

Experiment Number: 20316 - 01

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

Date Report Requested: 02/03/2014

Test Type: 90-DAY

Cedarwood oil

Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

F1_Rev.1_R2

NTP Study Number: C20316
Lock Date: 03/06/2006
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.0_001
PWG Approval Date: 11/26/2007

Test Type: 90-DAY

Cedarwood oil

Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE	UNTREATED	0 %	6.25 %	12.5 %	25 %	50 %
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Moribund Sacrifice						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
ALIMENTARY SYSTEM						
Esophagus	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Large, Cecum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Large, Colon	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Large, Rectum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Small, Duodenum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Small, Ileum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Small, Jejunum	(10)	(10)	(0)	(0)	(0)	(0)
Liver	(10)	(10)	(10)	(10)	(10)	(10)
Pancreas	(10)	(10)	(0)	(0)	(0)	(0)
Salivary Glands	(10)	(10)	(0)	(0)	(0)	(0)
Stomach, Forestomach	(10)	(10)	(0)	(0)	(0)	(0)
Stomach, Glandular	(10)	(10)	(0)	(0)	(0)	(0)
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(10)	(0)	(0)	(0)	(0)
Heart	(10)	(10)	(0)	(0)	(0)	(0)
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(10)	(10)	(10)	(10)	(10)
Adrenal Medulla	(10)	(10)	(0)	(0)	(0)	(0)
Islets, Pancreatic	(10)	(10)	(0)	(0)	(0)	(0)
Parathyroid Gland	(9)	(9)	(0)	(0)	(0)	(0)

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

Test Type: 90-DAY

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CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE	UNTREATED	0 %	6.25 %	12.5 %	25 %	50 %
Pituitary Gland	(10)	(10)	(0)	(0)	(0)	(0)
Thyroid Gland	(10)	(10)	(10)	(10)	(10)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(10)	(10)	(0)	(0)	(0)	(0)
Preputial Gland	(10)	(10)	(0)	(0)	(0)	(0)
Prostate	(10)	(10)	(0)	(0)	(0)	(0)
Seminal Vesicle	(10)	(10)	(0)	(0)	(0)	(0)
Testes	(10)	(10)	(0)	(1)	(0)	(0)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(10)	(10)	(10)	(10)	(10)
Lymph Node, Mesenteric	(10)	(10)	(0)	(0)	(0)	(0)
Spleen	(10)	(10)	(0)	(0)	(0)	(0)
Thymus	(10)	(10)	(0)	(0)	(0)	(0)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(10)	(0)	(0)	(0)	(0)
Skin	(10)	(10)	(10)	(10)	(10)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(10)	(0)	(0)	(0)	(0)

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

Experiment Number: 20316 - 01

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

Date Report Requested: 02/03/2014

Test Type: 90-DAY

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Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE	UNTREATED	0 %	6.25 %	12.5 %	25 %	50 %
NERVOUS SYSTEM						
Brain	(10)	(10)	(0)	(0)	(0)	(0)
RESPIRATORY SYSTEM						
Lung	(10)	(10)	(0)	(0)	(0)	(0)
Nose	(10)	(10)	(0)	(0)	(0)	(0)
Trachea	(10)	(10)	(0)	(0)	(0)	(0)
SPECIAL SENSES SYSTEM						
Eye	(10)	(10)	(0)	(0)	(0)	(0)
Harderian Gland	(10)	(10)	(0)	(0)	(0)	(0)
URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Urinary Bladder	(10)	(10)	(0)	(0)	(0)	(0)

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

Experiment Number: 20316 - 01

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

Date Report Requested: 02/03/2014

Test Type: 90-DAY

Cedarwood oil

Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE 100 %

Disposition Summary

Animals Initially In Study	10
Early Deaths	
Moribund Sacrifice	2
Survivors	
Terminal Sacrifice	8
Animals Examined Microscopically	10

