

Experiment Number: 20009 - 01
Test Type: 90-DAY
Route: DOSED WATER
Species/Strain: RATS/F 344/N

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)
beta-Picoline
CAS Number: 108-99-6

Date Report Requested: 08/29/2016
Time Report Requested: 11:29:47
First Dose M/F: 11/17/03 / 11/18/03
Lab: BAT

NTP Study Number: C20009
Lock Date: 07/30/2004
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

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FISCHER 344 RATS MALE	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
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)
Inflammation, Chronic Active						1 (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)
Hematopoietic Cell Proliferation	8 (80%)					9 (90%)
Inflammation, Chronic Active	10 (100%)					10 (100%)
Mesentery	(1)	(0)	(0)	(0)	(0)	(0)
Inflammation, Chronic Active	1 (100%)					
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Lymphocyte	7 (70%)					4 (40%)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active						1 (10%)
Glands, Ectasia						1 (10%)
Tooth	(0)	(0)	(0)	(0)	(0)	(2)
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)

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

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Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	10 (100%)					10 (100%)

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
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	(9)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell						1 (10%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Coagulating Gland	(1)	(0)	(0)	(0)	(0)	(1)
Inflammation, Chronic Active						1 (100%)
Epididymis	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell	1 (10%)					3 (30%)
Epithelium, Degeneration						1 (10%)
Mesothelium, Hyperplasia	1 (10%)					
Preputial Gland	(10)	(1)	(0)	(0)	(0)	(10)
Inflammation, Granulomatous	1 (10%)					
Inflammation, Chronic Active	8 (80%)					10 (100%)
Prostate	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	1 (10%)					
Seminal Vesicle	(10)	(0)	(0)	(0)	(0)	(10)
Testes	(10)	(0)	(0)	(0)	(0)	(10)
Tunic, Inflammation, Chronic Active						1 (10%)

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FISCHER 344 RATS MALE	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(9)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
Cartilage, Atypia Cellular						1 (10%)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	6 (60%)					6 (60%)
Metaplasia, Osseous						1 (10%)
Metaplasia, Squamous						1 (10%)
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Suppurative	1 (10%)					
Pleura	(0)	(0)	(0)	(0)	(0)	(1)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)

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FISCHER 344 RATS MALE	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
<hr/>						
SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell						1 (10%)
<hr/>						
URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Nephropathy	10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Medulla, Mineralization	5 (50%)	7 (70%)	6 (60%)	6 (60%)	3 (30%)	7 (70%)
Renal Tubule, Accumulation, Hyaline Droplet	10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
Renal Tubule, Pigmentation						1 (10%)
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell						2 (20%)

*** END OF MALE ***

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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)
Parasite Metazoan						1 (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)	(10)	(10)	(10)	(10)	(10)
Hematopoietic Cell Proliferation	3 (30%)				1 (10%)	1 (10%)
Hepatodiaphragmatic Nodule	2 (20%)	1 (10%)			1 (10%)	1 (10%)
Inflammation, Chronic Active	10 (100%)	9 (90%)	10 (100%)	9 (90%)	7 (70%)	10 (100%)
Mesentery	(0)	(0)	(0)	(0)	(1)	(0)
Fat, Inflammation, Chronic Active					1 (100%)	
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Lymphocyte	6 (60%)					6 (60%)
Inflammation, Chronic Active						1 (10%)
Acinus, Atrophy						1 (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)
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)

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Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	9 (90%)					9 (90%)
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(8)	(0)	(0)	(0)	(0)	(9)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Clitoral Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	6 (60%)					8 (80%)
Ovary	(10)	(0)	(0)	(0)	(0)	(10)
Oviduct	(1)	(0)	(0)	(0)	(0)	(0)
Infiltration Cellular, Mixed Cell	1 (100%)					
Uterus	(10)	(0)	(0)	(0)	(0)	(10)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)

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INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mixed Cell	1 (10%)					
Skin	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active						1 (10%)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	3 (30%)					7 (70%)
Metaplasia, Osseous	2 (20%)					
Interstitial, Infiltration Cellular, Mononuclear Cell	1 (10%)					
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Olfactory Epithelium, Foreign Body	1 (10%)					
Trachea	(9)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active						1 (10%)
SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell	1 (10%)					
Inflammation, Chronic Active	2 (20%)					1 (10%)
Metaplasia, Squamous	2 (20%)					

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FISCHER 344 RATS FEMALE	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
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URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Nephropathy	7 (70%)	10 (100%)	7 (70%)	8 (80%)	9 (90%)	10 (100%)
Capsule, Inflammation, Chronic Active	1 (10%)					
Cortex, Angiectasis					1 (10%)	
Medulla, Mineralization	5 (50%)	6 (60%)	5 (50%)	3 (30%)	4 (40%)	9 (90%)
Papilla, Casts Granular						1 (10%)
Renal Tubule, Crystals	1 (10%)					
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	1 (10%)					1 (10%)

*** END OF REPORT ***

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