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 6 of 13

NUMBER OF PAGES IN VOLUME: 338

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

SERVICE CODE NUMBER: 1238

MPI RESEARCH STUDY NUMBER: 125-141

Unpublished Work
Copyright ©2013 E.I. du Pont de Nemours and Company

Table 8
Statistical Analysis of Non-Neoplastic Lesions

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
adrenal glands				
angiectasis/cystic degeneration, focal cortical				
Overall Rates (a)	17/70 (24.29%)	3/52 (5.77%)	1/52 (1.92%)	14/70 (20.00%)
Fisher's Exact Test; P-value		0.0065	0.0005	0.6844
Cochran-Armitage Trend Test; P-value		NT	NT	0.3965
atrophy, cortical				
Overall Rates (a)	1/70 (1.43%)	1/52 (1.92%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8063
hematopoiesis, extramedullary				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6723
hyperplasia, focal cortical				
Overall Rates (a)	16/70 (22.86%)	4/52 (7.69%)	10/52 (19.23%)	8/70 (11.43%)
Fisher's Exact Test; P-value		0.0279	0.6620	0.1152
Cochran-Armitage Trend Test; P-value		NT	NT	0.1798

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
adrenal glands				
hyperplasia, focal medullary				
Overall Rates (a)	10/70 (14.29%)	10/52 (19.23%)	11/52 (21.15%)	9/70 (12.86%)
Fisher's Exact Test; P-value		0.4714	0.3419	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8839
hypertrophy, focal cortical				
Overall Rates (a)	2/70 (2.86%)	2/52 (3.85%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4852
infarct				
Overall Rates (a)	2/70 (2.86%)	0/52 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5068	0.5068	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0722
necrosis				
Overall Rates (a)	1/70 (1.43%)	0/52 (0.00%)	0/52 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4620

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
adrenal glands				
vacuolation, diffuse				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6723
vacuolation, focal				
Overall Rates (a)	23/70 (32.86%)	11/52 (21.15%)	10/52 (19.23%)	11/70 (15.71%)
Fisher's Exact Test; P-value		0.2203	0.1039	0.0293
Cochran-Armitage Trend Test; P-value		NT	0.0770	0.0167*
aorta				
mineralization				
Overall Rates (a)	5/70 (7.14%)	1/50 (2.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.3988	0.2382	0.0581
Cochran-Armitage Trend Test; P-value		NT	0.1325	0.0151*
bone marrow, femur				
hyperplasia, granulocytic				
Overall Rates (a)	2/70 (2.86%)	1/50 (2.00%)	1/52 (1.92%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9931

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
bone marrow, femur				
hyperplasia, mixed				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4167	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4672
necrosis				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
bone marrow, sternum				
hyperplasia, granulocytic				
Overall Rates (a)	1/70 (1.43%)	1/50 (2.00%)	1/52 (1.92%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.3008
hyperplasia, mixed				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4167	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4672

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
bone, femur				
fibrous osteodystrophy				
Overall Rates (a)	4/70 (5.71%)	0/51 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.1373	0.3924	0.1196
Cochran-Armitage Trend Test; P-value		NT	0.1781	0.0359*
hyperostosis				
Overall Rates (a)	1/70 (1.43%)	0/51 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2046
osteoarthritis/pododermatitis				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6716
bone, sternum				
fibrous osteodystrophy				
Overall Rates (a)	3/70 (4.29%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.2647	0.6354	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0884

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
bone, sternum				
hyperostosis				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
brain				
compression, ventral (pituitary tumor)				
Overall Rates (a)	22/70 (31.43%)	15/50 (30.00%)	16/52 (30.77%)	17/70 (24.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4510
Cochran-Armitage Trend Test; P-value		NT	NT	0.3846
edema				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
hemorrhage				
Overall Rates (a)	1/70 (1.43%)	1/50 (2.00%)	0/52 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6766

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
brain				
inflammation, embolic				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
mineralization, focal				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
necrosis, focal				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
schwannoma, malignant, secondary				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
cavity, abdominal				
fibrosarcoma, malignant, secondary				
Overall Rates (a)	0/1 (0.00%)	0/1 (0.00%)	0/2 (0.00%)	1/3 (33.33%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3496
inflammation, acute				
Overall Rates (a)	0/1 (0.00%)	1/1 (100.00%)	0/2 (0.00%)	0/3 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3496
coagulating glands				
depletion, secretory				
Overall Rates (a)	4/70 (5.71%)	3/50 (6.00%)	5/53 (9.43%)	5/70 (7.14%)
Fisher's Exact Test; P-value		1.0000	0.4973	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6117
dilatation				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6767

