TRADE SECRET

Study Title

H-28548: COMBINED CHRONIC TOXICITY/ONCOGENICITY
STUDY 2-YEAR ORAL GAVAGE STUDY IN RATS

Laboratory Project ID: DuPont-18405-1238

Volume 10 of 13

NUMBER OF PAGES IN VOLUME: 351

TEST GUIDELINES:
- U.S. EPA Health Effects Test Guidelines OPPTS 870.4300 Combined Chronic Toxicity/Carcinogenicity (1998)
- OECD Guidelines for the Testing of Chemicals Section 4 (No. 453) Health Effects (2009)
- JMAFF Japan Agricultural Chemicals Regulation Law 12 Nousan No. 8147 (2000)
- EEC Methods for the Determination of Toxicity Method B.33 Combined Chronic/Carcinogenicity test, Directive 88/302/EC (1988)

AUTHOR: Lisa Craig, B.S.

STUDY COMPLETED ON: March 28, 2013

APPLICANT/SPONSOR: E.I. du Pont de Nemours and Company
Wilmington, Delaware 19898
U.S.A.

PERFORMING LABORATORY: MPI Research, Inc.
54943 North Main Street
Mattawan, Michigan 49071-8353
U.S.A.

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1318	E	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- hyperplasia, epidermal, mild corresponds to macroscopic observation (skin - abrasion/scab)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- astrocytoma, malignant, primary, fatal, positive cause of death
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1318	E	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- spinal cord tumor
1319	S	**Macroscopic**	
		lymph node, inguinal	- not identified, right, no grade draining node for mass a.
		skin, subcutis	- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (nodule) approximately 0.5 cm in diameter.
		testes	- discoloration, red, right, moderate

S - Scheduled necropsy
E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1319	S	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal
			- hyperplasia, focal medullary, unilateral, mild
			- necrosis, unilateral, mild
			- vacuolation, focal, unilateral, minimal
			two sets of adrenals submitted with this animal from necropsy. one set has only medullary hyperplasia.
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- oligospermia/germ cell debris, unilateral, severe
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits

S - Scheduled necropsy

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1319	S	**Microscopic**	
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1319	S	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- adenoma, acinar cell, benign, primary, incidental, not cause of death
			- hyperplasia, acinar cell, focal, mild
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1319	S	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death
			corresponds to macroscopic observation (testes - discoloration, red)
			- hyperplasia, interstitial cell, unilateral, minimal
		thymus	- depletion, lymphoid, generalized, severe
			two sets of thymus submitted from necropsy. both have same microscopic finding.
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1319	S	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
1320	E	**Macroscopic**	
		pituitary gland	- enlarged, moderate
		stomach, nonglandular	- swollen/thickened, mild
1320	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1320	E	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1320	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits

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Individual Animal Listing - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1320	E	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- erosion/ulcer, severe
			corresponds to macroscopic observation (stomach, nonglandular - swollen/thickened)
		testes	- hyperplasia, interstitial cell, bilateral, minimal
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1321	D	**Macroscopic**	
		pituitary gland	- enlarged, minimal
1321	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1321	D	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- within normal limits
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1321	D	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1321	D	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- pituitary gland - enlarged
		Cause of Death	- undetermined
1323	D	**Macroscopic**	
		all tissues	- within normal limits
1323	D	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1323	D	**Microscopic**	
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1323	D	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1323	D	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1323	D	**Microscopic**	
		vagina	- within normal limits
		Cause of Death	- undetermined
1333	S	**Macroscopic**	
		ovaries	- cyst, clear, right, mild
		pituitary gland	- enlarged, red, severe
		uterus with cervix	- enlarged, horn, mild
1333	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits

S - Scheduled necropsy
D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1333	S	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- within normal limits
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

S - Scheduled necropsy

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1333	S	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, incidental, not cause of death slide 18.
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- hyperplasia, sex-cord/stromal, unilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

S - Scheduled necropsy

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1333	S	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits

S - Scheduled necropsy

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1333	S	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, moderate
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		non-correlated macro observation	- ovaries - cyst
1334	E	**Macroscopic**	
		adrenal glands	- enlarged, right, mild
		lymph node, axillary	- within normal limits
			draining node for mass a and mass b, left. draining node for mass e, right.
		lymph node, inguinal	- within normal limits
			draining node for mass c, left. draining node for mass d, right.
		pituitary gland	- enlarged, red, moderate

S - Scheduled necropsy
E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1334	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 4.5 cm in diameter. - mass, tan, mass b, left axillary area, present corresponds to antemortem observation (mass 2) approximately 2.5 cm in diameter. - mass, tan, mass c, left anogenital region, present corresponds to antemortem observation (mass 3) approximately 4.7 cm in diameter. - mass, tan, mass d, right anogenital region, present corresponds to antemortem observation (mass 4) approximately 4.0 cm in diameter. - mass, tan, mass e, right axillary area, present corresponds to antemortem observation (mass 5) approximately 1.9 cm in diameter.
1334	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged) - hyperplasia, focal cortical, unilateral, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1334	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1334	E	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1334	E	**Microscopic**	
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d; skin, subcutis - mass e)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1334	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1334	E	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1335	S	**Macroscopic**	
		liver	- cyst, clear, left lateral lobe, moderate
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a, right and mass b, left.
		lymph node, mesenteric	- within normal limits draining node for mass c.
		pancreas	- mass, tan, mass c, present approximately 1.0 cm in diameter.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1335	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, right anogenital region, present corresponds to antemortem observation (hair sparse mass 1) approximately 9.0 x 8.0 x 3.2 cm. - mass, tan, mass b, left inguinal area, present corresponds to antemortem observation (mass 2) approximately 4.0 x 4.0 x 3.5 cm.
1335	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1335	S	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- cyst, biliary, simple, mild
			corresponds to macroscopic observation (liver - cyst)
			- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
			- macrophages, pigmented alveolar, minimal

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1335	S	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- hyperplasia, sex-cord/stromal, unilateral, mild
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
			- carcinoma, islet cell, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (pancreas - mass c)
		parathyroid glands	- within normal limits
			one of pair present

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1335	S	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, mild
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1335	S	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
1336	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, left and mass d, right.
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a, right and mass c, left.
		pituitary gland	- enlarged, red, severe

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1336	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, right anogenital region, present corresponds to antemortem observation (hair sparse mass 1) approximately 10.0 x 5.5 x 3.5 cm. - mass, tan, mass b, left axillary area, present corresponds to antemortem observation (mass 2) approximately 6.5 x 5.0 x 3.0 cm. - mass, tan, mass c, right inguinal area, present corresponds to antemortem observation (mass 3) approximately 3.0 cm in diameter. - mass, tan, mass d, right axillary area, present approximately 1.0 cm in diameter.
		thymus	- small, severe
1336	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1336	E	**Microscopic**	
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
			- compression, ventral (pituitary tumor), moderate
			- hemorrhage, moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1336	E	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (skin, subcutis - mass d)
			- adenoma, benign, primary, incidental, not cause of death
			slide 18.
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c)
			- hyperplasia, lobular, moderate
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- degeneration, mild
			squamous epithelium, oral mucosa.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1336	E	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1336	E	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			corresponds to macroscopic observation (thymus - small)
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, minimal
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1337	E	**Macroscopic**	
		animal/whole body	- body fat depleted, mild corresponds to antemortem observation (thin)
		liver	- discoloration, tan, multiple lobes, mild
		lung with bronchi	- mass, tan, multiple, multiple lobes, mass b, present ranging in size from approximately 0.2 to 2.0 cm in diameter.
		lymph node, mandibular	- discoloration, red, bilateral, mild draining node for mass a.
		lymph node, mediastinal	- not identified, no grade draining node for mass b.
		skin, subcutis	- mass, tan, mass a, ventral neck, present corresponds to antemortem observation (mass 1) approximately 12.0 cm in diameter.
1337	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1337	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1337	E	**Microscopic**	
		liver	- vacuolation, periportal, mild
			corresponds to macroscopic observation (liver - discoloration, tan)
		lung	- adenocarcinoma, malignant, secondary
			corresponds to macroscopic observation (lung with bronchi - mass b)
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
			corresponds to macroscopic observation (lymph node, mandibular - discoloration, red)
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1337	E	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

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MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1337	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1338	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, left, and mass b, right.
		pituitary gland	- enlarged, tan, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1338	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 3.0 x 2.5 x 1.5 cm. - mass, ulcerated, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 2.5 x 2.0 x 1.5 cm, tan, possible cannibalism.
1338	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits one of pair present

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1338	E	**Microscopic**	
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, clear, minimal
			- hematopoiesis, extramedullary, minimal
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1338	E	**Microscopic**	
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1338	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1338	E	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1339	S	**Macroscopic**	
		lymph node, axillary	- within normal limits right is draining node for mass b.
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 8.0 x 5.0 x 2.3 cm. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (swelling mass 2) approximately 2.0 x 2.0 x 0.8 cm.
		uterus with cervix	- cyst, clear, horn, mild
1339	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1339	S	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
			- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1339	S	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1339	S	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1339	S	**Microscopic**	
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (uterus with cervix - cyst)
		vagina	- within normal limits
1340	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits
			draining node for mass a, right.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1340	E	**Macroscopic**	
		mammary gland	- swollen/thickened, tan, generalized, moderate corresponds to antemortem observation (swelling)
		pituitary gland	- enlarged, red, moderate
		skin, subcutis	- mass, tan, mass a, right anogenital region, present corresponds to antemortem observation (swelling mass 1) approximately 3.0 cm in diameter.
1340	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1340	E	**Microscopic**	
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- edema, papilla, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, mild
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, mild
		lung	- histiocytosis, alveolar, minimal
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1340	E	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, moderate
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- hyperplasia, focal, bilateral, minimal
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1340	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			- inflammation, mild
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1340	E	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1341	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, mild
		skin, subcutis	- mass, tan, mass a, right lateral thorax, present corresponds to antemortem observation (mass 1 scabbed area) approximately 3.0 cm in diameter. ulcerated.
1341	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, mixed, mild
		bone marrow, sternum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1341	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1341	E	**Microscopic**	
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, diffuse, pars distalis, mild corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1341	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits one of pair present

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1341	E	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1342	E	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass a, right.
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 10.0 x 10.0 x 7.0 cm.
1342	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1342	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1342	E	**Microscopic**	
		lung	- within normal limits
		lymph node, axillary	- erythrocytosis/erythrophagocytosis, sinus, minimal
			- histiocytosis, sinus, mild
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1342	E	**Microscopic**	
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1342	E	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1343	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1343	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1343	E	**Microscopic**	
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1343	E	**Microscopic**	
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1343	E	**Microscopic**	
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- inflammation, subacute/chronic, minimal
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1344	E	**Macroscopic**	
		animal/whole body	- body fat depleted, mild corresponds to antemortem observation (thin)
		lymph node, axillary	- within normal limits draining node for mass a, right.
		skin, subcutis	- mass, tan, mass a, right lateral thorax, present corresponds to antemortem observation (mass 1) approximately 9.0 cm in diameter. wraps around to right axillary area.
1344	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1344	E	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- not examined
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- necrosis, hepatocytes, centrilobular, minimal
			- vacuolation, centrilobular, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1344	E	**Microscopic**	
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1344	E	**Microscopic**	
		skin, subcutis	- fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- not examined
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1344	E	**Microscopic**	
		Cause of Death	- fibrosarcoma/fibroma
1345	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, right.
		lymph node, inguinal	- within normal limits draining node for mass a, left.
		mammary gland	- swollen/thickened, generalized, mild
		ovaries	- cyst, clear, right, mild
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (swelling) approximately 2.0 x 2.0 x 1.0 cm. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (swelling) approximately 2.0 x 1.0 x 0.5 cm.
1345	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal

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MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1345	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
			- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1345	E	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b)
			- hyperplasia, lobular, moderate corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1345	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
			corresponds to macroscopic observation (ovaries - cyst)
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1345	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- erosion/ulcer, minimal
			- inflammation, minimal
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1345	E	**Microscopic**	
		Cause of Death	- pituitary tumor
1346	E	**Macroscopic**	
		lymph node, axillary	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 12.5 x 6.5 x 5.0 cm.
1346	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			- vacuolation, focal, unilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1346	E	**Microscopic**	
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1346	E	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1346	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1346	E	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1347	S	**Macroscopic**	
		lymph node, mesenteric	- enlarged, moderate
1347	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1347	S	**Microscopic**	
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- polyarteritis, minimal
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, mild
			- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, median cleft, mild
		lung	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1347	S	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- dilatation, sinus, moderate
			corresponds to macroscopic observation (lymph node, mesenteric - enlarged)
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			slide 18.
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- exudate, nasal passage, minimal
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- hyperplasia, sex-cord/stromal, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
			- polyarteritis, moderate
		parathyroid glands	- not examined
		pharynx	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1347	S	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1347	S	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- hyperplasia, squamous cell, mild
		vagina	- within normal limits
1348	D	**Macroscopic**	
		adrenal glands	- enlarged, left, mild
		cavity, thoracic	- mass, tan, mass a, present approximately 4.0 cm in diameter.
		lymph node, mediastinal	- within normal limits draining node for mass a.
		pituitary gland	- enlarged, red, mild
		thymus	- not identified, no grade thymus most likely within mass a.

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1348	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate
			corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined
			autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1348	D	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mediastinal	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1348	D	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, diffuse, pars distalis, mild
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1348	D	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- thymoma, malignant, primary, fatal, positive cause of death corresponds to macroscopic observation (cavity, thoracic - mass a)
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- thymus tumor
1349	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, left.

