Final 1_16 Week SSAC Only

NTP Study Number:	C20614
Lock Date:	01/10/2012
Cage Range:	ALL
Date Range:	ALL
Reasons For Removal:	25017 SSAC
Removal Date Range:	ALL
Treatment Groups:	Include ALL
Study Gender:	Both
TDMSE Version:	3.0.2.3_002
PWG Approval Date:	07/25/2018

Harlan Sprague Dawley RATS MALE	0/0 ppm	0/150 ppm	150/150 ppm	0/300 ppm	300/300 ppm
Disposition Summary					
Animals Initially In Study	**60**	**60**	**60**	**60**	**60**
Scheduled Sacrifice	**10**	**10**	**10**	**10**	**10**
Early Deaths					
Survivors					
Animals Examined Microscopically	**10**	**10**	**10**	**10**	**10**
ALIMENTARY SYSTEM					
Esophagus	(10)	(10)	(10)	(10)	(10)
Intestine Large, Cecum	(10)	(10)	(10)	(10)	(10)
Intestine Large, Colon	(10)	(10)	(10)	(10)	(10)
Intestine Large, Rectum	(10)	(10)	(10)	(10)	(10)
Intestine Small, Duodenum	(10)	(10)	(10)	(10)	(10)
Intestine Small, Ileum	(10)	(10)	(10)	(10)	(10)
Intestine Small, Jejunum	(10)	(10)	(10)	(10)	(10)
Liver	(10)	(10)	(10)	(10)	(10)
Pancreas	(10)	(10)	(10)	(10)	(10)
Salivary Glands	(10)	(10)	(10)	(10)	(10)
Stomach, Forestomach	(10)	(10)	(10)	(10)	(10)
Stomach, Glandular	(10)	(10)	(10)	(10)	(10)
CARDIOVASCULAR SYSTEM					
Blood Vessel	(10)	(10)	(10)	(10)	(10)
Heart	(10)	(10)	(10)	(10)	(10)
ENDOCRINE SYSTEM					
Adrenal Cortex	(10)	(10)	(10)	(10)	(10)
Adrenal Medulla	(10)	(10)	(10)	(10)	(10)
Islets, Pancreatic	(10)	(10)	(10)	(10)	(10)
Parathyroid Gland	(10)	(9)	(9)	(10)	(8)
Pituitary Gland	(10)	(10)	(10)	(10)	(10)

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

Harlan Sprague Dawley RATS MALE	0/0 ppm	0/150 ppm	150/150 ppm	0/300 ppm	300/300 ppm
Thyroid Gland	(10)	(10)	(10)	(10)	(10)
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Epididymis	(10)	(10)	(10)	(10)	(10)
Preputial Gland	(10)	(10)	(10)	(10)	(10)
Prostate	(10)	(10)	(10)	(10)	(10)
Seminal Vesicle	(10)	(10)	(10)	(10)	(10)
Testes	(10)	(10)	(10)	(10)	(10)
HEMATOPOIETIC SYSTEM					
Bone Marrow	(10)	(10)	(10)	(10)	(10)
Lymph Node, Mandibular	(10)	(10)	(10)	(10)	(10)
Lymph Node, Mesenteric	(10)	(10)	(10)	(10)	(10)
Spleen	(10)	(10)	(10)	(10)	(10)
Thymus	(10)	(10)	(10)	(10)	(10)
INTEGUMENTARY SYSTEM					
Mammary Gland	(10)	(10)	(10)	(10)	(10)
Skin	(10)	(10)	(10)	(10)	(10)
MUSCULOSKELETAL SYSTEM					
Bone	(10)	(10)	(10)	(10)	(10)

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

Harlan Sprague Dawley RATS MALE	0/0 ppm	0/150 ppm	150/150 ppm	0/300 ppm	300/300 ppm
NERVOUS SYSTEM					
Brain	(10)	(10)	(10)	(10)	(10)
RESPIRATORY SYSTEM					
Lung	(10)	(10)	(10)	(10)	(10)
Nose	(10)	(10)	(10)	(10)	(10)
Trachea	(10)	(10)	(10)	(10)	(10)
SPECIAL SENSES SYSTEM					
Eye	(10)	(10)	(10)	(10)	(10)
Harderian Gland	(10)	(10)	(10)	(10)	(10)
URINARY SYSTEM					
Kidney	(10)	(10)	(10)	(10)	(10)
Urinary Bladder	(10)	(10)	(10)	(10)	(10)