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
coagulating glands				
hyperplasia				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2071
inflammation				
Overall Rates (a)	5/70 (7.14%)	4/50 (8.00%)	3/53 (5.66%)	5/70 (7.14%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8980
epididymides				
granuloma, spermatic				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9961
inflammation, peritoneal				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9961

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
epididymides				
oligospermia/germ cell debris, bilateral				
Overall Rates (a)	6/70 (8.57%)	3/50 (6.00%)	4/52 (7.69%)	4/70 (5.71%)
Fisher's Exact Test; P-value		0.7334	1.0000	0.7447
Cochran-Armitage Trend Test; P-value		NT	NT	0.5865
oligospermia/germ cell debris, unilateral				
Overall Rates (a)	2/70 (2.86%)	4/50 (8.00%)	2/52 (3.85%)	4/70 (5.71%)
Fisher's Exact Test; P-value		0.2331	1.0000	0.6806
Cochran-Armitage Trend Test; P-value		NT	NT	0.6270
polyarteritis				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6708
esophagus				
hemorrhage				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
esophagus				
inflammation				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
eyes				
cataract				
Overall Rates (a)	3/68 (4.41%)	3/49 (6.12%)	1/51 (1.96%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.6938	0.6342	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7511
hemorrhage				
Overall Rates (a)	0/68 (0.00%)	1/49 (2.04%)	1/51 (1.96%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4188	0.4286	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9840
inflammation				
Overall Rates (a)	0/68 (0.00%)	0/49 (0.00%)	1/51 (1.96%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4286	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6840

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
eyes				
inflammation, acute				
Overall Rates (a)	1/68 (1.47%)	0/49 (0.00%)	2/51 (3.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.5757	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6926
metaplasia, squamous				
Overall Rates (a)	3/68 (4.41%)	1/49 (2.04%)	1/51 (1.96%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.6387	0.6342	0.1169
Cochran-Armitage Trend Test; P-value		NT	NT	0.0816
neovascularization, corneal				
Overall Rates (a)	3/68 (4.41%)	1/49 (2.04%)	0/51 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.6387	0.2591	0.1169
Cochran-Armitage Trend Test; P-value		NT	0.1171	0.0317*
synechia				
Overall Rates (a)	0/68 (0.00%)	0/49 (0.00%)	0/51 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2115

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
eyes, optic nerves				
necrosis				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	0/51 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2088
eyes, retina				
degeneration/atrophy, retina, unilateral				
Overall Rates (a)	0/63 (0.00%)	0/42 (0.00%)	1/43 (2.33%)	1/63 (1.59%)
Fisher's Exact Test; P-value		1.0000	0.4057	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2393
detachment, retinal				
Overall Rates (a)	0/63 (0.00%)	0/42 (0.00%)	0/43 (0.00%)	1/63 (1.59%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2127
fold/rosette, retinal				
Overall Rates (a)	1/63 (1.59%)	1/42 (2.38%)	1/43 (2.33%)	0/63 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4669

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
foot/feet				
fracture/callus				
Overall Rates (a)	0/1 (0.00%)	0/3 (0.00%)	0/1 (0.00%)	1/2 (50.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1736
inflammation				
Overall Rates (a)	0/1 (0.00%)	2/3 (66.67%)	1/1 (100.00%)	0/2 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6304
osteoarthritis/pododermatitis				
Overall Rates (a)	1/1 (100.00%)	1/3 (33.33%)	0/1 (0.00%)	1/2 (50.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6304
harderian glands				
hyperplasia, focal				
Overall Rates (a)	13/68 (19.12%)	11/50 (22.00%)	8/52 (15.38%)	9/70 (12.86%)
Fisher's Exact Test; P-value		0.8177	0.6362	0.3584
Cochran-Armitage Trend Test; P-value		NT	NT	0.2365

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
heart				
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
cardiomyopathy				
Overall Rates (a)	63/70 (90.00%)	45/50 (90.00%)	46/52 (88.46%)	64/70 (91.43%)
Fisher's Exact Test; P-value		1.0000	0.7766	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8424
endocarditis, valvular vegetative				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2341
mineralization, myofiber				
Overall Rates (a)	2/70 (2.86%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5098	0.5068	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0723