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1349	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (swelling) approximately 1.0 x 1.0 x 0.5 cm.
1349	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1349	E	**Microscopic**	
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- hyperplasia, transitional cell, bilateral, minimal
			- pyelitis, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1349	E	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1349	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1350	D	**Macroscopic**	
		all tissues	- within normal limits
1350	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1350	D	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
		lung	- bacterial colonies, minimal
			large amount of section has lysed red blood cells indicative of dosing injury.
			- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1350	D	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1350	D	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- dosing injury
1351	D	**Macroscopic**	
		eyes	- absent/cannibalized, bilateral, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		eyes, optic nerves	- absent/cannibalized, bilateral, no grade

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1351	D	**Macroscopic**	
		eyes, retina	- absent/cannibalized, bilateral, no grade
		harderian glands	- absent/cannibalized, bilateral, no grade
		lacrimal glands, exorbital	- absent/cannibalized, bilateral, no grade
		lymph node, axillary	- within normal limits draining node for mass a, left. draining node for mass b, right.
		lymph node, mandibular	- absent/cannibalized, bilateral, no grade
		parathyroid glands	- absent/cannibalized, bilateral, no grade
		pituitary gland	- enlarged, red, severe
		salivary gland, mandibular	- absent/cannibalized, bilateral, no grade
		salivary gland, parotid	- absent/cannibalized, bilateral, no grade
		salivary gland, sublingual	- absent/cannibalized, bilateral, no grade
		skin, subcutis	- mass, tan, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 4.0 cm in diameter. - mass, ulcerated, mass a, left axillary area, present corresponds to antemortem observation (mass 1 hair sparse) approximately 9.0 x 6.0 x 5.0 cm, tan.
		thyroid gland	- absent/cannibalized, bilateral, no grade

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1351	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- not examined cannibalized
		eyes, optic nerves	- not examined cannibalized
		eyes, retina	- not examined cannibalized
		galt	- within normal limits
		harderian glands	- not examined cannibalized
		heart	- cardiomyopathy, minimal

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1351	D	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- not examined cannibalized
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- not examined
		liver	- within normal limits
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- not examined cannibalized
		lymph node, mesenteric	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1351	D	**Microscopic**	
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
			cannibalized
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- not examined
			cannibalized

D - Died on Study

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1351	D	**Microscopic**	
		salivary gland, parotid	- not examined cannibalized
		salivary gland, sublingual	- not examined cannibalized
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- not examined cannibalized
		tongue	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1351	D	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1352	S	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass b, left. draining node for mass c, right.
		lymph node, mandibular	- within normal limits draining node for mass a, right.
		mammary gland	- swollen/thickened, tan, moderate most affected areas are left inguinal region, right inguinal region and anogenital region.
		ovaries	- cyst, clear, left, mild

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1352	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, cervical, present corresponds to antemortem observation (mass 1) approximately 2.0 x 4.5 x 5.0 cm.
			- mass, tan, mass b, left anogenital region, present corresponds to antemortem observation (nodule) approximately 1.0 x 1.5 x 2.0 cm.
			- mass, tan, mass c, right inguinal area, present corresponds to antemortem observation (nodule) approximately 0.5 x 1.5 x 2.0 cm.
1352	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			- hyperplasia, focal medullary, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1352	S	**Microscopic**	
		brain	- lymphoma, malignant, multicentric, incidental, not cause of death
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- lymphoma, malignant, multicentric, incidental, not cause of death
		harderian glands	- lymphoma, malignant, bilateral, multicentric, incidental, not cause of death
		heart	- cardiomyopathy, mild
			- lymphoma, malignant, multicentric, incidental, not cause of death
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- lymphoma, malignant, bilateral, multicentric, incidental, not cause of death
		large intestine, cecum	- polyarteritis, minimal
		large intestine, colon	- lymphoma, malignant, multicentric, incidental, not cause of death
		large intestine, rectum	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1352	S	**Microscopic**	
		larynx	- lymphoma, malignant, multicentric, incidental, not cause of death
		liver	- focus of cellular alteration, basophilic, minimal
			- lymphoma, malignant, multicentric, incidental, not cause of death
			- necrosis, focal, minimal
			- vacuolation, centrilobular, minimal
		lung	- histiocytosis, alveolar, minimal
			- lymphoma, malignant, multicentric, incidental, not cause of death
		lymph node, inguinal	- lymphoma, malignant, multicentric, incidental, not cause of death slide 26-3 and 26-3 r-1.
		lymph node, mandibular	- hyperplasia, lymphocyte/plasmacyte, medulla, mild
			- lymphoma, malignant, multicentric, incidental, not cause of death
		lymph node, mesenteric	- lymphoma, malignant, multicentric, incidental, not cause of death

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1352	S	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c)
			- hyperplasia, lobular, moderate
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		multicentric neoplasm	- lymphoma, malignant, multicentric, incidental, not cause of death
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- lymphoma, malignant, multicentric, incidental, not cause of death
		nose, level b	- lymphoma, malignant, multicentric, incidental, not cause of death
		nose, level c	- lymphoma, malignant, multicentric, incidental, not cause of death
		nose, level d	- lymphoma, malignant, multicentric, incidental, not cause of death
		ovaries	- cyst, unilateral, mild
			corresponds to macroscopic observation (ovaries - cyst)
			- hyperplasia, sex-cord/stromal, unilateral, minimal
		oviducts	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1352	S	**Microscopic**	
		pancreas	- hyperplasia, islet cell, mild
			- lymphoma, malignant, multicentric, incidental, not cause of death
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- lymphoma, malignant, multicentric, incidental, not cause of death
		salivary gland, parotid	- lymphoma, malignant, multicentric, incidental, not cause of death
		salivary gland, sublingual	- lymphoma, malignant, multicentric, incidental, not cause of death
		skeletal muscle, biceps femoris	- lymphoma, malignant, multicentric, incidental, not cause of death
		skin	- within normal limits
		skin, subcutis	- lymphoma, malignant, multicentric, incidental, not cause of death
			slide 8, 18, 18-1, 26-1, 26-2, 26-3, and 26-3 r-1.
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1352	S	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- lymphoma, malignant, multicentric, incidental, not cause of death
		stomach, glandular	- within normal limits
		stomach, nonglandular	- lymphoma, malignant, multicentric, incidental, not cause of death
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, mild
		thyroid gland	- lymphoma, malignant, bilateral, multicentric, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- lymphoma, malignant, unilateral, multicentric, incidental, not cause of death
		urinary bladder	- lymphoma, malignant, multicentric, incidental, not cause of death
		uterus with cervix	- dilatation, gland/lumen, mild
			- lymphoma, malignant, multicentric, incidental, not cause of death
		vagina	- within normal limits
1353	S	**Macroscopic**	
		adrenal glands	- enlarged, tan, right, mild

S - Scheduled necropsy

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1353	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass d, left.
		lymph node, iliac	- within normal limits draining node for mass c, right.
		lymph node, inguinal	- not identified, right, no grade draining node for mass a and mass b.
		pituitary gland	- enlarged, tan, mild
		skin, subcutis	- mass, black, mass c, right anogenital region, present approximately 5.5 x 3.5 x 2.0 cm. - mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 6.0 x 4.0 x 3.5 cm. - mass, tan, mass b, right inguinal area, present corresponds to antemortem observation (mass 2) approximately 2.5 x 2.5 x 2.0 cm. - mass, tan, mass d, left axillary area, present corresponds to antemortem observation (swelling) approximately 2.5 x 1.5 x 1.5 cm.

S - Scheduled necropsy

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1353	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			corresponds to macroscopic observation (adrenal glands - enlarged)
			one medulla present
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1353	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, iliac	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1353	S	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1353	S	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1353	S	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, mild
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
1354	E	**Macroscopic**	
		pituitary gland	- enlarged, moderate
1354	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1354	E	**Microscopic**	
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), severe
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1354	E	**Microscopic**	
		larynx	- within normal limits
		liver	- fibrosis, minimal
			- macrophages, pigmented, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death slide 18.
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1354	E	**Microscopic**	
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1354	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, minimal
		tongue	- hyperplasia, squamous cell, moderate
			- inflammation, subacute/chronic, moderate
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1355	S	**Macroscopic**	
		adrenal glands	- small, right, mild
		pituitary gland	- enlarged, red, severe
1355	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal medullary, unilateral, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1355	S	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1355	S	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, moderate
			- hyperplasia, bile duct, mild
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1355	S	**Microscopic**	
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1355	S	**Microscopic**	
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, bilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- adrenal glands - small
1356	E	**Macroscopic**	
		adrenal glands	- enlarged, bilateral, mild
		liver	- focus/foci, red, multiple lobes, mild
		lymph node, axillary	- within normal limits draining node for mass a, left and mass g, right.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1356	E	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass b and mass e, left and mass c, right.
		lymph node, mandibular	- within normal limits draining lymph node for mass d, left and mass f, right.
		pituitary gland	- enlarged, red, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1356	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 3.0 x 2.5 x 1.5 cm. - mass, tan, mass b, left inguinal area, present corresponds to antemortem observation (mass 2) approximately 2.5 x 1.5 x 1.0 cm. - mass, tan, mass c, right inguinal area, present corresponds to antemortem observation (swelling) approximately 3.5 x 2.5 x 1.5 cm. - mass, tan, mass d, left lateral neck, present approximately 2.5 x 1.0 x 0.75 cm. - mass, tan, mass e, left anogenital region, present approximately 2.0 x 1.75 x 1.0 cm. - mass, tan, mass f, right lateral neck, present approximately 3.0 x 1.5 x 1.0 cm. - mass, tan, mass g, right axillary area, present corresponds to antemortem observation (swelling) approximately 2.0 x 1.0 x 0.5 cm.
		tongue	- focus/foci, tan, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1356	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1356	E	**Microscopic**	
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1356	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d; skin, subcutis - mass e; skin, subcutis - mass f; skin, subcutis - mass g)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1356	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1356	E	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- liver - focus/foci, red
			- tongue - focus/foci, tan
		Cause of Death	- pituitary tumor
1357	S	**Macroscopic**	
		lymph node, mandibular	- within normal limits draining node for mass a, bilateral.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, ventral neck, present corresponds to antemortem observation (swelling) approximately 2.5 cm in diameter.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1357	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- hyperplasia, focal medullary, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1357	S	**Microscopic**	
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1357	S	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1357	S	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- hyperkeratosis, mild
			- hyperplasia, squamous cell, mild
		vagina	- within normal limits
1358	S	**Macroscopic**	
		lung with bronchi	- focus/foci, tan, left lobe, mild
		lymph node, axillary	- within normal limits
			draining node for mass b, left.

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1358	S	**Macroscopic**	
		lymph node, mandibular	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, mild
		skin, subcutis	- mass, tan, mass a, ventral neck, present corresponds to antemortem observation (mass 1) approximately 4.0 cm in diameter. - mass, tan, mass b, left axillary area, present corresponds to antemortem observation (swelling) approximately 1.5 cm in diameter.
1358	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1358	S	**Microscopic**	
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, unilateral, minimal
			- hydronephrosis, unilateral, mild
			- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1358	S	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, mild
			corresponds to macroscopic observation (lung with bronchi - focus/foci, tan)
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1358	S	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1358	S	**Microscopic**	
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, moderate
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			- hyperkeratosis, minimal
			- hyperplasia, squamous cell, mild
		vagina	- within normal limits
1359	E	**Macroscopic**	
		animal/whole body	- body fat depleted, moderate corresponds to antemortem observation (thin)
		pituitary gland	- enlarged, red, severe

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1359	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), severe
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1359	E	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, mild
		parathyroid glands	- within normal limits one of pair present

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1359	E	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1359	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, minimal
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1360	D	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 4.0 cm in diameter.
		uterus with cervix	- enlarged, horn, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1360	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
			- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1360	D	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
			- multinucleated, hepatocytes, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- foreign material, mild
			plant.
		nose, level b	- foreign material, moderate
			plant.
		nose, level c	- foreign material, moderate
			plant.

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1360	D	**Microscopic**	
		nose, level d	- foreign material, minimal plant.
		ovaries	- hyperplasia, sex-cord/stromal, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1360	D	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- erosion/ulcer, mild
			- inflammation, mild
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1361	D	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, left.
		lymph node, inguinal	- not identified, left, no grade draining node for mass a. may be encompassed in mass a.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 8.0 x 6.0 x 4.0 cm. - mass, tan, mass b, left axillary area, present approximately 2.5 x 2.0 x 0.5 cm.
1361	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate - ganglioneuroma, benign, unilateral, primary, incidental, not cause of death
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1361	D	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1361	D	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1361	D	**Microscopic**	
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibroma, benign, primary, incidental, not cause of death
			slide 18.
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1361	D	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1362	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b and mass f, right.

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1362	E	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a and mass c, left. draining node for mass d and mass e, right.
		lymph node, mandibular	- within normal limits draining node for mass g, right.
		pituitary gland	- enlarged, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1362	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left anogenital region, present corresponds to antemortem observation (skin discolored mass 1) approximately 7.0 cm in diameter. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (mass 2 swelling) approximately 1.2 cm in diameter. - mass, tan, mass c, left inguinal area, present approximately 2.2 cm in diameter. - mass, tan, mass d, right inguinal area, present approximately 1.2 cm in diameter. - mass, tan, mass e, right inguinal area, present approximately 1.9 cm in diameter. - mass, tan, mass f, right axillary area, present corresponds to antemortem observation (swelling) approximately 1.8 cm in diameter. - mass, tan, mass g, right lateral neck, present approximately 1.0 cm in diameter.
1362	E	**Microscopic**	
		adrenal glands	- vacuolation, focal, unilateral, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1362	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1362	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1362	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b; skin, subcutis - mass d; skin, subcutis - mass f)
			mass d has both an adenocarcinoma and a fibroadenoma.
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c; skin, subcutis - mass d; skin, subcutis - mass e; skin, subcutis - mass g)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1362	E	**Microscopic**	
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1362	E	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1363	D	**Macroscopic**	
		liver	- focus/foci, tan, left lateral lobe, mild
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1363	D	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 12.5 x 10.0 x 5.0 cm.
1363	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal

D - Died on Study

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1363	D	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, moderate
			corresponds to macroscopic observation (liver - focus/foci, tan)
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1363	D	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1363	D	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1364	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, left.

