

Experiment Number: 56348-01
Test Type: 90-DAY
Species/Strain: Rat/F 344/N

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS
ABRIDGED) (a)**

Test Compound: Citral
CAS Number: 5392-40-5

Date Report Requested: 10/23/2014
Time Report Requested: 05:11:41
First Dose M/F: NA / NA
Lab: BAT

C Number: C56348A
Lock Date: 01/02/1996
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date NONE

Experiment Number: 56348-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

Test Compound: Citral

CAS Number: 5392-40-5

Date Report Requested: 10/23/2014

Time Report Requested: 05:11:41

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat MALE	UNTREAT CONTROL	VEHICLE CONTROL	3900 PPM	7800 PPM	15600 PPM	31300 PPM
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Moribund Sacrifice						10
Survivors						
Terminal Sacrifice	10	10	10	10	10	
Animals Examined Microscopically	10	10	10	10	10	10
ALIMENTARY SYSTEM						
Esophagus	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Large, Cecum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Large, Colon	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Large, Rectum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Small, Duodenum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Small, Ileum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Small, Jejunum	(10)	(10)	(0)	(0)	(10)	(10)
Liver	(10)	(10)	(1)	(0)	(10)	(10)
Pancreas	(10)	(10)	(0)	(0)	(10)	(10)
Salivary Glands	(10)	(10)	(0)	(0)	(10)	(10)
Stomach, Forestomach	(10)	(10)	(0)	(0)	(10)	(10)
Stomach, Glandular	(10)	(10)	(0)	(0)	(10)	(10)
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(10)	(0)	(0)	(10)	(10)
Heart	(10)	(10)	(0)	(0)	(10)	(10)
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(10)	(0)	(0)	(10)	(10)
Adrenal Medulla	(10)	(10)	(0)	(0)	(10)	(10)

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

b - Primary tumors: all tumors except metastatic tumors

* Number of animals with any tissue examined microscopically

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Lab: BAT

F 344/N Rat MALE	UNTREAT CONTROL	VEHICLE CONTROL	3900 PPM	7800 PPM	15600 PPM	31300 PPM
Islets, Pancreatic	(10)	(10)	(0)	(0)	(10)	(10)
Parathyroid Gland	(10)	(7)	(0)	(0)	(9)	(10)
Pituitary Gland	(9)	(9)	(0)	(0)	(10)	(10)
Thyroid Gland	(10)	(10)	(0)	(0)	(10)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(10)	(10)	(0)	(0)	(10)	(10)
Preputial Gland	(10)	(10)	(0)	(0)	(10)	(10)
Prostate	(10)	(10)	(0)	(0)	(10)	(10)
Seminal Vesicle	(10)	(10)	(0)	(0)	(10)	(10)
Testes	(10)	(10)	(0)	(0)	(10)	(10)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(10)	(0)	(10)	(10)	(10)
Lymph Node, Mandibular	(10)	(10)	(0)	(0)	(10)	(10)
Lymph Node, Mesenteric	(10)	(10)	(0)	(0)	(10)	(10)
Spleen	(10)	(10)	(0)	(0)	(10)	(10)
Thymus	(10)	(10)	(0)	(0)	(10)	(10)
INTEGUMENTARY SYSTEM						
Mammary Gland	(9)	(8)	(0)	(0)	(10)	(8)
Skin	(10)	(10)	(0)	(0)	(10)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(10)	(0)	(0)	(10)	(10)
NERVOUS SYSTEM						
Brain	(10)	(10)	(0)	(0)	(10)	(10)

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F 344/N Rat MALE	UNTREAT CONTROL	VEHICLE CONTROL	3900 PPM	7800 PPM	15600 PPM	31300 PPM
<hr/>						
RESPIRATORY SYSTEM						
Lung	(10)	(10)	(0)	(0)	(10)	(10)
Nose	(10)	(10)	(0)	(0)	(10)	(10)
Trachea	(10)	(10)	(0)	(0)	(10)	(10)
<hr/>						
SPECIAL SENSES SYSTEM						
None						
<hr/>						
URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Urinary Bladder	(10)	(10)	(0)	(0)	(10)	(10)

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

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F 344/N Rat MALE

UNTREAT
CONTROL

VEHICLE CONTROL

3900 PPM

7800 PPM

15600 PPM

31300 PPM

Tumor Summary for MALE

Total Animals with Primary Neoplasms (b)