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
heart				
mineralization, vascular				
Overall Rates (a)	2/70 (2.86%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5098	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2195
thrombus				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9961
joint, tibiofemoral				
degeneration/necrosis, cartilage				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2059
inflammation, subacute/chronic				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6741

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
joint, tibiofemoral				
osteoarthritis/pododermatitis				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6716
kidneys				
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/55 (0.00%)	0/53 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0695
carcinoma, sebaceous cell, malignant, secondary				
Overall Rates (a)	0/70 (0.00%)	0/55 (0.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2003
cyst				
Overall Rates (a)	5/70 (7.14%)	6/55 (10.91%)	1/53 (1.89%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.5335	0.2345	0.4411
Cochran-Armitage Trend Test; P-value		NT	NT	0.1045

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
kidneys				
dilatation, tubular				
Overall Rates (a)	4/70 (5.71%)	0/55 (0.00%)	3/53 (5.66%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.1298	1.0000	0.3659
Cochran-Armitage Trend Test; P-value		NT	NT	0.3647
hemorrhage				
Overall Rates (a)	0/70 (0.00%)	0/55 (0.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2003
hyaline, droplets, increased				
Overall Rates (a)	1/70 (1.43%)	0/55 (0.00%)	2/53 (3.77%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	0.5770	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3332
hydronephrosis, bilateral				
Overall Rates (a)	13/70 (18.57%)	5/55 (9.09%)	8/53 (15.09%)	6/70 (8.57%)
Fisher's Exact Test; P-value		0.1991	0.6387	0.1372
Cochran-Armitage Trend Test; P-value		NT	NT	0.1533

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
kidneys				
hydronephrosis, unilateral				
Overall Rates (a)	7/70 (10.00%)	4/55 (7.27%)	2/53 (3.77%)	8/70 (11.43%)
Fisher's Exact Test; P-value		0.7540	0.2973	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9098
hyperplasia, transitional cell				
Overall Rates (a)	7/70 (10.00%)	5/55 (9.09%)	2/53 (3.77%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	0.2973	0.1654
Cochran-Armitage Trend Test; P-value		NT	0.2181	0.0497*
hyperplasia, tubular				
Overall Rates (a)	1/70 (1.43%)	0/55 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2027
inflammation, chronic-active				
Overall Rates (a)	0/70 (0.00%)	0/55 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6678

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
kidneys				
inflammation, embolic				
Overall Rates (a)	0/70 (0.00%)	0/55 (0.00%)	0/53 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0695
mineralization, pelvic				
Overall Rates (a)	6/70 (8.57%)	2/55 (3.64%)	3/53 (5.66%)	6/70 (8.57%)
Fisher's Exact Test; P-value		0.4642	0.7307	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9034
mineralization, tubular				
Overall Rates (a)	6/70 (8.57%)	4/55 (7.27%)	4/53 (7.55%)	8/70 (11.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.7792
Cochran-Armitage Trend Test; P-value		NT	NT	0.5577
mineralization, vascular				
Overall Rates (a)	1/70 (1.43%)	0/55 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5495

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
kidneys				
nephropathy, chronic progressive				
Overall Rates (a)	68/70 (97.14%)	45/55 (81.82%)	44/53 (83.02%)	67/70 (95.71%)
Fisher's Exact Test; P-value		0.0051	0.0093	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8413
polyarteritis				
Overall Rates (a)	1/70 (1.43%)	0/55 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2027
pyelitis				
Overall Rates (a)	11/70 (15.71%)	8/55 (14.55%)	3/53 (5.66%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	0.0941	0.0454
Cochran-Armitage Trend Test; P-value		NT	0.1047	0.0099*
pyelonephritis, bilateral				
Overall Rates (a)	0/70 (0.00%)	1/55 (1.82%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4400	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6728

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
kidneys				
thrombus				
Overall Rates (a)	2/70 (2.86%)	1/55 (1.82%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2012
lacrimal glands, exorbital				
atrophy				
Overall Rates (a)	0/69 (0.00%)	1/49 (2.04%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4153	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5604
depletion, secretory				
Overall Rates (a)	0/69 (0.00%)	1/49 (2.04%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4153	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6658
large intestine, cecum				
edema				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
large intestine, cecum				
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6759
polyarteritis				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
large intestine, rectum				
inflammation, peritoneal				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6708
larynx				
erosion/ulcer				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2087