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1364	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, ulcerated, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 7.0 x 5.0 x 3.0 cm, tan.
1364	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1364	E	**Microscopic**	
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, moderate
			- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, inguinal	- not examined misidentified tissue
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1364	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1364	E	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, unilateral, mild
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1364	E	**Microscopic**	
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1365	S	**Macroscopic**	
		pituitary gland	- enlarged, tan, moderate
1365	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- hyperplasia, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1365	S	**Microscopic**	
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, unilateral, minimal
			- edema, papilla, unilateral, mild
			- hydronephrosis, unilateral, mild
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- erosion/ulcer, mild
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1365	S	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1365	S	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1365	S	**Microscopic**	
		vagina	- within normal limits
1366	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		lymph node, brachial	- within normal limits draining node for mass a, right.
		lymph node, inguinal	- not identified, right, no grade draining node for mass b.
		pituitary gland	- enlarged, red, moderate
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 10.0 x 8.0 x 3.0 cm. - mass, tan, mass b, right inguinal area, present corresponds to antemortem observation (skin discolored mass 2) approximately 6.0 x 5.2 x 2.2 cm.
1366	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1366	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1366	E	**Microscopic**	
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, brachial	- not examined
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- exudate, nasal passage, minimal
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1366	E	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1366	E	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1367	E	**Macroscopic**	
		lymph node, inguinal	- absent, left, no grade draining node for mass a.
		skin, subcutis	- mass, tan, mass a, anogenital region, present corresponds to antemortem observation (mass 1) approximately 7.0 x 6.0 x 4.0 cm.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1367	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1367	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, mild
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- dilatation, gland/lumen, mild
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1367	E	**Microscopic**	
		parathyroid glands	- hyperplasia, focal, unilateral, minimal one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1367	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- hyperplasia, endometrial, mild
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1368	S	**Macroscopic**	
		lymph node, inguinal	- not identified, right, no grade draining node for mass a.
		skin, subcutis	- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 8.0 cm in diameter.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1368	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1368	S	**Microscopic**	
		kidneys	- edema, papilla, bilateral, mild
			- hydronephrosis, bilateral, mild
			- hyperplasia, transitional cell, bilateral, minimal
			- macrophages, pigmented, unilateral, minimal
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- angiectasis, minimal
			- focus of cellular alteration, basophilic, mild
			- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1368	S	**Microscopic**	
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) slide 18 and 26-1.
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- hyperplasia, focal, unilateral, mild one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1368	S	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, bilateral, mild
		urinary bladder	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1368	S	**Microscopic**	
		uterus with cervix	- dilatation, gland/lumen, mild
			- hyperplasia, endometrial, mild
		vagina	- within normal limits
1369	E	**Macroscopic**	
		cavity, thoracic	- fluid, red, minimal
			approximately 1.0 ml of fluid.
		mammary gland	- swollen/thickened, tan, inguinal, left, mild
			corresponds to antemortem observation (swelling)
		pituitary gland	- enlarged, tan, moderate
		skin	- abrasion/scab, inguinal, right, moderate
			corresponds to antemortem observation (mass 1)
		spleen	- enlarged, mild
1369	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, mild
		aorta	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1369	E	**Microscopic**	
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1369	E	**Microscopic**	
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- hyperplasia, sex-cord/stromal, bilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1369	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- erosion/ulcer, moderate
			corresponds to macroscopic observation (skin - abrasion/scab)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
			corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1369	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- skin inflammation/necrosis
1370	S	**Macroscopic**	
		pituitary gland	- cyst, clear, mild
1370	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1370	S	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1370	S	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1370	S	**Microscopic**	
		pituitary gland	- cyst, moderate
			corresponds to macroscopic observation (pituitary gland - cyst)
			- hyperplasia, focal, pars distalis, mild
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1370	S	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
1371	E	**Macroscopic**	
		all tissues	- within normal limits
1371	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1371	E	**Microscopic**	
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1371	E	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1371	E	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- carcinoma, follicular cell, malignant, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- undetermined

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1372	S	**Macroscopic**	
		lymph node, mandibular	- within normal limits bilateral, draining node for mass a.
		skin, subcutis	- mass, tan, mass a, ventral neck, present corresponds to antemortem observation (mass 1) approximately 7.0 x 5.5 x 2.0 cm.
1372	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1372	S	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild

S - Scheduled necropsy

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1372	S	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

S - Scheduled necropsy

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1372	S	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
1373	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, right.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1373	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, anogenital region, present corresponds to antemortem observation (mass 1) approximately 3.0 x 1.5 x 1.0 cm. - mass, ulcerated, mass b, right axillary area, present corresponds to antemortem observation (scabbed area mass 2) approximately 6.0 cm in diameter, tan.
1373	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), minimal
		esophagus	- within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1373	E	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1373	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- adenoma, benign, primary, incidental, not cause of death slide 18.
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- not examined
		pharynx	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1373	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1373	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- metaplasia, squamous, minimal
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1374	S	**Macroscopic**	
		adrenal glands	- enlarged, right, mild
		lymph node, inguinal	- within normal limits
			draining node for mass a, left. draining node for mass b, right.

S - Scheduled necropsy
E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1374	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 6.0 x 3.0 x 1.0 cm. - mass, tan, mass b, right inguinal area, present approximately 1.0 cm in diameter.
		uterus with cervix	- enlarged, horn, mild
1374	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1374	S	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, bilateral, mild
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, focal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, inguinal	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1374	S	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1374	S	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- cyst, keratin, minimal
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1374	S	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- granular cell tumor, benign, primary, incidental, not cause of death
			- hyperplasia, cystic endometrial, mild
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
1375	E	**Macroscopic**	
		liver	- cyst, clear, caudate lobe, mild
		lymph node, inguinal	- within normal limits
			draining node for mass a, left.
		mammary gland	- swollen/thickened, ventral abdomen, left axillary area, mild
			corresponds to antemortem observation (swelling)
		pituitary gland	- enlarged, severe

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1375	E	**Macroscopic**	
		skin, subcutis	- mass, brown, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 2.0 cm in diameter.
1375	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1375	E	**Microscopic**	
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- cyst, biliary, simple, mild
			corresponds to macroscopic observation (liver - cyst)
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1375	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
			- hyperplasia, sex-cord/stromal, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1375	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits one of pair present

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1375	E	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1376	E	**Macroscopic**	
		adrenal glands	- enlarged, red, moderate
		lymph node, axillary	- within normal limits draining node for mass b, right.
		lymph node, inguinal	- within normal limits draining node for mass a, right.
		skin, subcutis	- mass, tan, mass b, right axillary area, present corresponds to antemortem observation (swelling) approximately 4.5 cm in diameter. - mass, ulcerated, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 11.0 x 8.0 x 3.0 cm, tan.
		uterus with cervix	- enlarged, horn, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1376	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, severe
			corresponds to macroscopic observation (adrenal glands - enlarged)
			- atrophy, cortical, unilateral, severe
		aorta	- mineralization, mild
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1376	E	**Microscopic**	
		kidneys	- nephropathy, chronic progressive, bilateral, moderate
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, clear, mild
			- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, minimal
		lung	- hemorrhage, minimal
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1376	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death slide 18 r-1.
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b)
			- hyperplasia, lobular, moderate
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, bilateral, mild
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1376	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1376	E	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (uterus with cervix - enlarged)
			- hyperplasia, endometrial, mild
		vagina	- within normal limits
		Cause of Death	- fibrosarcoma/fibroma
1377	D	**Macroscopic**	
		eyes	- absent/cannibalized, left, no grade
			corresponds to antemortem observation (cannibalized/partially cannibalized)
		eyes, retina	- absent/cannibalized, left, no grade
			corresponds to antemortem observation (cannibalized/partially cannibalized)
		tongue	- absent portion/cannibalized, no grade
			corresponds to antemortem observation (cannibalized/partially cannibalized)
1377	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1377	D	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits one of pair present
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined one cannibalized, one too autolytic to examine.
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- within normal limits
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1377	D	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- vacuolation, periportal, mild
		lung	- bacterial colonies, minimal red blood cell lysis in alveolar septae.
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits one of pair present

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1377	D	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1377	D	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- not examined
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- probable dosing injury
1378	D	**Macroscopic**	
		pituitary gland	- enlarged, mild
1378	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1378	D	**Microscopic**	
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, bilateral, mild
			- edema, papilla, bilateral, mild
			- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1378	D	**Microscopic**	
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		mesentery/peritoneum	- polyarteritis, moderate slide 11 and 12.
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
			- hyperplasia, sex-cord/stromal, bilateral, mild
		oviducts	- within normal limits
		pancreas	- polyarteritis, moderate
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1378	D	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate

D - Died on Study

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1378	D	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1379	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1379	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1379	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1379	E	**Microscopic**	
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1379	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1379	E	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1380	E	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, tan, mild
		skin, subcutis	- mass, ulcerated, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 8.0 cm in diameter, tan.
1380	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- hematopoiesis, extramedullary, bilateral, minimal
		aorta	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1380	E	**Microscopic**	
		bone marrow, femur	- hyperplasia, granulocytic, minimal
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1380	E	**Microscopic**	
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, diffuse, mild
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1380	E	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, diffuse, pars distalis, mild
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1380	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1381	E	**Macroscopic**	
		pituitary gland	- enlarged, severe
1381	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1381	E	**Microscopic**	
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), severe
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- cyst, unilateral, minimal
			- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1381	E	**Microscopic**	
		larynx	- within normal limits
		liver	- multinucleated, hepatocytes, mild
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, bilateral, minimal
		oviducts	- within normal limits
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1381	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1381	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1382	D	**Macroscopic**	
		ears	- nodule, tan, right, present approximately 0.4 cm in diameter.
		lymph node, inguinal	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, red, moderate

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1382	D	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left anogenital region, present approximately 2.5 cm in diameter.
1382	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- hyperplasia, focal medullary, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1382	D	**Microscopic**	
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, minimal
			- hyperplasia, bile duct, mild
		lung	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- dilatation, sinus, minimal
		mammary gland	- fibroadenoma, benign, primary, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal

D - Died on Study

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1382	D	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- foreign material, mild plant.
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1382	D	**Microscopic**	
		skin, subcutis	- schwannoma, benign, primary, incidental, not cause of death corresponds to macroscopic observation (ears - nodule)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
			- metaplasia, squamous, minimal

D - Died on Study

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1382	D	**Microscopic**	
		vagina	- within normal limits
		Cause of Death	- undetermined
1383	D	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, ulcerated, mass a, right axillary area, present corresponds to antemortem observation (mass 1 cannibalized/partially cannibalized) approximately 10.0 x 6.5 x 5.5 cm, tan. majority of skin covering mass appears to be cannibalized.
1383	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, mixed, mild
		bone marrow, sternum	- hyperplasia, mixed, mild

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1383	D	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined
			autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1383	D	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- hyperplasia, lymphocyte/plasmacyte, medulla, mild
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1383	D	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1383	D	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- granular cell tumor, benign, primary, incidental, not cause of death
		Cause of Death	- mammary tumor
1384	E	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass c and mass f, right and mass d, mass e, left.

E - Euthanized *in extremis*
D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1384	E	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a and mass g, left and mass b and mass h, right.
		lymph node, mandibular	- within normal limits draining node for mass i, right.
		pituitary gland	- enlarged, red, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1384	E	**Macroscopic**	
		skin, subcutis	- mass, black, mass b, right inguinal area, present corresponds to antemortem observation (mass 2) approximately 3.5 x 3.0 x 1.2 cm. - mass, red, mass d, left axillary area, present corresponds to antemortem observation (mass 4) approximately 1.5 cm in diameter. - mass, red, mass i, right lateral neck, present approximately 1.5 cm in diameter. - mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 1.5 cm in diameter. - mass, tan, mass c, right axillary area, present corresponds to antemortem observation (mass 3) approximately 1.0 cm in diameter. - mass, tan, mass e, left axillary area, present corresponds to antemortem observation (mass 5) approximately 2.5 x 2.0 x 1.0 cm. - mass, tan, mass g, left anogenital region, present approximately 3.5 x 2.0 x 1.0 cm. - mass, tan, mass h, right anogenital region, present approximately 3.0 x 2.0 x 1.3 cm. - mass, ulcerated, mass f, right axillary area, present corresponds to antemortem observation (mass 6) approximately 3.0 x 2.5 x 1.0 cm, red.

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1384	E	**Macroscopic**	
		thymus	- small, severe
1384	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal medullary, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1384	E	**Microscopic**	
		kidneys	- hyperplasia, transitional cell, bilateral, minimal
			- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1384	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d; skin, subcutis - mass e; skin, subcutis - mass f; skin, subcutis - mass g; skin, subcutis - mass h; skin, subcutis - mass i)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1384	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1384	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate corresponds to macroscopic observation (thymus - small) - hyperplasia, epithelial cell, minimal
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1385	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1385	E	**Macroscopic**	
		skin, subcutis	- mass, ulcerated, mass a, right axillary area, present
			corresponds to antemortem observation (hair sparse scabbed area mass 1)
			approximately 6.0 cm in diameter, tan.
1385	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			- hyperplasia, focal cortical, unilateral, minimal
			one medulla present
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- angiectasis, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- astrocytoma, malignant, primary, incidental, not cause of death
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1385	E	**Microscopic**	
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, mild
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1385	E	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1385	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
			- hyperplasia, follicular cell, unilateral, minimal
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1385	E	**Microscopic**	
		Cause of Death	- mammary tumor
1386	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1386	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1386	E	**Microscopic**	
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, eosinophilic, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1386	E	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1386	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1387	E	**Macroscopic**	
		adrenal glands	- enlarged, right, moderate
		mammary gland	- swollen/thickened, cervical, inguinal, mild
		pituitary gland	- enlarged, severe
1387	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1387	E	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, unilateral, minimal
			- pyelitis, unilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1387	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1387	E	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1388	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1388	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1388	E	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, mild
		lung	- infiltration, lymphoid, perivascular, mild
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1388	E	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- fibrosis, minimal
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1388	E	**Microscopic**	
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1389	S	**Macroscopic**	
		liver	- focus/foci, red, multiple lobes, mild