ALIMENTARY SYSTEM

Esophagus	(10)
Intestine Large, Cecum	(10)
Intestine Large, Colon	(10)
Intestine Large, Rectum	(10)
Intestine Small, Duodenum	(10)
Intestine Small, Ileum	(10)
Intestine Small, Jejunum	(10)
Liver	(10)
Pancreas	(10)
Salivary Glands	(10)
Stomach, Forestomach	(10)
Stomach, Glandular	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)
Heart	(10)

ENDOCRINE SYSTEM

Adrenal Cortex	(10)
Adrenal Medulla	(10)
Islets, Pancreatic	(10)
Parathyroid Gland	(10)

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

Experiment Number: 20316 - 01

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

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Test Type: 90-DAY

Cedarwood oil

Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE **100 %**

Pituitary Gland	(10)
Thyroid Gland	(10)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(10)
Preputial Gland	(10)
Prostate	(10)
Seminal Vesicle	(10)
Testes	(10)

HEMATOPOIETIC SYSTEM

Bone Marrow	(10)
Lymph Node, Mesenteric	(10)
Spleen	(10)
Thymus	(10)

INTEGUMENTARY SYSTEM

Mammary Gland	(10)
Skin	(10)

MUSCULOSKELETAL SYSTEM

Bone	(10)
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a - Number of animals examined microscopically at site and number of animals with lesion

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**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS
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Route: SKIN APPLICATION

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First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE 100 %

NERVOUS SYSTEM

Brain (10)

RESPIRATORY SYSTEM

Lung (10)
Nose (10)
Trachea (10)

SPECIAL SENSES SYSTEM

Eye (10)
Harderian Gland (10)

URINARY SYSTEM

Kidney (10)
Urinary Bladder (10)

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

Experiment Number: 20316 - 01

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

Date Report Requested: 02/03/2014

Test Type: 90-DAY

Cedarwood oil

Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE

UNTREATED

0 %

6.25 %

12.5 %

25 %

50 %

Tumor Summary for Males

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

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

b - Primary tumors: all tumors except metastatic tumors

Experiment Number: 20316 - 01

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

Date Report Requested: 02/03/2014

Test Type: 90-DAY

Cedarwood oil

Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS MALE

100 %

Tumor Summary for Males

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 ***

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

b - Primary tumors: all tumors except metastatic tumors

Test Type: 90-DAY

Cedarwood oil

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Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE	UNTREATED	0 %	6.25 %	12.5 %	25 %	50 %
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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)	(10)	(0)	(0)	(0)	(0)
Intestine Large, Cecum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Large, Colon	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Large, Rectum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Small, Duodenum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Small, Ileum	(10)	(10)	(0)	(0)	(0)	(0)
Intestine Small, Jejunum	(10)	(10)	(0)	(0)	(0)	(0)
Liver	(10)	(10)	(10)	(10)	(10)	(10)
Mesentery	(0)	(0)	(1)	(0)	(0)	(0)
Pancreas	(10)	(10)	(0)	(0)	(0)	(0)
Salivary Glands	(10)	(10)	(0)	(0)	(10)	(10)
Stomach, Forestomach	(10)	(10)	(0)	(0)	(0)	(0)
Stomach, Glandular	(10)	(10)	(0)	(0)	(0)	(0)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(10)	(0)	(0)	(0)	(0)
Heart	(10)	(10)	(0)	(0)	(0)	(0)

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(10)	(0)	(0)	(0)	(0)
Adrenal Medulla	(10)	(10)	(0)	(0)	(0)	(0)
Islets, Pancreatic	(10)	(10)	(0)	(0)	(0)	(0)
Parathyroid Gland	(9)	(9)	(0)	(0)	(0)	(0)