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
larynx				
exudate, luminal				
Overall Rates (a)	0/70 (0.00%)	1/49 (2.04%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4118	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4698
foreign material				
Overall Rates (a)	0/70 (0.00%)	2/49 (4.08%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.1675	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5460
inflammation				
Overall Rates (a)	0/70 (0.00%)	1/49 (2.04%)	0/52 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.4118	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2260
mucus increased				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	2/52 (3.85%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	0.1797	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0923

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
liver				
angiectasis				
Overall Rates (a)	2/70 (2.86%)	0/70 (0.00%)	1/70 (1.43%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4964	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6530
congestion				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
cyst, biliary, multiloculated				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
cyst, biliary, simple				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
liver				
degeneration, cystic, focal				
Overall Rates (a)	24/70 (34.29%)	24/70 (34.29%)	19/70 (27.14%)	42/70 (60.00%)
Fisher's Exact Test; P-value		1.0000	0.4639	0.0038
Cochran-Armitage Trend Test; P-value		NT	0.3658	0.0073*
fibrosis				
Overall Rates (a)	0/70 (0.00%)	2/70 (2.86%)	0/70 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.4964	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.3685
focus of cellular alteration, basophilic				
Overall Rates (a)	6/70 (8.57%)	5/70 (7.14%)	6/70 (8.57%)	13/70 (18.57%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.1372
Cochran-Armitage Trend Test; P-value		NT	NT	0.0577
focus of cellular alteration, clear				
Overall Rates (a)	2/70 (2.86%)	1/70 (1.43%)	2/70 (2.86%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5218

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
liver				
focus of cellular alteration, eosinophilic				
Overall Rates (a)	15/70 (21.43%)	18/70 (25.71%)	6/70 (8.57%)	15/70 (21.43%)
Fisher's Exact Test; P-value		0.6909	0.0564	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4171
hematopoiesis, extramedullary				
Overall Rates (a)	19/70 (27.14%)	28/70 (40.00%)	24/70 (34.29%)	19/70 (27.14%)
Fisher's Exact Test; P-value		0.1519	0.4639	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8193
hyperplasia, bile duct				
Overall Rates (a)	40/70 (57.14%)	33/70 (47.14%)	32/70 (45.71%)	34/70 (48.57%)
Fisher's Exact Test; P-value		0.3101	0.2364	0.3973
Cochran-Armitage Trend Test; P-value		NT	NT	0.3107
hyperplasia, hepatocellular, regenerative				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
liver				
hypertrophy, hepatocyte, centrilobular				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	7/70 (10.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.0133
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0003*
infarct				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
infiltration, mononuclear cell				
Overall Rates (a)	36/70 (51.43%)	28/70 (40.00%)	20/70 (28.57%)	25/70 (35.71%)
Fisher's Exact Test; P-value		0.2349	0.0094	0.0879
Cochran-Armitage Trend Test; P-value		0.1763	0.0059*	0.0249*
inflammation, acute				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
liver				
leukocytosis, sinusoidal				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000
macrophages, pigmented				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
necrosis, focal				
Overall Rates (a)	6/70 (8.57%)	3/70 (4.29%)	4/70 (5.71%)	9/70 (12.86%)
Fisher's Exact Test; P-value		0.4932	0.7447	0.5861
Cochran-Armitage Trend Test; P-value		NT	NT	0.3214
necrosis, hepatocytes, centrilobular				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	1/70 (1.43%)	5/70 (7.14%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.2086
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0263*

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
liver				
osteosarcoma, malignant, secondary				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
vacuolation, centrilobular				
Overall Rates (a)	4/70 (5.71%)	6/70 (8.57%)	2/70 (2.86%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.7447	0.6806	0.6806
Cochran-Armitage Trend Test; P-value		NT	NT	0.2209
vacuolation, diffuse				
Overall Rates (a)	3/70 (4.29%)	1/70 (1.43%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.6195	0.6195	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0698
vacuolation, focal				
Overall Rates (a)	9/70 (12.86%)	7/70 (10.00%)	5/70 (7.14%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.7914	0.3989	0.0552
Cochran-Armitage Trend Test; P-value		NT	0.2609	0.0254*

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
liver				
vacuolation, median cleft				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	2/70 (2.86%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.1405
vacuolation, midzonal				
Overall Rates (a)	1/70 (1.43%)	2/70 (2.86%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1951
vacuolation, periportal				
Overall Rates (a)	18/70 (25.71%)	16/70 (22.86%)	16/70 (22.86%)	7/70 (10.00%)
Fisher's Exact Test; P-value		0.8440	0.8440	0.0259
Cochran-Armitage Trend Test; P-value		NT	0.6922	0.0288*
lung				
bacterial colonies				
Overall Rates (a)	3/70 (4.29%)	6/50 (12.00%)	6/53 (11.32%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.1614	0.1718	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9817