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1389	S	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a and b.
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 5.0 cm in diameter.
			- mass, tan, mass b, right inguinal area, present corresponds to antemortem observation (swelling) approximately 1.0 cm in diameter.
		uterus with cervix	- enlarged, horn, mild
1389	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1389	S	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1389	S	**Microscopic**	
		liver	- degeneration, cystic, focal, minimal
			- dilatation, cystic, bile ducts, mild
			- focus of cellular alteration, basophilic, mild
			- hyperplasia, bile duct, mild
			- vacuolation, periportal, minimal
		lung	- inflammation, subacute/chronic, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1389	S	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1389	S	**Microscopic**	
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, lymphoid, medulla, mild
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		non-correlated macro observation	- liver - focus/foci, red
1390	E	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass b, right.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1390	E	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		lymph node, mandibular	- within normal limits draining node for mass c, left.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 5.0 x 5.0 x 3.0 cm. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 2.0 cm in diameter. - mass, tan, mass c, ventral neck, left, present corresponds to antemortem observation (mass 3) approximately 4.0 x 2.5 x 2.0 cm.
		spleen	- enlarged, mild
		thymus	- small, severe
		vagina	- prolapse, mild corresponds to antemortem observation (reproductive tract prolapsed)
1390	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1390	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, mild
			- hyperplasia, transitional cell, unilateral, minimal
			- mineralization, pelvic, unilateral, mild
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1390	E	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- abscess, severe
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass c)
			- hyperplasia, lobular, moderate
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1390	E	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibrosarcoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1390	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, moderate corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate corresponds to macroscopic observation (thymus - small)
		thyroid gland	- within normal limits
		tongue	- inflammation, acute, minimal
		trachea	- within normal limits
		ureters	- dilatation, unilateral, mild
		urinary bladder	- within normal limits
		uterus with cervix	- hyperplasia, cervical fibromuscular, moderate
		vagina	- hyperplasia, fibromuscular, moderate
			- prolapse, no grade corresponds to macroscopic observation (vagina - prolapse)
		Cause of Death	- vagina; prolapse; no grade

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1391	E	**Macroscopic**	
		all tissues	- within normal limits
1391	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- hemorrhage, moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

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MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1391	E	**Microscopic**	
		kidneys	- hyperplasia, transitional cell, unilateral, minimal
			- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1391	E	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1391	E	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1392	S	**Macroscopic**	
		mammary gland	- swollen/thickened, tan, generalized, mild corresponds to antemortem observation (swelling)
1392	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1392	S	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1392	S	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- dilatation, cystic, bile ducts, minimal
			- focus of cellular alteration, basophilic, mild
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenoma, benign, primary, incidental, not cause of death very small, on slide 18-1.
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (mammary gland - swollen/thickened) slide 18-1.
			- hyperplasia, lobular, mild corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- inflammation, minimal

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1392	S	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1392	S	**Microscopic**	
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, mild
		thyroid gland	- hyperplasia, c-cell, focal, bilateral, minimal
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
1393	E	**Macroscopic**	
		adrenal glands	- enlarged, right, mild

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1393	E	**Macroscopic**	
		bone, mandible	- mass, ulcerated, mass b, left, present corresponds to antemortem observation (mass 2) approximately 4.5 x 2.0 x 2.5 cm, tan.
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		lymph node, mandibular	- within normal limits draining node for mass b, left.
		pituitary gland	- enlarged, moderate
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 5.5 x 4.5 x 2.5 cm.
		thymus	- small, moderate
		tooth/teeth	- absent/broken/malocclusion/overgrown, no grade corresponds to antemortem observation (malocclusion)
		uterus with cervix	- enlarged, horn, mild
1393	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged)

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1393	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- hyperplasia, transitional cell, unilateral, mild
			- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1393	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, mild
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- inflammation, acute, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1393	E	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- atrophy, moderate
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1393	E	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			corresponds to macroscopic observation (thymus - small)
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, moderate
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		zymbal`s gland	- carcinoma, sebaceous cell, malignant, unilateral, primary, mortality-independent
			corresponds to macroscopic observation (bone, mandible - mass b)
		Cause of Death	- zymbals gland tumor

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1394	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, right.
		lymph node, mandibular	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass a, cervical, right, present corresponds to antemortem observation (mass 1) approximately 1.5 cm in diameter. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 1.5 cm in diameter.
1394	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal - hyperplasia, focal cortical, unilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1394	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, mild
			- mineralization, pelvic, unilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1394	E	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, mild
			- hyperplasia, bile duct, minimal
		lung	- granuloma, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- adenoma, benign, primary, incidental, not cause of death
			slide 18.
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- hyperplasia, sex-cord/stromal, bilateral, minimal

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1394	E	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1394	E	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, mild
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
			- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, unilateral, mild
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1395	E	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1395	E	**Macroscopic**	
		skin	- hair sparse, dorsal cervical region, dorsal thoracic region, mild corresponds to antemortem observation (hair sparse)
1395	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1395	E	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1395	E	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- alopecia/hypotrichosis, mild
			corresponds to macroscopic observation (skin - hair sparse)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1395	E	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- not examined
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1396	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1396	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1396	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, unilateral, minimal
			- pyelitis, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1396	E	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, moderate
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1396	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			- inflammation, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1396	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- hyperplasia, simple transitional cell, moderate
			- inflammation, minimal
		uterus with cervix	- granular cell tumor, benign, primary, incidental, not cause of death
			- hyperplasia, squamous cell, mild
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1397	D	**Macroscopic**	
		lymph node, inguinal	- not identified, right, no grade draining node for mass a.
		pituitary gland	- enlarged, red, severe

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1397	D	**Macroscopic**	
		skin	- abrasion/scab, red, right axillary area, mild corresponds to antemortem observation (scabbed area hair sparse)
		skin, subcutis	- mass, firm, mass a, right anogenital region, present corresponds to antemortem observation (swelling) approximately 3.3 x 2.8 x 1.8 cm, tan.
1397	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1397	D	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, bilateral, minimal
			- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- erythrocytosis/erythrophagocytosis, sinus, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1397	D	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1397	D	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- adenoma, basal cell, benign, primary, mortality-independent corresponds to macroscopic observation (skin - abrasion/scab)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1397	D	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1398	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, left.
		mammary gland	- swollen/thickened, tan, generalized, moderate
		pituitary gland	- enlarged, red, moderate
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 3.5 cm in diameter.
		stomach, nonglandular	- irregular surface, tan, mild
1398	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate - hyperplasia, focal medullary, bilateral, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1398	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1398	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration/inflammation, mixed cell, minimal
			- vacuolation, centrilobular, moderate
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- not examined
			misidentified tissue
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			small, slide 18.
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, moderate
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1398	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1398	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- erosion/ulcer, mild
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			corresponds to macroscopic observation (stomach, nonglandular - irregular surface)
			- inflammation, mild
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1398	E	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1399	E	**Macroscopic**	
		skin	- absent portion/cannibalized, left hindleg/limb, left ventral abdomen, no grade corresponds to antemortem observation (laceration)
1399	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild one medulla present
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1399	E	**Microscopic**	
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1399	E	**Microscopic**	
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1399	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- loss of hindlimb function, cause undetermined.

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1400	E	**Macroscopic**	
		adrenal glands	- enlarged, left, mild
		kidneys	- focus/foci, tan, bilateral, mild
		lung with bronchi	- focus/foci, tan, multiple lobes, mild
		lymph node, inguinal	- not identified, left, no grade draining node for mass b. draining node for mass c, right.
		pituitary gland	- enlarged, red, severe
		skin	- abrasion/scab, ventral neck, mild corresponds to antemortem observation (scabbed area)
		skin, subcutis	- mass, tan, mass b, left inguinal area, present corresponds to antemortem observation (mass 2) approximately 2.0 cm in diameter. - mass, tan, mass c, right inguinal area, present corresponds to antemortem observation (mass 3) approximately 3.0 cm in diameter.
		uterus with cervix	- enlarged, red, horn, mild
1400	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged)

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1400	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1400	E	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, mild
			corresponds to macroscopic observation (lung with bronchi - focus/foci, tan)
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1400	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin - abrasion/scab; skin, subcutis - mass b; skin, subcutis - mass c)
			slide 18-1, 26-1, and 26-2.
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1400	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1400	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- hyperplasia, squamous cell, mild
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- polyp, stromal, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		non-correlated macro observation	- kidneys - focus/foci, tan
		Cause of Death	- pituitary tumor
1 mg/kg/day			
1411	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1411	E	**Macroscopic**	
		thymus	- small, mild
1411	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1411	E	**Microscopic**	
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1411	E	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1411	E	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe corresponds to macroscopic observation (thymus - small)
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1412	E	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a and mass b, right and mass c, left.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1412	E	**Macroscopic**	
		mammary gland	- swollen/thickened, tan, mild
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass b, right inguinal area, present corresponds to antemortem observation (mass 2) approximately 5.0 x 5.0 x 1.0 cm.
			- mass, tan, mass c, left inguinal area, present corresponds to antemortem observation (mass 3) approximately 8.0 x 9.0 x 4.0 cm.
			- mass, ulcerated, mass a, anogenital region, present corresponds to antemortem observation (mass 1 hair sparse) approximately 5.0 x 5.0 x 3.0 cm, tan.
1412	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1412	E	**Microscopic**	
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- vacuolation, periportal, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1412	E	**Microscopic**	
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, moderate
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1412	E	**Microscopic**	
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
			- atrophy, acinar, mild
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibroma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass c)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1412	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, mild
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1413	D	**Macroscopic**	
		adrenal glands	- enlarged, left, mild
		lymph node, axillary	- within normal limits draining node for mass a, left and draining node for mass b, right.
		lymph node, inguinal	- not identified, right, no grade draining node for mass c.
		mammary gland	- swollen/thickened, tan, generalized, moderate
		pituitary gland	- enlarged, moderate
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 4.0 x 4.0 x 1.0 cm. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (hair sparse mass 2) approximately 5.0 x 3.0 x 1.0 cm. - mass, tan, mass c, right inguinal area, present corresponds to antemortem observation (nodule) approximately 4.5 x 3.0 x 1.0 cm.

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1413	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, severe
			corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
			- hemorrhage, minimal
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1413	D	**Microscopic**	
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1413	D	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass c)
			- hyperplasia, lobular, moderate
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1413	D	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1413	D	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- carcinoma, follicular cell, malignant, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1414	D	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (swelling) approximately 1.0 cm in diameter.

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1414	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1414	D	**Microscopic**	
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1414	D	**Microscopic**	
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- cyst, keratin, minimal
		skin, subcutis	- fibroma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1414	D	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- undetermined
1415	D	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		mammary gland	- swollen/thickened, tan, generalized, mild
		pituitary gland	- enlarged, red, severe

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1415	D	**Macroscopic**	
		skin, subcutis	- mass, red, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 4.0 cm in diameter.
1415	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate one medulla present
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1415	D	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1415	D	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- exudate, nasal passage, mild
			- foreign material, minimal plant.
		nose, level b	- exudate, nasal passage, minimal
			- foreign material, minimal plant.
		nose, level c	- exudate, nasal passage, mild
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, mild
		parathyroid glands	- within normal limits one of pair present

D - Died on Study

TRADE SECRET

Study Title
H-28548: COMBINED CHRONIC TOXICITY/ONCOGENICITY
STUDY 2-YEAR ORAL GAVAGE STUDY IN RATS

Laboratory Project ID: DuPont-18405-1238

Volume 11 of 13

NUMBER OF PAGES IN VOLUME: 351

TEST GUIDELINES:
- U.S. EPA Health Effects Test Guidelines OPPTS 870.4300 Combined Chronic Toxicity/Carcinogenicity (1998)
- OECD Guidelines for the Testing of Chemicals Section 4 (No. 453) Health Effects (2009)
- JMAFF Japan Agricultural Chemicals Regulation Law 12 Nousan No. 8147 (2000)
- EEC Methods for the Determination of Toxicity Method B.33 Combined Chronic/Carcinogenicity test, Directive 88/302/EC (1988)

AUTHOR: Lisa Craig, B.S.

STUDY COMPLETED ON: March 28, 2013

APPLICANT/SPONSOR: E.I. du Pont de Nemours and Company
Wilmington, Delaware 19898
U.S.A.

PERFORMING LABORATORY: MPI Research, Inc.
54943 North Main Street
Mattawan, Michigan 49071-8353
U.S.A.

WORK REQUEST NUMBER: 18405

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1415	D	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1415	D	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1416	S	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass a, left. draining node for mass b, right.
		mammary gland	- swollen/thickened, tan, generalized, mild

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1416	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 5.0 cm in diameter.
			- mass, tan, mass b, right axillary area, present corresponds to antemortem observation (nodule) approximately 1.2 cm in diameter.
1416	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1416	S	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		pancreas	- within normal limits
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
1417	D	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade
			draining node for mass a, c, and d, left. draining node for mass b, right.
		pituitary gland	- enlarged, red, moderate

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1417	D	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 5.0 cm in diameter. - mass, tan, mass b, right inguinal area, present corresponds to antemortem observation (mass 2) approximately 3.5 cm in diameter. - mass, tan, mass c, anogenital region, present corresponds to antemortem observation (nodule) approximately 2.3 cm in diameter. - mass, tan, mass d, left inguinal area, present approximately 1.4 x 1.2 x 2.6 cm.
1417	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1417	D	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, unilateral, moderate
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
		lung	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1417	D	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1417	D	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1417	D	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1418	S	**Macroscopic**	
		lymph node, mandibular	- within normal limits draining node for mass a, left.
		pituitary gland	- cyst, red, mild
		skin, subcutis	- mass, tan, mass a, ventral neck, present corresponds to antemortem observation (mass 1) approximately 4.5 x 4.0 x 2.0 cm.

