiderin						2 (20%)
Mesentery	(0)	(0)	(0)	(1)	(1)	(0)
Fat, Necrosis				1 (100%)	1 (100%)	
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Acinus, Atrophy						1 (10%)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)

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

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat MALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
<b>CARDIOVASCULAR SYSTEM</b>						
Heart	(10)	(10)	(10)	(10)	(10)	(10)
Cardiomyopathy	6 (60%)	7 (70%)	6 (60%)	3 (30%)	5 (50%)	2 (20%)
Hypertrophy						8 (80%)
<b>ENDOCRINE SYSTEM</b>						
Adrenal Cortex	(10)	(10)	(10)	(10)	(10)	(10)
Zona Fascult, Vacuolization Cytoplasmic						10 (100%)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(9)	(0)	(0)	(0)	(0)	(9)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(9)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Epididymis	(10)	(10)	(10)	(10)	(10)	(10)
Degeneration						10 (100%)
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Prostate	(10)	(10)	(10)	(10)	(10)	(10)
Atrophy						10 (100%)
Seminal Vesicle	(10)	(10)	(10)	(10)	(10)	(9)
Atrophy						9 (100%)
Testes	(10)	(10)	(10)	(10)	(10)	(10)
Germinal Epith, Degeneration						5 (50%)
Mineralization			1 (10%)			
Sertoli Cell, Degeneration			1 (10%)			

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

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat MALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
<b>HEMATOPOIETIC SYSTEM</b>						
Bone Marrow	(10)	(10)	(10)	(10)	(10)	(10)
Hyperplasia						10 (100%)
Lymph Node, Bronchial	(9)	(10)	(8)	(10)	(10)	(9)
Hyperplasia		5 (50%)	4 (50%)	3 (30%)	6 (60%)	3 (33%)
Pigmentation		9 (90%)	8 (100%)	10 (100%)	10 (100%)	9 (100%)
Lymph Node, Mandibular	(10)	(0)	(0)	(0)	(8)	(10)
Atrophy						6 (60%)
Lymph Node, Mediastinal	(9)	(5)	(8)	(10)	(8)	(10)
Hyperplasia		3 (60%)	7 (88%)	8 (80%)	6 (75%)	8 (80%)
Pigmentation		4 (80%)	8 (100%)	9 (90%)	7 (88%)	9 (90%)
Lymph Node, Mesenteric	(10)	(10)	(10)	(10)	(10)	(8)
Spleen	(10)	(10)	(10)	(10)	(10)	(10)
Hematopoietic Cell Proliferation						10 (100%)
Thymus	(10)	(10)	(10)	(10)	(10)	(9)
Atrophy						8 (89%)
Hemorrhage	1 (10%)					
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(7)	(0)	(0)	(0)	(0)	(5)
Skin	(10)	(1)	(0)	(0)	(0)	(10)
Ulcer		1 (100%)				
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Foreign Body		10 (100%)	10 (100%)	10 (100%)	10 (100%)	9 (90%)

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

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat MALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
Inflammation, Chronic			5 (50%)	8 (80%)	9 (90%)	
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Alveolar Epith, Hyperplasia		10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Alveolus, Infiltration Cellular, Histiocyte	4 (40%)					
Alveolus, Proteinosis		10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Foreign Body		10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Inflammation, Chronic Active		10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Interstitialium, Fibrosis			10 (100%)	10 (100%)	9 (90%)	10 (100%)
Serosa, Hemorrhage	1 (10%)					
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Foreign Body		1 (10%)	1 (10%)	8 (80%)	8 (80%)	10 (100%)
Trachea	(10)	(10)	(10)	(10)	(10)	(10)
Foreign Body			1 (10%)	2 (20%)	5 (50%)	8 (80%)
SPECIAL SENSES SYSTEM						
None						
URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Nephropathy	7 (70%)	4 (40%)	5 (50%)	1 (10%)	4 (40%)	10 (100%)
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

\*\*\*END OF MALE DATA\*\*\*

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

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat FEMALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
<b>Disposition Summary</b>						
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
<b>ALIMENTARY SYSTEM</b>						
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)	(1)	(2)	(1)	(2)	(10)
Centrilobular, Hepatocyte, Atrophy						8 (80%)
Centrilobular, Hepatocyte, Necrosis						9 (90%)
Hepatodiaphragmatic Nodule	1 (10%)	1 (100%)	2 (100%)	1 (100%)	2 (100%)	7 (70%)
Necrosis						1 (10%)
Pigmentation, Hemosiderin						6 (60%)
Mesentery	(0)	(1)	(1)	(0)	(0)	(0)
Fat, Necrosis		1 (100%)	1 (100%)			
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
<b>CARDIOVASCULAR SYSTEM</b>						
Heart	(10)	(10)	(10)	(10)	(10)	(10)
Cardiomyopathy	3 (30%)	1 (10%)	1 (10%)	2 (20%)	3 (30%)	