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lung				
carcinoma, c-cell, malignant, secondary				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2034
carcinoma, cortical, malignant, secondary				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2071
crystals, hemoglobin				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2343
edema				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2034

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lung				
foreign material				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5545
granuloma				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/53 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.4167	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2244
hemangiosarcoma, malignant, secondary				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6690
hemorrhage				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	3/53 (5.66%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.3139	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5758

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lung				
histiocytosis, alveolar				
Overall Rates (a)	23/70 (32.86%)	15/50 (30.00%)	10/53 (18.87%)	26/70 (37.14%)
Fisher's Exact Test; P-value		0.8429	0.1017	0.7233
Cochran-Armitage Trend Test; P-value		NT	NT	0.8561
hyperplasia, bronchiolar-alveolar				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6767
hyperplasia, type ii cell				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6690
hypertrophy/hyperplasia, bronchiolar/bronchial				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6767

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lung				
inflammation, acute				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/53 (0.00%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.2062
inflammation, perivascular				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6767
inflammation, subacute/chronic				
Overall Rates (a)	2/70 (2.86%)	1/50 (2.00%)	3/53 (5.66%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.6509	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8606
leukocytosis, vascular				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6767

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lung				
macrophages, alveolar				
Overall Rates (a)	1/70 (1.43%)	1/50 (2.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4572
macrophages, pigmented alveolar				
Overall Rates (a)	1/70 (1.43%)	2/50 (4.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5700	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2176
metaplasia, osseous				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6690
mucus increased				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6767

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lung				
necrosis				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2071
osteosarcoma, malignant, secondary				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2034
pneumonitis, uremic				
Overall Rates (a)	3/70 (4.29%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.2647	0.6334	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0873
thrombus				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2034

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lymph node, axillary				
erythrocytosis/erythrophagocytosis, sinus				
Overall Rates (a)	1/12 (8.33%)	1/5 (20.00%)	0/6 (0.00%)	0/8 (0.00%)
Fisher's Exact Test; P-value		0.5147	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3354
histiocytosis, sinus				
Overall Rates (a)	1/12 (8.33%)	0/5 (0.00%)	0/6 (0.00%)	0/8 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2816
hyperplasia, lymphoid, generalized				
Overall Rates (a)	0/12 (0.00%)	0/5 (0.00%)	0/6 (0.00%)	1/8 (12.50%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1721
lymph node, mandibular				
dilatation, sinus				
Overall Rates (a)	4/70 (5.71%)	2/49 (4.08%)	4/53 (7.55%)	2/69 (2.90%)
Fisher's Exact Test; P-value		1.0000	0.7247	0.6806
Cochran-Armitage Trend Test; P-value		NT	NT	0.6135

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lymph node, mandibular				
erythrocytosis/erythrophagocytosis, sinus				
Overall Rates (a)	7/70 (10.00%)	6/49 (12.24%)	3/53 (5.66%)	11/69 (15.94%)
Fisher's Exact Test; P-value		0.7695	0.5126	0.3238
Cochran-Armitage Trend Test; P-value		NT	NT	0.4446
hemorrhage				
Overall Rates (a)	1/70 (1.43%)	0/49 (0.00%)	0/53 (0.00%)	0/69 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
hyperplasia, lymphocyte/plasmacyte, medulla				
Overall Rates (a)	1/70 (1.43%)	1/49 (2.04%)	0/53 (0.00%)	0/69 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2306
osteosarcoma, malignant, secondary				
Overall Rates (a)	1/70 (1.43%)	0/49 (0.00%)	0/53 (0.00%)	0/69 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lymph node, mediastinal				
dilatation, sinus				
Overall Rates (a)	0/3 (0.00%)	1/1 (100.00%)	1/3 (33.33%)	0/3 (0.00%)
Fisher's Exact Test; P-value		0.2500	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9005
lymph node, mesenteric				
depletion, lymphoid, generalized				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	0/54 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2056
dilatation, sinus				
Overall Rates (a)	3/70 (4.29%)	2/51 (3.92%)	1/54 (1.85%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	0.6316	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5334
erythrocytosis/erythrophagocytosis, sinus				
Overall Rates (a)	5/70 (7.14%)	1/51 (1.96%)	1/54 (1.85%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.3992	0.2311	0.2086
Cochran-Armitage Trend Test; P-value		NT	NT	0.0660