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1418	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			- hyperplasia, focal cortical, unilateral, mild
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, mild
			- focus of cellular alteration, eosinophilic, mild
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		pancreas	- atrophy, acinar, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - cyst)
		stomach, nonglandular	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1418	S	**Microscopic**	
		tongue	- within normal limits
		uterus with cervix	- within normal limits
1419	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass f and mass g, right.
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a and b, left, and mass c, d, and e, right.
		pituitary gland	- enlarged, moderate

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1419	S	**Macroscopic**	
		skin, subcutis	- mass, green, mass b, left inguinal area, present approximately 4.0 x 3.0 x 1.5 cm. - mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 1.0 x 9.0 x 3.5 cm. - mass, tan, mass c, right inguinal area, present approximately 2.0 cm in diameter. - mass, tan, mass d, right inguinal area, present approximately 2.5 cm in diameter. - mass, tan, mass e, right inguinal area, present approximately 1.5 cm in diameter. - mass, tan, mass f, right axillary area, present corresponds to antemortem observation (swelling) approximately 5.0 x 3.5 x 2.0 cm. - mass, tan, mass g, right axillary area, present corresponds to antemortem observation (nodule) approximately 4.0 x 2.0 x 1.0 cm.
		vagina	- prolapse, moderate
1419	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1419	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1419	S	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b; skin, subcutis - mass d; skin, subcutis - mass e; skin, subcutis - mass g)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c; skin, subcutis - mass f)
		pancreas	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- polyp, stromal, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (vagina - prolapse)

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1420	D	**Macroscopic**	
		eyes	- absent, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		eyes, retina	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		lacrimal glands, exorbital	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		lymph node, mandibular	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		salivary gland, mandibular	- absent/cannibalized, bilateral, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		salivary gland, parotid	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		salivary gland, sublingual	- absent/cannibalized, bilateral, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1420	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate
			- vacuolation, focal, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
			one of pair present
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined
			autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1420	D	**Microscopic**	
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
			one of pair present
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- not examined
		lymph node, mesenteric	- within normal limits
		mammary gland	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1420	D	**Microscopic**	
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- not examined cannibalized
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- not examined cannibalized
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1420	D	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- undetermined
1421	E	**Macroscopic**	
		lymph node, axillary	- enlarged, right, mild draining node for mass a.
		mammary gland	- swollen/thickened, tan, anogenital region, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1421	E	**Macroscopic**	
		pituitary gland	- enlarged, minimal
		skin, subcutis	- mass, ulcerated, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 2.5 cm in diameter, red.
		spleen	- enlarged, mild
1421	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1421	E	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, mild
		lung	- within normal limits
		lymph node, axillary	- hyperplasia, lymphocyte/plasmacyte, medulla, mild
			corresponds to macroscopic observation (lymph node, axillary - enlarged)
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1421	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- galactocele, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
			- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1421	E	**Microscopic**	
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1421	E	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- pituitary gland - enlarged
		Cause of Death	- mammary tumor
1422	E	**Macroscopic**	
		ovaries	- cyst, clear, right, mild
		pituitary gland	- enlarged, severe
1422	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1422	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1422	E	**Microscopic**	
		liver	- degeneration, cystic, focal, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1422	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1422	E	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- ovaries - cyst
		Cause of Death	- pituitary tumor
1423	E	**Macroscopic**	
		pituitary gland	- enlarged, severe
1423	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1423	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1423	E	**Microscopic**	
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1423	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- hyperplasia, squamous cell, moderate
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1423	E	**Microscopic**	
		ureters	- within normal limits one of pair present
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1424	S	**Macroscopic**	
		mammary gland	- swollen/thickened, mild anogenital, right and left inguinal mostly affected.
		pituitary gland	- enlarged, red, severe
1424	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		kidneys	- mineralization, pelvic, bilateral, minimal
		liver	- hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - vacuolation, periportal, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1424	S	**Microscopic**	
		lung	- within normal limits
		mammary gland	- galactocele, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
			- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		pancreas	- atrophy, acinar, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
1425	S	**Macroscopic**	
		adipose tissue	- discoloration, yellow, mild
			in white fat near left kidney.

S - Scheduled necropsy

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1425	S	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, left.
		skin, subcutis	- mass, tan, mass a, left inguinal area, present approximately 2.0 cm in diameter.
		thymus	- small, mild
1425	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate - hyperplasia, focal cortical, unilateral, minimal
		kidneys	- mineralization, pelvic, unilateral, minimal - mineralization, tubular, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild
		liver	- focus of cellular alteration, basophilic, mild - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, mild - vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, inguinal	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1425	S	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass a)
		mesentery/peritoneum	- necrosis, fat, moderate corresponds to macroscopic observation (adipose tissue - discoloration, yellow)
		pancreas	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate corresponds to macroscopic observation (thymus - small) - hyperplasia, epithelial cell, minimal
		tongue	- within normal limits
		uterus with cervix	- hyperplasia, cervical fibromuscular, mild
1426	E	**Macroscopic**	
		lymph node, axillary	- within normal limits right is draining node for mass c. left is draining node for mass a.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1426	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits left is draining node for mass b.
		ovaries with oviducts	- cyst, clear, left, mild
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 3.0 x 2.5 x 1.7 cm. - mass, tan, mass b, left anogenital region, present corresponds to antemortem observation (mass 2) approximately 5.0 x 4.0 x 2.5 cm. - mass, tan, mass c, right axillary area, present corresponds to antemortem observation (nodule) approximately 2.0 x 1.5 x 0.7 cm
1426	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild - hyperplasia, focal medullary, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1426	E	**Microscopic**	
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
			- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1426	E	**Microscopic**	
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- foreign material, mild plant.
			- inflammation, acute, moderate
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b; skin, subcutis - mass c)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- exudate, nasal passage, mild
			- foreign material, minimal plant.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1426	E	**Microscopic**	
		nose, level b	- exudate, nasal passage, mild
			- foreign material, mild
			plant.
		nose, level c	- exudate, nasal passage, minimal
			- foreign material, minimal
			plant.
		nose, level d	- exudate, nasal passage, mild
			- foreign material, mild
			plant.
		ovaries	- cyst, unilateral, mild
			corresponds to macroscopic observation (ovaries with oviducts - cyst)
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1426	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1426	E	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1427	D	**Macroscopic**	
		pituitary gland	- enlarged, severe
1427	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1427	D	**Microscopic**	
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild

D - Died on Study

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1427	D	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- exudate, nasal passage, minimal
		nose, level b	- exudate, nasal passage, minimal
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1427	D	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1428	E	**Macroscopic**	
		pituitary gland	- enlarged, severe
		uterus with cervix	- enlarged, horn, mild
1428	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1428	E	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, minimal
			- mineralization, pelvic, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			slide 18.
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1428	E	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1428	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, unilateral, mild
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1429	S	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass b, right. draining node for mass c, left.
		lymph node, mandibular	- within normal limits draining node for mass a, bilateral.
		pituitary gland	- enlarged, moderate
		skin, subcutis	- mass, tan, mass a, cervical, present corresponds to antemortem observation (mass 1) approximately 4.5 x 4.5 x 3.0 cm. - mass, tan, mass b, right anogenital region, present corresponds to antemortem observation (mass 2) approximately 6.0 x 5.0 x 2.0 cm. - mass, tan, mass c, left inguinal area, present corresponds to antemortem observation (mass 3) approximately 3.0 cm in diameter.
1429	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1429	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, mild
		lung	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c)
		pancreas	- hyperplasia, acinar cell, focal, mild
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1430	S	**Macroscopic**	
		adrenal glands	- enlarged, bilateral, mild
		lymph node, axillary	- within normal limits draining node for mass c, left.
		lymph node, inguinal	- enlarged, right, mild draining node for mass a, mass b and mass d.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, right anogenital region, present corresponds to antemortem observation (mass 1) approximately 6.0 x 4.0 x 3.5 cm. - mass, tan, mass b, right inguinal area, present approximately 1.0 cm in diameter. - mass, tan, mass c, left axillary area, present corresponds to antemortem observation (nodule) approximately 2.0 x 1.0 x 1.0 cm. - mass, tan, mass d, right anogenital region, present corresponds to antemortem observation (nodule) approximately 2.5 x 2.0 x 1.5 cm.
1430	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild corresponds to macroscopic observation (adrenal glands - enlarged)

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1430	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- not examined
			misidentified tissue

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1430	S	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (lymph node, inguinal - enlarged)
			slide 27-abd.
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d)
		pancreas	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1431	S	**Macroscopic**	
		adrenal glands	- enlarged, right, mild
		foot/feet	- ulcer, plantar/palmar, mild corresponds to antemortem observation (ulcer plantar/palmar)
		lymph node, inguinal	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, red, moderate
		skin, subcutis	- mass, tan, mass a, right anogenital region, present approximately 2.5 x 3.0 x 1.0 cm.
1431	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged) - hyperplasia, focal cortical, unilateral, mild - pheochromocytoma, benign, unilateral, primary, incidental, not cause of death

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1431	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		liver	- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, inguinal	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (skin, subcutis - mass a)
		pancreas	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1432	S	**Macroscopic**	
		lymph node, iliac	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, mild
		skin, subcutis	- mass, tan, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 4.0 cm in diameter.
1432	S	**Microscopic**	
		adrenal glands	- hyperplasia, focal medullary, unilateral, mild
		kidneys	- mineralization, pelvic, unilateral, minimal - nephropathy, chronic progressive, bilateral, mild
		liver	- degeneration, cystic, focal, minimal - focus of cellular alteration, basophilic, minimal - focus of cellular alteration, eosinophilic, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, iliac	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1432	S	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		pancreas	- hyperplasia, acinar cell, focal, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
1433	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		skin	- hair sparse, dorsal cervical region, dorsal thoracic region, moderate
			corresponds to antemortem observation (hair sparse hair absent)
1433	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1433	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, bilateral, mild
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, mild
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1433	E	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1433	E	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- alopecia/hypotrichosis, moderate
			corresponds to macroscopic observation (skin - hair sparse)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1433	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		thymus	- thymoma, malignant, primary, incidental, not cause of death
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1434	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass c, right.
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a, left and mass b, right.
		pituitary gland	- enlarged, mild

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1434	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1 mass 4) approximately 6.0 x 4.0 x 3.0 cm.
			- mass, tan, mass b, right inguinal area, present corresponds to antemortem observation (mass 2) approximately 6.0 x 3.5 x 3.0 cm.
			- mass, tan, mass c, right axillary area, present corresponds to antemortem observation (mass 3) approximately 3.0 cm in diameter.
1434	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, mild
			- hematopoiesis, extramedullary, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1434	S	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c)
		pancreas	- atrophy, acinar, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- hyperplasia, squamous cell, minimal
1435	S	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass b and mass d, right.

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1435	S	**Macroscopic**	
		lymph node, inguinal	- not identified, bilateral, no grade draining node for mass a, left and mass c, right.
		ovaries	- cyst, clear, right, mild
		pituitary gland	- enlarged, red, moderate
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 10.0 x 9.0 x 3.5 cm. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 2.5 cm in diameter. - mass, tan, mass c, right inguinal area, present corresponds to antemortem observation (mass 3) approximately 7.0 x 5.0 x 3.5 cm. - mass, tan, mass d, right axillary area, present corresponds to antemortem observation (mass 4) approximately 5.0 x 4.0 x 2.0 cm.

S - Scheduled necropsy

MPI Research Study Number 125-141
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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1435	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
		kidneys	- mineralization, pelvic, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
			- inflammation, subacute/chronic, minimal
		lymph node, axillary	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d)
		ovaries	- cyst, unilateral, mild
			corresponds to macroscopic observation (ovaries - cyst)
		pancreas	- within normal limits

S - Scheduled necropsy

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H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1435	S	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- cyst, keratin, minimal
		tongue	- within normal limits
		uterus with cervix	- hyperkeratosis, minimal
			- hyperplasia, squamous cell, minimal
1436	E	**Macroscopic**	
		lung with bronchi	- discoloration, tan, multiple lobes, mild
		pituitary gland	- enlarged, red, severe
1436	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal medullary, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1436	E	**Microscopic**	
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), severe
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1436	E	**Microscopic**	
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
		lung	- inflammation, acute, severe
			corresponds to macroscopic observation (lung with bronchi - discoloration, tan)
			plant material.
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, mild
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1436	E	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1436	E	**Microscopic**	
		thymus	- not examined
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- inflammation, acute, minimal
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1437	S	**Macroscopic**	
		adrenal glands	- cyst, clear, left, mild
		lymph node, axillary	- within normal limits draining node for mass a, right.
		lymph node, inguinal	- not identified, no grade draining node for mass c, bilateral and mass d, left.
		pituitary gland	- enlarged, severe

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1437	S	**Macroscopic**	
		skin, subcutis	- abscess, right inguinal area, mild corresponds to antemortem observation (mass 2) - mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 2.5 cm in diameter. - mass, tan, mass c, anogenital region, present corresponds to antemortem observation (nodule mass 3) approximately 3.0 cm in diameter. - mass, tan, mass d, left inguinal area, present approximately 2.0 cm in diameter.
1437	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - cyst)
		kidneys	- hyperplasia, transitional cell, unilateral, minimal - mineralization, pelvic, bilateral, mild
		liver	- vacuolation, periportal, minimal
		lung	- inflammation, subacute/chronic, minimal

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1437	S	**Microscopic**	
		lymph node, axillary	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - abscess)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c; skin, subcutis - mass d)
		pancreas	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
1438	S	**Macroscopic**	
		all tissues	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1438	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		pancreas	- within normal limits
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits
1439	E	**Macroscopic**	
		large intestine, cecum	- focus/foci, red, mucosa, mild
		lymph node, mandibular	- discoloration, red, bilateral, mild
		pituitary gland	- enlarged, red, severe
1439	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal medullary, unilateral, mild

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1439	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
			- compression, ventral (pituitary tumor), moderate
			- hemorrhage, mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, unilateral, minimal
			- pyelitis, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1439	E	**Microscopic**	
		large intestine, cecum	- erosion/ulcer, moderate
			corresponds to macroscopic observation (large intestine, cecum - focus/foci, red)
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- inflammation, subacute/chronic, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
			corresponds to macroscopic observation (lymph node, mandibular - discoloration, red)
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, incidental, not cause of death
			slide 18.
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

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Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1439	E	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

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MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1439	E	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- hyperplasia, squamous cell, moderate
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1440	S	**Macroscopic**	
		lymph node, iliac	- not identified, bilateral, no grade draining node for mass a. draining node for mass b, right.
		skin, subcutis	- mass, tan, mass a, anogenital region, present corresponds to antemortem observation (mass 1) approximately 7.0 x 7.5 x 2.5 cm. - mass, tan, mass b, right inguinal area, present approximately 2.5 x 2.0 x 1.0 cm.
1440	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, mild one of pair present
		kidneys	- mineralization, pelvic, bilateral, minimal - nephropathy, chronic progressive, unilateral, minimal

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1440	S	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, clear, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
		pancreas	- atrophy, acinar, minimal
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- polyp, stromal, benign, primary, incidental, not cause of death
1441	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1441	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1441	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- atrophy, unilateral, minimal
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

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MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1441	E	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1441	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1441	E	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1442	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, left.
		lymph node, inguinal	- not identified, right, no grade draining node for mass a.
		pituitary gland	- enlarged, mild

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MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1442	E	**Macroscopic**	
		skin, subcutis	- mass, red, mass b, left axillary area, present approximately 1.5 cm in diameter.
			- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 13.0 cm in diameter.
		uterus with cervix	- enlarged, horn, mild
1442	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1442	E	**Microscopic**	
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1442	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1442	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1442	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, moderate
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1443	E	**Macroscopic**	
		adrenal glands	- enlarged, left, moderate
		lymph node, axillary	- within normal limits
			draining node for mass a, left.