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

Harlan Sprague Dawley RATS MALE	0/0 ppm	0/150 ppm	150/150 ppm	0/300 ppm	300/300 ppm

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

Harlan Sprague Dawley RATS FEMALE	0/0 ppm	0/300 ppm	150/300 ppm	0/1000 ppm	300/1000 ppm
Disposition Summary					
Animals Initially In Study	**60**	**60**	**60**	**60**	**60**
Scheduled Sacrifice	**10**	**10**	**10**	**10**	**10**
Early Deaths					
Survivors					
Animals Examined Microscopically	**10**	**10**	**10**	**10**	**10**
ALIMENTARY SYSTEM					
Esophagus	(10)	(10)	(10)	(10)	(10)
Intestine Large, Cecum	(10)	(10)	(10)	(10)	(10)
Intestine Large, Colon	(10)	(10)	(10)	(10)	(10)
Intestine Large, Rectum	(10)	(10)	(10)	(10)	(10)
Intestine Small, Duodenum	(10)	(10)	(10)	(10)	(10)
Intestine Small, Ileum	(10)	(10)	(10)	(10)	(10)
Intestine Small, Jejunum	(10)	(10)	(10)	(10)	(10)
Liver	(10)	(10)	(10)	(10)	(10)
Pancreas	(10)	(10)	(10)	(10)	(10)
Salivary Glands	(10)	(10)	(10)	(10)	(10)
Stomach, Forestomach	(10)	(10)	(10)	(10)	(10)
Stomach, Glandular	(10)	(10)	(10)	(10)	(10)
CARDIOVASCULAR SYSTEM					
Blood Vessel	(10)	(10)	(10)	(10)	(10)
Heart	(10)	(10)	(10)	(10)	(10)
ENDOCRINE SYSTEM					
Adrenal Cortex	(10)	(10)	(10)	(10)	(10)
Adrenal Medulla	(10)	(10)	(10)	(10)	(10)
Islets, Pancreatic	(10)	(10)	(10)	(10)	(10)
Parathyroid Gland	(10)	(10)	(10)	(9)	(10)
Pituitary Gland	(10)	(10)	(10)	(10)	(10)

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

Harlan Sprague Dawley RATS FEMALE	0/0 ppm	0/300 ppm	150/300 ppm	0/1000 ppm	300/1000 ppm
Thyroid Gland	(10)	(10)	(10)	(10)	(10)
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Clitoral Gland	(10)	(10)	(10)	(10)	(10)
Ovary	(10)	(10)	(10)	(10)	(10)
Uterus	(10)	(10)	(10)	(10)	(10)
HEMATOPOIETIC SYSTEM					
Bone Marrow	(10)	(10)	(10)	(10)	(10)
Lymph Node	(0)	(0)	(0)	(2)	(0)
Lymph Node, Mandibular	(10)	(10)	(10)	(10)	(10)
Lymph Node, Mesenteric	(10)	(10)	(10)	(9)	(10)
Spleen	(10)	(10)	(10)	(10)	(10)
Thymus	(10)	(10)	(10)	(10)	(10)
INTEGUMENTARY SYSTEM					
Mammary Gland	(10)	(10)	(10)	(10)	(10)
Skin	(10)	(10)	(10)	(10)	(10)
MUSCULOSKELETAL SYSTEM					
Bone	(10)	(10)	(10)	(10)	(10)
NERVOUS SYSTEM					

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

Harlan Sprague Dawley RATS FEMALE	0/0 ppm	0/300 ppm	150/300 ppm	0/1000 ppm	300/1000 ppm
Brain	(10)	(10)	(10)	(10)	(10)
RESPIRATORY SYSTEM					
Lung	(10)	(10)	(10)	(10)	(10)
Nose	(10)	(10)	(10)	(10)	(10)
Trachea	(10)	(10)	(10)	(10)	(10)
SPECIAL SENSES SYSTEM					
Eye	(10)	(10)	(10)	(10)	(10)
Harderian Gland	(10)	(10)	(10)	(10)	(10)
URINARY SYSTEM					
Kidney	(10)	(10)	(10)	(10)	(10)
Urinary Bladder	(10)	(10)	(10)	(10)	(10)

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

Harlan Sprague Dawley RATS FEMALE	0/0 ppm	0/300 ppm	150/300 ppm	0/1000 ppm	300/1000 ppm

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