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
lymph node, mesenteric				
inflammation, granulomatous				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/54 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6680
nerve, sciatic				
degeneration, axonal/myelin				
Overall Rates (a)	49/70 (70.00%)	31/50 (62.00%)	22/52 (42.31%)	42/70 (60.00%)
Fisher's Exact Test; P-value		0.4331	0.0029	0.2877
Cochran-Armitage Trend Test; P-value		NT	NT	0.0858
nose, level a				
exudate, nasal passage				
Overall Rates (a)	9/70 (12.86%)	0/50 (0.00%)	2/52 (3.85%)	5/70 (7.14%)
Fisher's Exact Test; P-value		0.0101	0.1142	0.3989
Cochran-Armitage Trend Test; P-value		NT	NT	0.2702
fibrous osteodystrophy				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5470

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level a				
foreign material				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	2/52 (3.85%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.5747	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8022
fungus/yeast				
Overall Rates (a)	4/70 (5.71%)	0/50 (0.00%)	1/52 (1.92%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.1397	0.3924	0.6806
Cochran-Armitage Trend Test; P-value		NT	NT	0.4145
inflammation				
Overall Rates (a)	7/70 (10.00%)	2/50 (4.00%)	1/52 (1.92%)	4/70 (5.71%)
Fisher's Exact Test; P-value		0.3019	0.1361	0.5319
Cochran-Armitage Trend Test; P-value		NT	NT	0.2413
metaplasia, squamous				
Overall Rates (a)	2/70 (2.86%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.5098	0.5068	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4598

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level b				
erosion/ulcer				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
exudate, nasal passage				
Overall Rates (a)	13/70 (18.57%)	1/50 (2.00%)	4/52 (7.69%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.0074	0.1142	0.0146
Cochran-Armitage Trend Test; P-value		0.0055*	0.0344*	0.0090*
fibrous osteodystrophy				
Overall Rates (a)	2/70 (2.86%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5098	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2195
foreign material				
Overall Rates (a)	2/70 (2.86%)	1/50 (2.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2007

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level b				
fungus/yeast				
Overall Rates (a)	7/70 (10.00%)	0/50 (0.00%)	3/52 (5.77%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.0405	0.5142	0.1654
Cochran-Armitage Trend Test; P-value		NT	NT	0.1318
inflammation				
Overall Rates (a)	9/70 (12.86%)	0/50 (0.00%)	1/52 (1.92%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.0101	0.0426	0.0552
Cochran-Armitage Trend Test; P-value		0.0087*	0.0069*	0.0123*
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6759
metaplasia, squamous				
Overall Rates (a)	4/70 (5.71%)	0/50 (0.00%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.1397	0.3924	0.3659
Cochran-Armitage Trend Test; P-value		NT	NT	0.1616

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level b				
odontodysplasia				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
nose, level c				
erosion/ulcer				
Overall Rates (a)	3/70 (4.29%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.2647	0.6354	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0884
exudate, nasal passage				
Overall Rates (a)	8/70 (11.43%)	1/50 (2.00%)	4/52 (7.69%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.0783	0.5543	0.2076
Cochran-Armitage Trend Test; P-value		NT	NT	0.1868
fibrous osteodystrophy				
Overall Rates (a)	3/70 (4.29%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.2647	0.6354	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0884

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level c				
foreign material				
Overall Rates (a)	1/70 (1.43%)	1/50 (2.00%)	3/52 (5.77%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.3113	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7345
fungus/yeast				
Overall Rates (a)	5/70 (7.14%)	0/50 (0.00%)	2/52 (3.85%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.0746	0.6975	0.2086
Cochran-Armitage Trend Test; P-value		NT	NT	0.1279
inflammation				
Overall Rates (a)	6/70 (8.57%)	0/50 (0.00%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.0402	0.2367	0.1156
Cochran-Armitage Trend Test; P-value		0.0344*	0.0494*	0.0334*
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6759

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level c				
metaplasia, squamous				
Overall Rates (a)	7/70 (10.00%)	0/50 (0.00%)	2/52 (3.85%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.0405	0.2984	0.1654
Cochran-Armitage Trend Test; P-value		NT	NT	0.0892
nose, level d				
erosion/ulcer				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8116
exudate, nasal passage				
Overall Rates (a)	5/70 (7.14%)	1/50 (2.00%)	3/52 (5.77%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.3988	1.0000	0.0581
Cochran-Armitage Trend Test; P-value		NT	NT	0.0617
fibrous osteodystrophy				
Overall Rates (a)	3/70 (4.29%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.2647	0.6354	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0884