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1443	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass b, left. draining node for mass c, right.
		ovaries	- cyst, clear, right, mild
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 10.0 x 6.0 x 4.5 cm. - mass, tan, mass b, left inguinal area, present approximately 2.0 x 2.0 x 1.0 cm. - mass, tan, mass c, anogenital region, present corresponds to antemortem observation (swelling) approximately 3.5 x 2.5 x 1.5 cm.
1443	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, severe corresponds to macroscopic observation (adrenal glands - enlarged) - hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1443	E	**Microscopic**	
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- cyst, unilateral, minimal
			- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1443	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1443	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild corresponds to macroscopic observation (ovaries - cyst)
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1443	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1444	E	**Macroscopic**	
		lymph node, iliac	- within normal limits draining node for mass a, bilateral.
		spleen	- enlarged, minimal
		tail	- mass, ulcerated, mass a, distal tail, present corresponds to antemortem observation (scabbed area nodule) approximately 2.5 x 2.0 x 0.5 cm, tan.
1444	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1444	E	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, mild
		lung	- histiocytosis, alveolar, minimal
		lymph node, iliac	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1444	E	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- schwannoma, malignant, primary, mortality-independent corresponds to macroscopic observation (tail - mass a)
		small intestine, duodenum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1444	E	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, moderate corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- schwannoma

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1445	E	**Macroscopic**	
		pituitary gland	- enlarged, moderate
1445	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1445	E	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1445	E	**Microscopic**	
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1445	E	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, mild
			- inflammation, minimal
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1446	D	**Macroscopic**	
		pituitary gland	- enlarged, mild
1446	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1446	D	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1446	D	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- foreign material, moderate plant.
			- mucus increased, mild
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- foreign material, mild plant.
			- mucus increased, mild
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenoma, benign, primary, incidental, not cause of death slide 18.
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- foreign material, minimal plant.
			- mucus increased, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1446	D	**Microscopic**	
		nose, level c	- foreign material, minimal plant.
		nose, level d	- foreign material, minimal plant.
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- adenoma, benign, unilateral, primary, incidental, not cause of death
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, diffuse, pars distalis, mild corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1446	D	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- aspiration of foreign material

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1447	S	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a and mass b.
		lymph node, mandibular	- within normal limits draining node for mass c, left.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, left inguinal area, present corresponds to antemortem observation (mass 1) approximately 2.0 x 1.5 x 0.5 cm. - mass, tan, mass b, left anogenital region, present corresponds to antemortem observation (nodule swelling) approximately 2.5 cm in diameter. - mass, tan, mass c, left lateral neck, present approximately 3.0 cm in diameter.
1447	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1447	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, mild
			- nephropathy, chronic progressive, bilateral, mild
			- pyelitis, unilateral, minimal
		liver	- infiltration, mononuclear cell, minimal
			- multinucleated, hepatocytes, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		mammary gland	- adenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c)
		pancreas	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1447	S	**Microscopic**	
		tongue	- hyperplasia, squamous cell, mild
			- inflammation, subacute/chronic, mild
		uterus with cervix	- within normal limits
1448	D	**Macroscopic**	
		cavity, thoracic	- mass, red, mass a, present approximately 1.2 x 1.0 x 0.7 cm. cranial to lungs and attached to the trachea.
		lymph node, mandibular	- enlarged, red, left, mild
		lymph node, mediastinal	- not identified, no grade draining node for mass a.
		pituitary gland	- enlarged, severe
		skin	- hair sparse, dorsal cervical region, right, mild corresponds to antemortem observation (hair sparse)
1448	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1448	D	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
			- hemorrhage, minimal
		cavity, thoracic	- inflammation, granulomatous, moderate
			corresponds to macroscopic observation (cavity, thoracic - mass a)
			the lesion consists of multiple pyogranulomas with a central colony of bacteria, all walled off by a fibrous wall. most likely secondary to a dosing injury.
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1448	D	**Microscopic**	
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
		lung	- inflammation, acute, moderate
		lymph node, mandibular	- dilatation, sinus, minimal
			- hyperplasia, lymphocyte/plasmacyte, medulla, mild
			corresponds to macroscopic observation (lymph node, mandibular - enlarged)
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1448	D	**Microscopic**	
		nose, level a	- exudate, nasal passage, mild
		nose, level b	- exudate, nasal passage, minimal
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1448	D	**Microscopic**	
		skin	- alopecia/hypotrichosis, moderate corresponds to macroscopic observation (skin - hair sparse)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1448	D	**Microscopic**	
		Cause of Death	- pituitary tumor
1449	D	**Macroscopic**	
		lymph node, axillary	- within normal limits right, draining node for mass a. left, draining node for mass b.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 8.0 x 6.0 x 4.0 cm. - mass, tan, mass b, right lateral thorax, present corresponds to antemortem observation (mass 2) approximately 4.5 x 3.5 x 2.0 cm.
1449	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1449	D	**Microscopic**	
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, unilateral, minimal
			- fold/rosette, retinal, unilateral, minimal
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1449	D	**Microscopic**	
		larynx	- within normal limits
		liver	- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- exudate, nasal passage, minimal
		nose, level b	- exudate, nasal passage, mild
		nose, level c	- exudate, nasal passage, minimal
		nose, level d	- exudate, nasal passage, minimal
		ovaries	- hyperplasia, sex-cord/stromal, bilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1449	D	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1449	D	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- hyperplasia, squamous cell, mild
			- inflammation, subacute/chronic, minimal
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1450	S	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass a, left.
		ovaries	- cyst, clear, left, mild
		pituitary gland	- enlarged, red, mild

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1450	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (nodule) approximately 2.0 cm in diameter.
1450	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, minimal
		kidneys	- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		ovaries	- cyst, unilateral, mild corresponds to macroscopic observation (ovaries - cyst)

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1450	S	**Microscopic**	
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits
1451	E	**Macroscopic**	
		lymph node, axillary	- not identified, bilateral, no grade draining node for mass a, left and mass c, right.
		lymph node, inguinal	- not identified, right, no grade draining node for mass b.
		ovaries	- cyst, clear, right, moderate
		pituitary gland	- enlarged, moderate

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1451	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 0.8 cm in diameter
			- mass, tan, mass c, right axillary area, present corresponds to antemortem observation (swelling) approximately 0.7 cm in diameter.
			- mass, ulcerated, mass b, anogenital region, right, present corresponds to antemortem observation (mass 2) approximately 8.0 cm in diameter, tan.
1451	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1451	E	**Microscopic**	
		cavity, abdominal	- mesothelioma, malignant, secondary see kidney (slide 1), adrenal gland (slide 5), pancreas (slide 11), and urinary bladder (slide 17).
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal - mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1451	E	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, mild
			- infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass c)
			- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, moderate
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1451	E	**Microscopic**	
		ovaries	- mesothelioma, malignant, bilateral, primary, incidental, not cause of death
			corresponds to macroscopic observation (ovaries - cyst)
			one ovary has a small tumor, the other large.
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/regeneration, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1451	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- erosion/ulcer, minimal
			- hyperplasia, squamous cell, mild
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1451	E	**Microscopic**	
		Cause of Death	- mammary tumor
1452	E	**Macroscopic**	
		liver	- discoloration, tan, multiple lobes, mild
		lymph node, axillary	- within normal limits right is draining node for mass a.
		lymph node, inguinal	- within normal limits right is draining node for mass b.
		pituitary gland	- enlarged, moderate
		skin, subcutis	- mass, tan, mass b, right anogenital region, present approximately 2.5 x 2.0 x 1.0 cm. - mass, ulcerated, mass a, right axillary area, present corresponds to antemortem observation (scabbed area mass 1) tan, approximately 6.0 x 5.0 x 4.0 cm.
		spleen	- enlarged, mild
1452	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1452	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1452	E	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass b) slide 26-2 and slide 18r-1. - hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1452	E	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- fibrosarcoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1452	E	**Microscopic**	
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, moderate corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- hyperplasia, squamous cell, moderate
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- liver - discoloration, tan
		Cause of Death	- fibrosarcoma/fibroma

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1453	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, ulcerated, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 6.0 x 3.0 x 1.0 cm, tan.
		spleen	- enlarged, moderate
1453	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1453	E	**Microscopic**	
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
			- pyelitis, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- necrosis, focal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, inguinal	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1453	E	**Microscopic**	
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1453	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1453	E	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1454	S	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, right.
		lymph node, mandibular	- within normal limits draining node for mass b, left, and mass c, right.
		pituitary gland	- enlarged, severe

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1454	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 4.0 x 3.5 x 2.0 cm.
			- mass, tan, mass b, left lateral neck, present approximately 2.0 x 1.0 x 1.0 cm.
			- mass, tan, mass c, right lateral neck, present approximately 1.0 x 0.5 x 0.5 cm.
1454	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		kidneys	- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- necrosis, focal, minimal
			- vacuolation, centrilobular, minimal
		lung	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1454	S	**Microscopic**	
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass c)
			- fibroadenoma, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (skin, subcutis - mass b)
		pancreas	- atrophy, acinar, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits
1455	D	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1455	D	**Macroscopic**	
		skin	- abrasion/scab, sacral, mild
1455	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
			- hemorrhage, minimal
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
			one of pair present
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1455	D	**Microscopic**	
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1455	D	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- hyperplasia, epidermal, mild
			corresponds to macroscopic observation (skin - abrasion/scab)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1455	D	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1456	D	**Macroscopic**	
		lymph node, axillary	- within normal limits left is draining node for mass a.

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1456	D	**Macroscopic**	
		pituitary gland	- enlarged, tan, moderate
		skin, subcutis	- mass, tan, mass a, ventral neck, present
			corresponds to antemortem observation (mass 1 scabbed area cannibalized/partially cannibalized)
			approximately 10.0 x 8.0 x 3.0 cm and appears to be partially cannibalized. extends from left lateral neck to right ventral axillary area and engulfs left forelimb.
		spleen	- enlarged, mild
1456	D	**Microscopic**	
		adrenal glands	- adenoma, cortical, benign, unilateral, primary, incidental, not cause of death
			- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hematopoiesis, extramedullary, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1456	D	**Microscopic**	
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, moderate
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, mild - nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1456	D	**Microscopic**	
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, mild
			- infiltration, mononuclear cell, minimal
			- leukocytosis, sinusoidal, mild
			- necrosis, moderate
		lung	- histiocytosis, alveolar, minimal
			- leukocytosis, vascular, mild
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a) slide 18 and 26-1, 26-1a, 26-1b.
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1456	D	**Microscopic**	
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1456	D	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, moderate corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1457	E	**Macroscopic**	
		brain	- focus/foci, black, focal, cerebrum, mild
		ovaries	- cyst, clear, right, mild

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1457	E	**Macroscopic**	
		oviducts	- cyst, clear, right, mild
		pituitary gland	- enlarged, red, moderate
1457	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- carcinoma, pars distalis, malignant, secondary
			corresponds to macroscopic observation (brain - focus/foci, black)
			- compression, ventral (pituitary tumor), moderate
			- hemorrhage, moderate
			corresponds to macroscopic observation (brain - focus/foci, black)
		esophagus	- within normal limits
		eyes	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1457	E	**Microscopic**	
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, moderate
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1457	E	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- exudate, nasal passage, minimal
			- foreign material, minimal
			plant.
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
			corresponds to macroscopic observation (ovaries - cyst)
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- carcinoma, pars distalis, malignant, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1457	E	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			- inflammation, mild
		thymus	- hyperplasia, lymphoid, medulla, mild
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1457	E	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- oviducts - cyst
		Cause of Death	- pituitary tumor
1458	E	**Macroscopic**	
		pituitary gland	- enlarged, red, mild
		thymus	- discoloration, red, mild
1458	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1458	E	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1458	E	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1458	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- thymus - discoloration, red
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1459	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1459	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- hyperplasia, focal medullary, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1459	E	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
			- necrosis, focal, mild
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, moderate
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1459	E	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1459	E	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- edema, mild
			- hyperplasia, epithelial, nonglandular, mild
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- granular cell tumor, benign, primary, incidental, not cause of death
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1460	S	**Macroscopic**	
		adrenal glands	- enlarged, red, right, mild
		lymph node, axillary	- not identified, right, no grade draining node for mass a.
		mammary gland	- swollen/thickened, tan, generalized, mild
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (hair sparse mass 1) approximately 3.0 cm in diameter.
1460	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged)
		kidneys	- hyperplasia, tubular, unilateral, minimal - mineralization, pelvic, bilateral, minimal
		liver	- hematopoiesis, extramedullary, minimal - vacuolation, focal, minimal
		lung	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1460	S	**Microscopic**	
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		pancreas	- atrophy, acinar, mild
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
1461	E	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass a, left.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1461	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass b, left. draining node for mass c, right.
		lymph node, mandibular	- within normal limits draining node for mass d, right.
		pituitary gland	- enlarged, moderate
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 5.0 x 2.5 x 2.5 cm. - mass, tan, mass b, left inguinal area, present corresponds to antemortem observation (mass 2) approximately 2.0 cm in diameter. - mass, tan, mass d, right lateral neck, present approximately 1.0 cm in diameter. - mass, ulcerated, mass c, right inguinal area, present corresponds to antemortem observation (mass 3) approximately 1.5 cm in diameter, tan.
1461	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1461	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, bilateral, moderate
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- cyst, unilateral, mild
			- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1461	E	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, mild
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- histiocytosis, sinus, mild
		lymph node, inguinal	- within normal limits right inguinal not examined, misidentified tissue.
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1461	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1461	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1461	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1462	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits
			draining node for mass a, left.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, left inguinal area, present
			approximately 2.5 x 2.0 x 1.0 cm.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1462	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1462	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- foreign material, minimal plant material.
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1462	E	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1462	E	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1463	E	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1463	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 9.0 cm in diameter.
1463	E	**Microscopic**	
		adrenal glands	- adenoma, cortical, benign, unilateral, primary, incidental, not cause of death
			- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), minimal
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1463	E	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1463	E	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- hyperplasia, focal, bilateral, mild
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1463	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1464	D	**Macroscopic**	
		adipose tissue	- discoloration, red, mild white adipose near spleen.
		adrenal glands	- enlarged, right, mild
		liver	- focus/foci, tan, multiple lobes, mild
		lymph node, axillary	- within normal limits draining node for mass a, right.
		lymph node, inguinal	- not identified, right, no grade draining node for mass b.
		skin, subcutis	- mass, black, mass b, right inguinal area, present corresponds to antemortem observation (mass 2) approximately 4.0 x 3.0 x 1.5 cm. - mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 2.0 x 2.0 x 1.0 cm.
		uterus with cervix	- focus/foci, black, horn, minimal
1464	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged) - hyperplasia, focal medullary, bilateral, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1464	D	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
			- thrombus, severe
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, bilateral, mild
			- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1464	D	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
			- necrosis, hepatocytes, centrilobular, severe corresponds to macroscopic observation (liver - focus/foci, tan)
			- vacuolation, median cleft, mild
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1464	D	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- galactocele, mild
			- hyperplasia, lobular, mild
		mesentery/peritoneum	- congestion, mild
			corresponds to macroscopic observation (adipose tissue - discoloration, red)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, bilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1464	D	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1464	D	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- uterus with cervix - focus/foci, black
		Cause of Death	- heart failure/atrial thrombus
1465	D	**Macroscopic**	
		lymph node, iliac	- within normal limits draining node for mass a, bilateral.
		pituitary gland	- enlarged, severe
		urinary bladder	- within normal limits the bladder is encompassed with mass a.
		uterus with cervix	- enlarged, body, moderate - mass, brown, mass a, body, present approximately 7.0 x 4.0 x 5.0 cm.