Total Primary Neoplasms

Total Animals with Benign Neoplasms

Total Benign Neoplasms

Total Animals with Malignant Neoplasms

Total Malignant Neoplasms

Total Animals with Metastatic Neoplasms

Total Metastatic Neoplasms

Total Animals with Malignant Neoplasms

Uncertain Primary Site

Total Animals with Neoplasms Uncertain -

Benign or Malignant

Total Uncertain Neoplasms

END OF MALE DATA

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

b - Primary tumors: all tumors except metastatic tumors

* Number of animals with any tissue examined microscopically

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First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat FEMALE	UNTREAT CONTROL	VEHICLE CONTROL	3900 PPM	7800 PPM	15600 PPM	31300 PPM
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Moribund Sacrifice						10
Survivors						
Terminal Sacrifice	10	10	10	10	10	
Animals Examined Microscopically	10	10	1	10	10	10
ALIMENTARY SYSTEM						
Esophagus	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Large, Cecum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Large, Colon	(10)	(10)	(0)	(1)	(10)	(10)
Leiomyosarcoma				1 (100%)		
Intestine Large, Rectum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Small, Duodenum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Small, Ileum	(10)	(10)	(0)	(0)	(10)	(10)
Intestine Small, Jejunum	(10)	(10)	(0)	(0)	(10)	(10)
Liver	(10)	(10)	(1)	(0)	(10)	(10)
Pancreas	(10)	(10)	(0)	(0)	(10)	(10)
Salivary Glands	(10)	(10)	(0)	(0)	(10)	(10)
Stomach, Forestomach	(10)	(10)	(0)	(0)	(10)	(10)
Stomach, Glandular	(10)	(10)	(0)	(0)	(10)	(10)
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(10)	(0)	(0)	(10)	(10)
Heart	(10)	(10)	(0)	(0)	(10)	(10)
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(10)	(0)	(0)	(10)	(10)

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

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* Number of animals with any tissue examined microscopically

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F 344/N Rat FEMALE	UNTREAT CONTROL	VEHICLE CONTROL	3900 PPM	7800 PPM	15600 PPM	31300 PPM
Adrenal Medulla	(10)	(10)	(0)	(0)	(10)	(10)
Islets, Pancreatic	(10)	(10)	(0)	(0)	(10)	(10)
Parathyroid Gland	(10)	(8)	(0)	(0)	(10)	(8)
Pituitary Gland	(10)	(10)	(0)	(0)	(10)	(10)
Thyroid Gland	(10)	(10)	(0)	(0)	(10)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Clitoral Gland	(10)	(10)	(0)	(0)	(10)	(10)
Ovary	(10)	(10)	(0)	(0)	(10)	(10)
Uterus	(10)	(10)	(0)	(0)	(10)	(10)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(10)	(0)	(10)	(10)	(10)
Lymph Node, Mandibular	(10)	(10)	(0)	(0)	(10)	(10)
Lymph Node, Mesenteric	(10)	(10)	(0)	(0)	(10)	(10)
Spleen	(10)	(10)	(0)	(0)	(10)	(10)
Thymus	(10)	(10)	(0)	(0)	(10)	(10)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(10)	(0)	(0)	(10)	(8)
Skin	(10)	(10)	(0)	(0)	(10)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(10)	(0)	(0)	(10)	(10)
NERVOUS SYSTEM						
Brain	(10)	(10)	(0)	(0)	(10)	(10)

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* Number of animals with any tissue examined microscopically

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F 344/N Rat FEMALE	UNTREAT CONTROL	VEHICLE CONTROL	3900 PPM	7800 PPM	15600 PPM	31300 PPM
<hr/>						
RESPIRATORY SYSTEM						
Lung	(10)	(10)	(0)	(0)	(10)	(10)
Nose	(10)	(10)	(0)	(0)	(10)	(10)
Trachea	(10)	(10)	(0)	(0)	(10)	(10)
<hr/>						
SPECIAL SENSES SYSTEM						
None						
<hr/>						
URINARY SYSTEM						
Kidney	(10)	(10)	(0)	(0)	(10)	(10)
Urinary Bladder	(10)	(10)	(0)	(0)	(10)	(10)

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

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F 344/N Rat FEMALE	UNTREAT CONTROL	VEHICLE CONTROL	3900 PPM	7800 PPM	15600 PPM	31300 PPM
<hr/> Tumor Summary for FEMALE						
Total Animals with Primary Neoplasms (b)				1		
Total Primary Neoplasms				1		
Total Animals with Benign Neoplasms						
Total Benign Neoplasms						
Total Animals with Malignant Neoplasms				1		
Total Malignant Neoplasms				1		
Total Animals with Metastatic Neoplasms						
Total Metastatic Neoplasms						
Total Animals with Malignant Neoplasms Uncertain Primary Site						
Total Animals with Neoplasms Uncertain - Benign or Malignant						
Total Uncertain Neoplasms						

**** END OF REPORT ****

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

b - Primary tumors: all tumors except metastatic tumors

* Number of animals with any tissue examined microscopically