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level d				
foreign material				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	3/52 (5.77%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	0.0749	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6766
fungus/yeast				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
inflammation				
Overall Rates (a)	2/70 (2.86%)	0/50 (0.00%)	2/52 (3.85%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.5098	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8431
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6759

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
nose, level d				
metaplasia, squamous				
Overall Rates (a)	3/70 (4.29%)	0/50 (0.00%)	1/52 (1.92%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.2647	0.6354	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.3379
pancreas				
atrophy, acinar				
Overall Rates (a)	17/70 (24.29%)	17/70 (24.29%)	17/70 (24.29%)	12/70 (17.14%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4045
Cochran-Armitage Trend Test; P-value		NT	NT	0.3379
fibrosis				
Overall Rates (a)	21/70 (30.00%)	14/70 (20.00%)	21/70 (30.00%)	18/70 (25.71%)
Fisher's Exact Test; P-value		0.2414	1.0000	0.7064
Cochran-Armitage Trend Test; P-value		NT	NT	0.9037
hyperplasia, acinar cell, focal				
Overall Rates (a)	16/70 (22.86%)	18/70 (25.71%)	7/70 (10.00%)	21/70 (30.00%)
Fisher's Exact Test; P-value		0.8440	0.0664	0.4436
Cochran-Armitage Trend Test; P-value		NT	NT	0.7972

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
pancreas				
hyperplasia, islet cell				
Overall Rates (a)	2/70 (2.86%)	0/70 (0.00%)	2/70 (2.86%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.4964	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3929
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
mineralization, vascular				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
polyarteritis				
Overall Rates (a)	2/70 (2.86%)	2/70 (2.86%)	2/70 (2.86%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2690

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
parathyroid glands				
carcinoma, c-cell, malignant, secondary				
Overall Rates (a)	0/64 (0.00%)	0/43 (0.00%)	0/46 (0.00%)	1/60 (1.67%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4839
Cochran-Armitage Trend Test; P-value		NT	NT	0.2008
hyperplasia, diffuse				
Overall Rates (a)	1/64 (1.56%)	0/43 (0.00%)	2/46 (4.35%)	0/60 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.5703	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8313
hyperplasia, focal				
Overall Rates (a)	5/64 (7.81%)	1/43 (2.33%)	1/46 (2.17%)	6/60 (10.00%)
Fisher's Exact Test; P-value		0.3980	0.3977	0.7579
Cochran-Armitage Trend Test; P-value		NT	NT	0.6700
pharynx				
hemorrhage				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	0/52 (0.00%)	1/69 (1.45%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2062

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
pharynx				
hyperplasia, squamous epithelium				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	0/52 (0.00%)	1/69 (1.45%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2062
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	0/52 (0.00%)	2/69 (2.90%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0732
pituitary gland				
cyst				
Overall Rates (a)	4/70 (5.71%)	4/52 (7.69%)	0/60 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.7222	0.1237	0.3659
Cochran-Armitage Trend Test; P-value		NT	NT	0.0537
fibrosis				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	1/60 (1.67%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4615	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6781

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
pituitary gland				
hyperplasia, craniopharyngeal				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	0/60 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0714
hyperplasia, focal, pars distalis				
Overall Rates (a)	6/70 (8.57%)	4/52 (7.69%)	3/60 (5.00%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	0.5045	0.4932
Cochran-Armitage Trend Test; P-value		NT	NT	0.2456
macrophages, pigmented				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	1/60 (1.67%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4615	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6781
schwannoma, malignant, secondary				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	0/60 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2033

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
prostate gland				
abscess				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6749
inflammation, acute				
Overall Rates (a)	4/70 (5.71%)	4/51 (7.84%)	4/53 (7.55%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.7199	0.7247	0.6806
Cochran-Armitage Trend Test; P-value		NT	NT	0.4774
inflammation, chronic-active				
Overall Rates (a)	12/70 (17.14%)	2/51 (3.92%)	1/53 (1.89%)	10/70 (14.29%)
Fisher's Exact Test; P-value		0.0408	0.0066	0.8169
Cochran-Armitage Trend Test; P-value		NT	NT	0.5209
inflammation, subacute/chronic				
Overall Rates (a)	3/70 (4.29%)	2/51 (3.92%)	1/53 (1.89%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	0.6334	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8777