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1465	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal - mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1465	D	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, iliac	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1465	D	**Microscopic**	
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, moderate

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1465	D	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- not examined
		urinary bladder	- leiomyosarcoma, malignant, secondary
		uterus with cervix	- leiomyosarcoma, malignant, primary, fatal, positive cause of death corresponds to macroscopic observation (uterus with cervix - enlarged; uterus with cervix - mass a) slide 16-1, 16-1a, 16-1b, and 16-1c. - polyp, glandular, benign, primary, incidental, not cause of death slide 16.
		vagina	- within normal limits
		Cause of Death	- uterus tumor

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1466	D	**Macroscopic**	
		mammary gland	- swollen/thickened, generalized, mild
		pituitary gland	- enlarged, mild
1466	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1466	D	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1466	D	**Microscopic**	
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1466	D	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- undetermined
1467	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, left.

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1467	S	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a and mass d, right. draining node for mass c, left.
		skin, subcutis	- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 5.0 x 4.0 x 2.0 cm. - mass, tan, mass b, left axillary area, present corresponds to antemortem observation (mass 2) approximately 4.0 x 2.5 x 2.0 cm. - mass, tan, mass c, left inguinal area, present corresponds to antemortem observation (mass 3) approximately 3.0 x 3.0 x 1.5 cm. - mass, tan, mass d, right anogenital region, present corresponds to antemortem observation (mass 4) approximately 6.0 x 4.5 x 3.0 cm.
		uterus with cervix	- enlarged, horn, mild
1467	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1467	S	**Microscopic**	
		kidneys	- hydronephrosis, bilateral, mild
			- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, inguinal	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass c) two separate tumors present (collision tumor).
			- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c; skin, subcutis - mass d)
		pancreas	- hyperplasia, islet cell, mild
		stomach, nonglandular	- within normal limits
		tongue	- hyperplasia, squamous cell, moderate
			- inflammation, subacute/chronic, mild

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1467	S	**Microscopic**	
		uterus with cervix	- dilatation, gland/lumen, moderate corresponds to macroscopic observation (uterus with cervix - enlarged)
1468	D	**Macroscopic**	
		animal/whole body	- body fat depleted, moderate corresponds to antemortem observation (thin)
		pituitary gland	- enlarged, severe
1468	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate - hyperplasia, focal medullary, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1468	D	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, mild
			- hyperplasia, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1468	D	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1468	D	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- hyperplasia, squamous cell, mild
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits
		ureters	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1468	D	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
			- hyperplasia, cervical fibromuscular, mild
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1469	S	**Macroscopic**	
		pituitary gland	- enlarged, moderate
		uterus with cervix	- enlarged, cervix, moderate
1469	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, minimal
		kidneys	- nephropathy, chronic progressive, bilateral, moderate
		liver	- focus of cellular alteration, eosinophilic, minimal
		lung	- histiocytosis, alveolar, minimal
		pancreas	- atrophy, acinar, minimal
			- hyperplasia, islet cell, mild

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1469	S	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			- hyperplasia, cervical fibromuscular, moderate
			corresponds to macroscopic observation (uterus with cervix - enlarged)
			- hyperplasia, squamous cell, mild
1470	E	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass a, right and draining node for mass c, left.
		lymph node, inguinal	- within normal limits
			draining node for mass b, left.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1470	E	**Macroscopic**	
		pituitary gland	- enlarged, mild
		skin, subcutis	- mass, tan, mass b, left inguinal area, present corresponds to antemortem observation (swelling) approximately 1.7 x 0.8 x 0.4 cm in size.
			- mass, tan, mass c, left axillary area, present approximately 1.2 x 1.5 x 0.4 cm in size.
			- mass, ulcerated, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 5.7 x 2.1 x 1.4 cm in size, tan.
1470	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1470	E	**Microscopic**	
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1470	E	**Microscopic**	
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b; skin, subcutis - mass c)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1470	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1470	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1471	S	**Macroscopic**	
		pituitary gland	- enlarged, severe
1471	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
			- hyperplasia, focal cortical, unilateral, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1471	S	**Microscopic**	
		kidneys	- edema, papilla, bilateral, minimal
			- hyperplasia, transitional cell, bilateral, minimal
			- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		liver	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		pancreas	- atrophy, acinar, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1472	E	**Macroscopic**	
		liver	- cyst, clear, left lateral lobe, moderate approximately 1.5 cm in diameter.
		lymph node, inguinal	- within normal limits right is draining node for mass a.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, right anogenital region, present corresponds to antemortem observation (mass 1) approximately 8.0 x 6.0 x 3.8 cm.
1472	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1472	E	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, unilateral, moderate
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- cyst, biliary, simple, moderate
			corresponds to macroscopic observation (liver - cyst)
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, inguinal	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1472	E	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1472	E	**Microscopic**	
		salivary gland, parotid	- atrophy, minimal
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1472	E	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1473	E	**Macroscopic**	
		lymph node, mandibular	- within normal limits
			draining node for mass a, left.
		mammary gland	- swollen/thickened, tan, generalized, moderate
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, ulcerated, mass a, cervical, left, present
			corresponds to antemortem observation (mass 1 hair sparse mass 2)
			approximately 5.0 cm in diameter, tan.
1473	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1473	E	**Microscopic**	
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- hyperplasia, transitional cell, unilateral, mild
			- infarct, unilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- pyelitis, unilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1473	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1473	E	**Microscopic**	
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1473	E	**Microscopic**	
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1474	E	**Macroscopic**	
		pituitary gland	- enlarged, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1474	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1474	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1474	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1474	E	**Microscopic**	
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, minimal
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1475	S	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1 skin discolored) approximately 1.0 x 2.0 x 1.0 cm, surrounded by fluid filled cyst that ruptured.
		uterus with cervix	- enlarged, horn, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1475	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- hematopoiesis, extramedullary, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, inguinal	- within normal limits
		mammary gland	- adenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		pancreas	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (uterus with cervix - enlarged)

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1476	D	**Macroscopic**	
		adrenal glands	- enlarged, left, mild
		kidneys	- dilatation, pelvic, bilateral, mild
		lymph node, iliac	- enlarged, right, mild draining node for mass b.
		skin, subcutis	- mass, ulcerated, mass b, anogenital region, present corresponds to antemortem observation (mass 2) approximately 6.0 cm in diameter, tan.
		urinary bladder	- distended with urine, red, severe
1476	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1476	D	**Microscopic**	
		brain	- within normal limits
		clitoral glands	- carcinoma, squamous cell, malignant, unilateral, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b)
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, bilateral, mild
			- hydronephrosis, bilateral, mild
			corresponds to macroscopic observation (kidneys - dilatation, pelvic)
			- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1476	D	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, iliac	- hyperplasia, lymphocyte/plasmacyte, medulla, mild corresponds to macroscopic observation (lymph node, iliac - enlarged)
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
		oviducts	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1476	D	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1476	D	**Microscopic**	
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, bilateral, moderate
		urinary bladder	- dilatation, moderate
			corresponds to macroscopic observation (urinary bladder - distended with urine)
			- hemorrhage, severe
			corresponds to macroscopic observation (urinary bladder - distended with urine)
			- hyperplasia, simple transitional cell, mild
			- inflammation, moderate
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- clitoral gland tumor

D - Died on Study

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1477	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1477	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1477	E	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1477	E	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1477	E	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, lymphoid, medulla, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1478	E	**Macroscopic**	
		lymph node, axillary	- within normal limits
			left is draining node for mass a, right is draining node for mass b.

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1478	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 4.0 x 3.4 x 2.0 cm.
			- mass, ulcerated, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 4.5 x 3.0 x 2.2 cm. tan in color.
1478	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- hyperplasia, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1478	E	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, axillary	- hyperplasia, lymphocyte/plasmacyte, medulla, mild
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

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Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1478	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, bilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1478	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
			- hyperplasia, lymphoid, medulla, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1478	E	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1479	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, left.
		lymph node, mandibular	- within normal limits draining node for mass b, bilateral.
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, red, mass b, ventral thorax, present corresponds to antemortem observation (nodule) approximately 1.5 cm in diameter. - mass, ulcerated, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 2.0 cm in diameter, red.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1479	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal medullary, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), minimal
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1479	E	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, mild
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal
			- inflammation, subacute/chronic, minimal
		nose, level a	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1479	E	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1479	E	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, mild
			- hyperplasia, epithelial cell, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1480	E	**Macroscopic**	
		ovaries	- cyst, red, right, moderate
		pituitary gland	- enlarged, severe
		uterus with cervix	- enlarged, body, mild
1480	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1480	E	**Microscopic**	
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- pyelitis, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1480	E	**Microscopic**	
		ovaries	- cyst, unilateral, moderate
			corresponds to macroscopic observation (ovaries - cyst)
			- luteoma, benign, unilateral, primary, incidental, not cause of death
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1480	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- hyperplasia, cervical fibromuscular, moderate
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1491	S	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, moderate
		skin, subcutis	- mass, ulcerated, mass a, left inguinal area, present corresponds to antemortem observation (abrasion(s) mass 1) approximately 4.0 x 3.0 x 1.0 cm, tan.
1491	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal - hyperplasia, focal medullary, unilateral, minimal
		kidneys	- mineralization, pelvic, bilateral, minimal - nephropathy, chronic progressive, bilateral, minimal
		liver	- angiectasis, mild - focus of cellular alteration, basophilic, minimal
		lung	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		pancreas	- atrophy, acinar, minimal - hyperplasia, islet cell, minimal

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1491	S	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits
1492	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1492	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1492	E	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, bilateral, minimal
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1492	E	**Microscopic**	
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1492	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1492	E	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1493	D	**Macroscopic**	
		liver	- focus/foci, red, multiple lobes, mild
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, red, severe
		skin	- hair sparse, ventral thorax, head, mild corresponds to antemortem observation (hair sparse)
		skin, subcutis	- mass, tan, mass a, left inguinal area, present approximately 1.0 x 1.0 x 0.5 cm.

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1493	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1493	D	**Microscopic**	
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, inguinal	- within normal limits slide 26-1.
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass a) - hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1493	D	**Microscopic**	
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- alopecia/hypotrichosis, mild
			corresponds to macroscopic observation (skin - hair sparse)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1493	D	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- liver - focus/foci, red
		Cause of Death	- pituitary tumor

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1494	E	**Macroscopic**	
		liver	- focus/foci, red, right lateral lobe, minimal
		ovaries	- cyst, clear, left, mild
		pituitary gland	- enlarged, red, severe
		uterus with cervix	- enlarged, horn, mild
1494	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1494	E	**Microscopic**	
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, mild
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- angiectasis, mild
			corresponds to macroscopic observation (liver - focus/foci, red)
			- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, mild
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1494	E	**Microscopic**	
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
			corresponds to macroscopic observation (ovaries - cyst)
		oviducts	- within normal limits
		pancreas	- dilatation, duct, mild
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1494	E	**Microscopic**	
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			- inflammation, mild
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1494	E	**Microscopic**	
		uterus with cervix	- dilatation, gland/lumen, mild corresponds to macroscopic observation (uterus with cervix - enlarged) - polyp, stromal, benign, primary, incidental, not cause of death corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1495	E	**Macroscopic**	
		adrenal glands	- irregular surface, cystic, bilateral, moderate
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (nodule) approximately 2.0 cm in diameter.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1495	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			corresponds to macroscopic observation (adrenal glands - irregular surface)
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1495	E	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, moderate
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1495	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1495	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- erosion/ulcer, moderate
			- inflammation, moderate
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1496	S	**Macroscopic**	
		adrenal glands	- enlarged, right, mild
		mammary gland	- swollen/thickened, tan, generalized, mild
		pituitary gland	- enlarged, red, mild
1496	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate
			corresponds to macroscopic observation (adrenal glands - enlarged)
		kidneys	- hyperplasia, transitional cell, unilateral, minimal
			- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, unilateral, minimal
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		pancreas	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1496	S	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- within normal limits
1497	E	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 4.5 x 2.5 x 2.5 cm.
1497	E	**Microscopic**	
		adrenal glands	- within normal limits

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1497	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1497	E	**Microscopic**	
		larynx	- within normal limits
		liver	- focus of cellular alteration, eosinophilic, mild
		lung	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1497	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1497	E	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1498	E	**Macroscopic**	
		pituitary gland	- enlarged, severe
		skin	- hair sparse, left foreleg/limb, right foreleg/limb, mild corresponds to antemortem observation (hair sparse)
1498	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1498	E	**Microscopic**	
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- pyelitis, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1498	E	**Microscopic**	
		liver	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1498	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- alopecia/hypotrichosis, mild corresponds to macroscopic observation (skin - hair sparse)
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1498	E	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1499	E	**Macroscopic**	
		adrenal glands	- enlarged, bilateral, mild
		liver	- focus/foci, tan, left lateral lobe, mild
		lymph node, axillary	- not identified, left, no grade draining node for mass b.
		lymph node, mandibular	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, red, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1499	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left lateral neck, present corresponds to antemortem observation (mass 1) approximately 8.0 x 6.0 x 4.0 cm. - mass, tan, mass b, left axillary area, present corresponds to antemortem observation (mass 2) approximately 11.5 x 10.0 x 4.0 cm.
		thymus	- small, moderate
1499	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged)
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1499	E	**Microscopic**	
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1499	E	**Microscopic**	
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- hypertrophy, hepatocyte, centrilobular, minimal
			- necrosis, focal, mild
			corresponds to macroscopic observation (liver - focus/foci, tan)
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1499	E	**Microscopic**	
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1499	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			corresponds to macroscopic observation (thymus - small)
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
			one of pair present
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1500	S	**Macroscopic**	
		pituitary gland	- enlarged, moderate
1500	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1500	S	**Microscopic**	
		kidneys	- hyperplasia, transitional cell, bilateral, minimal
			- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, clear, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
			- inflammation, subacute/chronic, minimal
		pancreas	- hyperplasia, acinar cell, focal, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1500	S	**Microscopic**	
		uterus with cervix	- dilatation, gland/lumen, minimal
1501	D	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass a, anogenital region, present corresponds to antemortem observation (swelling) approximately 1.5 x 1.5 x 1.0 cm.
1501	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

S - Scheduled necropsy
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1501	D	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal - pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1501	D	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1501	D	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, mild
			- inflammation, mild
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1501	D	**Microscopic**	
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1502	E	**Macroscopic**	
		liver	- focus/foci, red, multiple lobes, mild
		lymph node, axillary	- not identified, right, no grade draining node for mass b.
		lymph node, iliac	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass a, left anogenital region, present corresponds to antemortem observation (mass 1) approximately 3.0 cm in diameter.
			- mass, ulcerated, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 3.0 cm in diameter, tan.