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

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Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE	UNTREATED	0 %	6.25 %	12.5 %	25 %	50 %
Pituitary Gland	(10)	(10)	(0)	(0)	(0)	(0)
Thyroid Gland	(10)	(10)	(10)	(10)	(10)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Clitoral Gland	(10)	(10)	(0)	(0)	(0)	(0)
Ovary	(10)	(10)	(0)	(0)	(0)	(0)
Uterus	(10)	(10)	(0)	(0)	(0)	(0)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(10)	(9)	(10)	(10)	(10)
Lymph Node, Mesenteric	(10)	(10)	(0)	(0)	(0)	(0)
Spleen	(10)	(10)	(0)	(0)	(0)	(0)
Thymus	(10)	(10)	(0)	(0)	(0)	(0)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(10)	(0)	(0)	(0)	(0)
Skin	(10)	(10)	(10)	(10)	(10)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(10)	(0)	(0)	(0)	(0)
NERVOUS SYSTEM						
Brain	(10)	(10)	(0)	(0)	(0)	(0)

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

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

Date Report Requested: 02/03/2014

Test Type: 90-DAY

Cedarwood oil

Time Report Requested: 08:13:55

Route: SKIN APPLICATION

CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE	UNTREATED	0 %	6.25 %	12.5 %	25 %	50 %
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RESPIRATORY SYSTEM						
Lung	(10)	(10)	(0)	(0)	(0)	(0)
Nose	(10)	(10)	(0)	(0)	(0)	(0)
Trachea	(10)	(10)	(0)	(0)	(0)	(0)

SPECIAL SENSES SYSTEM						
Eye	(10)	(10)	(0)	(0)	(0)	(0)
Harderian Gland	(10)	(10)	(0)	(0)	(0)	(0)

URINARY SYSTEM						
Kidney	(10)	(10)	(0)	(0)	(0)	(0)
Urinary Bladder	(10)	(10)	(0)	(0)	(0)	(0)

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

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

Date Report Requested: 02/03/2014

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CAS Number: 8000-27-9

First Dose M/F: 06/15/05 / 06/16/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE 100 %

Disposition Summary

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

ALIMENTARY SYSTEM

Esophagus	(10)
Intestine Large, Cecum	(10)
Intestine Large, Colon	(10)
Intestine Large, Rectum	(10)
Intestine Small, Duodenum	(10)
Intestine Small, Ileum	(10)
Intestine Small, Jejunum	(10)
Liver	(10)
Mesentery	(0)
Pancreas	(10)
Salivary Glands	(10)
Stomach, Forestomach	(10)
Stomach, Glandular	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)
Heart	(10)

ENDOCRINE SYSTEM

Adrenal Cortex	(10)
Adrenal Medulla	(10)
Islets, Pancreatic	(10)
Parathyroid Gland	(10)

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

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Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE

100 %

Pituitary Gland	(10)
Thyroid Gland	(10)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(10)
Ovary	(10)
Uterus	(10)

HEMATOPOIETIC SYSTEM

Bone Marrow	(10)
Lymph Node, Mesenteric	(10)
Spleen	(10)
Thymus	(10)

INTEGUMENTARY SYSTEM

Mammary Gland	(10)
Skin	(10)

MUSCULOSKELETAL SYSTEM

Bone	(10)
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NERVOUS SYSTEM

Brain	(10)
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a - Number of animals examined microscopically at site and number of animals with lesion

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Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE

100 %

RESPIRATORY SYSTEM

Lung	(10)
Nose	(10)
Trachea	(10)

SPECIAL SENSES SYSTEM

Eye	(10)
Harderian Gland	(10)

URINARY SYSTEM

Kidney	(10)
Urinary Bladder	(10)

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Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE	UNTREATED	0 %	6.25 %	12.5 %	25 %	50 %
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Tumor Summary for Females

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

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

b - Primary tumors: all tumors except metastatic tumors

Experiment Number: 20316 - 01

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS
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Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE

100 %

Tumor Summary for Females

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 REPORT ***

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

b - Primary tumors: all tumors except metastatic tumors