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

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat FEMALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
Hypertrophy						10 (100%)
<b>ENDOCRINE SYSTEM</b>						
Adrenal Cortex	(10)	(10)	(10)	(10)	(10)	(10)
Hemorrhage						1 (10%)
Zona Fascult, Vacuolization Cytoplasmic					1 (10%)	4 (40%)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(9)	(0)	(0)	(0)	(0)	(3)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Clitoral Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic	1 (10%)					
Ovary	(10)	(10)	(10)	(10)	(10)	(10)
Atrophy						10 (100%)
Cyst				1 (10%)	1 (10%)	
Periovarn Tiss, Cyst			1 (10%)			
Uterus	(10)	(10)	(10)	(10)	(10)	(10)
Atrophy						10 (100%)
<b>HEMATOPOIETIC SYSTEM</b>						
Bone Marrow	(10)	(10)	(10)	(10)	(10)	(10)
Hyperplasia					3 (30%)	10 (100%)
Inflammation, Granulomatous	2 (20%)	1 (10%)	1 (10%)	1 (10%)		
Lymph Node, Bronchial	(7)	(9)	(10)	(10)	(10)	(9)
Hyperplasia		7 (78%)	7 (70%)	9 (90%)	10 (100%)	5 (56%)
Pigmentation		8 (89%)	10 (100%)	9 (90%)	10 (100%)	9 (100%)

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

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat FEMALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
Lymph Node, Mandibular Atrophy	(9)	(0)	(0)	(0)	(9)	(9) 5 (56%)
Lymph Node, Mediastinal Atrophy	(7)	(9)	(8)	(5)	(9)	(8) 1 (13%)
Hyperplasia		8 (89%)	8 (100%)	4 (80%)	5 (56%)	7 (88%)
Pigmentation		8 (89%)	8 (100%)	5 (100%)	7 (78%)	8 (100%)
Lymph Node, Mesenteric Inflammation, Granulomatous	(10)	(9)	(10)	(10)	(10)	(9) 1 (10%)
Spleen Hematopoietic Cell Proliferation	(10)	(10)	(10)	(10)	(10)	(10) 9 (90%)
Thymus Atrophy	(10)	(10)	(10)	(10)	(10)	(9) 9 (100%)
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Larynx Foreign Body	(10)	(10) 10 (100%)	(10) 10 (100%)	(10) 10 (100%)	(10) 9 (90%)	(10) 9 (90%)
Hyperplasia						1 (10%)
Inflammation, Acute						1 (10%)
Inflammation, Chronic		2 (20%)	6 (60%)	9 (90%)	9 (90%)	
Lung Alveolar Epith, Hyperplasia	(10)	(10) 10 (100%)	(10) 10 (100%)	(10) 10 (100%)	(10) 10 (100%)	(10) 10 (100%)
Alveolus, Infiltration Cellular, Histiocyte	3 (30%)					

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

Experiment Number: 88124-01

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

Date Report Requested: 10/22/2014

Test Type: 90-DAY

Test Compound: Indium phosphide

Time Report Requested: 07:29:03

Species/Strain: Rat/F 344/N

CAS Number: 22398-80-7

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat FEMALE	CONTROL	1.0 MG/M3	3.0 MG/M3	10.0 MG/M3	30.0 MG/M3	100.0 MG/M3
Alveolus, Proteinosis		10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Foreign Body		9 (90%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Inflammation, Chronic Active		10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Interstitialium, Fibrosis			10 (100%)	10 (100%)	10 (100%)	10 (100%)
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Foreign Body		3 (30%)	2 (20%)	7 (70%)	9 (90%)	10 (100%)
Inflammation, Chronic		1 (10%)		1 (10%)	3 (30%)	
Nasolacrim Dct, Inflammation, Acute				1 (10%)		
Trachea	(10)	(10)	(10)	(10)	(10)	(10)
Foreign Body				3 (30%)	7 (70%)	7 (70%)
SPECIAL SENSES SYSTEM						
Harderian Gland	(1)	(0)	(0)	(0)	(0)	(0)
URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Mineralization	10 (100%)	8 (80%)	9 (90%)	9 (90%)	8 (80%)	7 (70%)
Nephropathy	1 (10%)			1 (10%)	1 (10%)	10 (100%)
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

\*\* END OF REPORT \*\*

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