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1502	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal medullary, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1502	E	**Microscopic**	
		kidneys	- hyperplasia, transitional cell, unilateral, minimal
			- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, unilateral, minimal
			- pyelitis, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- dilatation, sinusoidal, minimal
			corresponds to macroscopic observation (liver - focus/foci, red)
			- focus of cellular alteration, basophilic, mild
		lung	- within normal limits
		lymph node, iliac	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1502	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, minimal
			- hyperplasia, sex-cord/stromal, unilateral, minimal
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1502	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1502	E	**Microscopic**	
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1503	E	**Macroscopic**	
		pituitary gland	- enlarged, moderate
		uterus with cervix	- enlarged, focal, horn, mild
1503	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			- hyperplasia, focal cortical, unilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1503	E	**Microscopic**	
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1503	E	**Microscopic**	
		mammary gland	- hyperplasia, lobular, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, bilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1503	E	**Microscopic**	
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1503	E	**Microscopic**	
		Cause of Death	- pituitary tumor
1504	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1504	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1504	E	**Microscopic**	
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1504	E	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1504	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- granular cell tumor, benign, primary, incidental, not cause of death
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1505	E	**Macroscopic**	
		adrenal glands	- enlarged, bilateral, mild
		harderian glands	- discoloration, tan, left, moderate corresponds to antemortem observation (eye protruding)
		lymph node, axillary	- within normal limits draining node for mass b, right.
		lymph node, inguinal	- not identified, right, no grade draining node for mass a.
		skin, subcutis	- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 6.5 x 7.0 x 3.0 cm. - mass, tan, mass b, right axillary area, present corresponds to antemortem observation (mass 2) approximately 3.5 x 2.5 x 15 cm.
		thymus	- discoloration, red, mild
		uterus with cervix	- enlarged, minimal
1505	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate corresponds to macroscopic observation (adrenal glands - enlarged) - hyperplasia, focal cortical, unilateral, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1505	E	**Microscopic**	
		aorta	- within normal limits
		bone	- osteosarcoma, malignant, primary, fatal, positive cause of death corresponds to macroscopic observation (harderian glands - discoloration, tan) tumor extends from upper jaw to the back of the eye socket causing the eye to protrude. see slides 14-1, 14-1 r-1, 24 and 25.
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- inflammation, acute, unilateral, moderate
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1505	E	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- histiocytosis, sinus, mild
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, minimal
		multicentric neoplasm	- lymphoma, malignant, multicentric, incidental, not cause of death
		nerve, sciatic	- degeneration, axonal/myelin, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1505	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- cyst, unilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			- hyperplasia, diffuse, pars distalis, mild
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1505	E	**Microscopic**	
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- lymphoma, malignant, multicentric, incidental, not cause of death corresponds to macroscopic observation (thymus - discoloration, red)
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1505	E	**Microscopic**	
		Cause of Death	- bone tumor
1506	D	**Macroscopic**	
		lymph node, inguinal	- not identified, right, no grade draining node for mass a.
		skin, subcutis	- mass, ulcerated, mass a, right inguinal area, present corresponds to antemortem observation (mass 1 cannibalized/partially cannibalized) approximately 9.0 x 6.0 x 3.0 cm, tan.
1506	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1506	D	**Microscopic**	
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hematopoiesis, extramedullary, minimal
			- necrosis, hepatocytes, centrilobular, moderate
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1506	D	**Microscopic**	
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1506	D	**Microscopic**	
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1507	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1507	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1507	E	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1507	E	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1507	E	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			- inflammation, mild
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1508	E	**Macroscopic**	
		lymph node, axillary	- not identified, right, no grade draining node for mass a.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1508	E	**Macroscopic**	
		lymph node, mediastinal	- within normal limits draining node for mass b.
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 10.0 x 7.0 x 4.0 cm.
		thymus	- mass, tan, mass b, present approximately 2.5 x 2.0 x 0.5 cm.
1508	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate - hyperplasia, focal medullary, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1508	E	**Microscopic**	
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, minimal
			- vacuolation, periportal, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1508	E	**Microscopic**	
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mediastinal	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild
		multicentric neoplasm	- lymphoma, malignant, multicentric, incidental, not cause of death
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- polyarteritis, moderate
		parathyroid glands	- not examined
		pharynx	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1508	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- lymphoma, malignant, multicentric, incidental, not cause of death corresponds to macroscopic observation (thymus - mass b)
		thyroid gland	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1508	E	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1509	E	**Macroscopic**	
		adrenal glands	- cyst, left, moderate
		lymph node, axillary	- not identified, right, no grade draining node for mass a.
		mammary gland	- swollen/thickened, tan, generalized, mild
		pituitary gland	- enlarged, red, mild
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1 hair sparse) approximately 10.0 x 10.0 x 4.0 cm.

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1509	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate
			corresponds to macroscopic observation (adrenal glands - cyst)
			- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), minimal
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1509	E	**Microscopic**	
		kidneys	- hyperplasia, transitional cell, bilateral, minimal
			- mineralization, pelvic, bilateral, mild
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, mild
			- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, moderate corresponds to macroscopic observation (mammary gland - swollen/thickened)
		nerve, sciatic	- degeneration, axonal/myelin, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1509	E	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- degeneration/necrosis, olfactory epithelium, minimal
		ovaries	- hyperplasia, sex-cord/stromal, bilateral, mild
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- hyperplasia, focal, unilateral, mild one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1509	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, moderate
			- thrombus, mild

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1509	E	**Microscopic**	
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1510	D	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate
1510	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1510	D	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
			- mineralization, tubular, bilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1510	D	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1510	D	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, mild
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1511	E	**Macroscopic**	
		pituitary gland	- cyst, red, moderate
1511	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1511	E	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1511	E	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death corresponds to macroscopic observation (pituitary gland - cyst)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1511	E	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1512	D	**Macroscopic**	
		all tissues	- within normal limits
1512	D	**Microscopic**	
		adrenal glands	- within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1512	D	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- schwannoma, malignant, primary, fatal, positive cause of death
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1512	D	**Microscopic**	
		larynx	- within normal limits
		liver	- necrosis, hepatocytes, centrilobular, severe
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1512	D	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- within normal limits
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits

D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1512	D	**Microscopic**	
		vagina	- within normal limits
		Cause of Death	- schwannoma
1513	E	**Macroscopic**	
		all tissues	- within normal limits
1513	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- lymphoma, malignant, multicentric, fatal, positive cause of death
		bone marrow, sternum	- lymphoma, malignant, multicentric, fatal, positive cause of death
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*
D - Died on Study

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1513	E	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- lymphoma, malignant, multicentric, fatal, positive cause of death
		kidneys	- within normal limits
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- lymphoma, malignant, multicentric, fatal, positive cause of death
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, minimal
		multicentric neoplasm	- lymphoma, malignant, multicentric, fatal, positive cause of death
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- lymphoma, malignant, multicentric, fatal, positive cause of death

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1513	E	**Microscopic**	
		nose, level c	- lymphoma, malignant, multicentric, fatal, positive cause of death
		nose, level d	- lymphoma, malignant, multicentric, fatal, positive cause of death
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle	- lymphoma, malignant, multicentric, fatal, positive cause of death slide 20 and 21.
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1513	E	**Microscopic**	
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, moderate
			- lymphoma, malignant, multicentric, fatal, positive cause of death
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- hyperplasia, squamous cell, mild
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			- metaplasia, squamous, mild
		vagina	- within normal limits
		Cause of Death	- lymphoid tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1514	E	**Macroscopic**	
		animal/whole body	- body fat depleted, mild corresponds to antemortem observation (thin)
		pituitary gland	- enlarged, moderate
1514	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1514	E	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1514	E	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1514	E	**Microscopic**	
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- pituitary tumor
1515	E	**Macroscopic**	
		lymph node, mandibular	- within normal limits left, draining node for mass a.
		pituitary gland	- enlarged, red, moderate

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1515	E	**Macroscopic**	
		skin, subcutis	- mass, ulcerated, mass a, ventral neck, present corresponds to antemortem observation (mass 1) approximately 8.0 x 6.0 x 3.5 cm. mass a extends across left ventral neck and down left forelimb. is tan in color.
1515	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1515	E	**Microscopic**	
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, bilateral, mild
			- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1515	E	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, minimal
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
			- atrophy, acinar, mild
			- fibrosis, minimal
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1515	E	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1515	E	**Microscopic**	
		uterus with cervix	- dilatation, gland/lumen, minimal
		vagina	- within normal limits
		Cause of Death	- mammary tumor
1516	S	**Macroscopic**	
		foot/feet	- ulcer, plantar/palmar, mild corresponds to antemortem observation (ulcer plantar/palmar)
		lymph node, axillary	- within normal limits draining node for mass a, left.
		lymph node, iliac	- within normal limits draining node for mass c, bilateral.
		lymph node, inguinal	- not identified, right, no grade draining node for mass b.

S - Scheduled necropsy
E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1516	S	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 2.0 cm in diameter. - mass, tan, mass b, right inguinal area, present corresponds to antemortem observation (mass 2) approximately 2.0 cm in diameter.
		uterus with cervix	- mass, tan, mass c, horn, present corresponds to antemortem observation (swelling) approximately 1.0 cm in diameter.
1516	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild - hyperplasia, focal medullary, unilateral, minimal
		kidneys	- mineralization, pelvic, bilateral, minimal - nephropathy, chronic progressive, bilateral, mild - pyelitis, unilateral, minimal

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1516	S	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, mild
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, iliac	- dilatation, sinus, minimal
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass b)
			- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
		pancreas	- within normal limits
		stomach, nonglandular	- within normal limits
		tongue	- within normal limits
		uterus with cervix	- adenocarcinoma, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (uterus with cervix - mass c)
			- dilatation, gland/lumen, mild

S - Scheduled necropsy

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1517	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, right.
		lymph node, inguinal	- not identified, left, no grade draining node for mass c.
		lymph node, mandibular	- discoloration, red, bilateral, mild draining node for mass a, left.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass b, right axillary area, present corresponds to antemortem observation (nodule) approximately 3.0 cm in diameter. - mass, tan, mass c, left inguinal area, present approximately 3.0 cm in diameter. - mass, ulcerated, mass a, left lateral neck, present corresponds to antemortem observation (ulcer mass 1) approximately 6.0 cm in diameter, tan.
		spleen	- enlarged, moderate
1517	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal - hematopoiesis, extramedullary, bilateral, minimal

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1517	E	**Microscopic**	
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, mild
		bone marrow, sternum	- hyperplasia, granulocytic, minimal
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- hyperplasia, transitional cell, unilateral, minimal
			- mineralization, pelvic, bilateral, mild
			- pyelitis, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1517	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
			corresponds to macroscopic observation (lymph node, mandibular - discoloration, red)
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
			- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass b; skin, subcutis - mass c)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1517	E	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1517	E	**Microscopic**	
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, moderate corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
			- hyperplasia, epithelial cell, minimal
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		Cause of Death	- mammary tumor

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1518	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, mild
		skin, subcutis	- mass, ulcerated, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 3.0 cm in diameter, tan.
1518	E	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits

E - Euthanized *in extremis*

MPI Research Study Number 125-141
Dupont-18405-1238
H-28548: Combined Chronic Toxicity/Oncogenicity Study 2-Year Oral Gavage Study in Rats

Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1518	E	**Microscopic**	
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mammary gland	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- hyperplasia, lobular, mild

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1518	E	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1518	E	**Microscopic**	
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- erosion/ulcer, mild
			- hyperplasia, squamous cell, moderate
			- inflammation, subacute/chronic, mild
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
		non-correlated macro observation	- pituitary gland - enlarged
		Cause of Death	- mammary tumor

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1519	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		lymph node, inguinal	- not identified, left, no grade draining node for mass b.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 4.0 cm in diameter. - mass, tan, mass b, left inguinal area, present approximately 2.0 cm in diameter.
1519	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild - hyperplasia, focal medullary, unilateral, mild
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- within normal limits
		bone, sternum	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1519	E	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), moderate
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, pelvic, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- fibrosis, minimal
			- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1519	E	**Microscopic**	
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		mammary gland	- fibroadenoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a; skin, subcutis - mass b)
			- hyperplasia, lobular, mild
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, minimal
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits

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Individual Animal Listing - FEMALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1519	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- within normal limits
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate

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