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
salivary gland, mandibular				
depletion, secretory				
Overall Rates (a)	1/70 (1.43%)	0/49 (0.00%)	0/52 (0.00%)	0/69 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2062
fibrosis				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	0/52 (0.00%)	1/69 (1.45%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2062
mineralization, vascular				
Overall Rates (a)	0/70 (0.00%)	0/49 (0.00%)	1/52 (1.92%)	0/69 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6735
salivary gland, parotid				
atrophy				
Overall Rates (a)	1/70 (1.43%)	2/49 (4.08%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5678	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2191

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
salivary gland, sublingual				
depletion, secretory				
Overall Rates (a)	1/69 (1.45%)	0/49 (0.00%)	0/52 (0.00%)	0/68 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2051
seminal vesicles				
depletion, secretory				
Overall Rates (a)	5/70 (7.14%)	3/50 (6.00%)	5/53 (9.43%)	6/70 (8.57%)
Fisher's Exact Test; P-value		1.0000	0.7441	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6314
dilatation				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	1/53 (1.89%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4013
inflammation				
Overall Rates (a)	8/70 (11.43%)	5/50 (10.00%)	2/53 (3.77%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	0.1850	0.2076
Cochran-Armitage Trend Test; P-value		NT	NT	0.0600

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
skeletal muscle, biceps femoris				
atrophy				
Overall Rates (a)	2/70 (2.86%)	1/50 (2.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2007
degeneration/necrosis, myofiber				
Overall Rates (a)	18/70 (25.71%)	8/50 (16.00%)	5/52 (9.62%)	20/70 (28.57%)
Fisher's Exact Test; P-value		0.2627	0.0342	0.8495
Cochran-Armitage Trend Test; P-value		NT	NT	0.8643
degeneration/regeneration, myofiber				
Overall Rates (a)	2/70 (2.86%)	1/50 (2.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.5068	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3924
skin/skin, subcutis				
abscess				
Overall Rates (a)	2/70 (2.86%)	0/58 (0.00%)	1/59 (1.69%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5005	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2095

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
skin/skin, subcutis				
alopecia/hypotrichosis				
Overall Rates (a)	1/70 (1.43%)	1/58 (1.72%)	0/59 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2199
crust, serocellular				
Overall Rates (a)	0/70 (0.00%)	2/58 (3.45%)	0/59 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.2034	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5389
cyst, keratin				
Overall Rates (a)	0/70 (0.00%)	0/58 (0.00%)	1/59 (1.69%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4574	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6670
erosion/ulcer				
Overall Rates (a)	1/70 (1.43%)	2/58 (3.45%)	2/59 (3.39%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5897	0.5923	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5565

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
skin/skin, subcutis				
hyperkeratosis				
Overall Rates (a)	1/70 (1.43%)	0/58 (0.00%)	0/59 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1944
hyperplasia, epidermal				
Overall Rates (a)	1/70 (1.43%)	2/58 (3.45%)	1/59 (1.69%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.5897	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8426
inflammation				
Overall Rates (a)	0/70 (0.00%)	1/58 (1.72%)	0/59 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4531	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6645
osteosarcoma, malignant, secondary				
Overall Rates (a)	1/70 (1.43%)	0/58 (0.00%)	0/59 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1944

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
small intestine, duodenum				
hyperplasia, mucosal				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6708
small intestine, ileum				
dilatation, gland/lumen				
Overall Rates (a)	1/70 (1.43%)	0/51 (0.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9961
diverticulum				
Overall Rates (a)	1/70 (1.43%)	0/51 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2033
small intestine, jejunum				
dilatation, gland/lumen				
Overall Rates (a)	1/70 (1.43%)	1/51 (1.96%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2304

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
small intestine, jejunum				
erosion/ulcer				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6716
lymphangiectasis				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6716
spinal cord, thoracic				
degeneration, axonal/myelin				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
spleen				
cyst, capsule				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
spleen				
depletion, lymphoid, generalized				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
hematopoiesis, extramedullary, increased				
Overall Rates (a)	26/70 (37.14%)	15/50 (30.00%)	16/52 (30.77%)	23/70 (32.86%)
Fisher's Exact Test; P-value		0.4417	0.5640	0.7233
Cochran-Armitage Trend Test; P-value		NT	NT	0.6186
hyperplasia, reactive red pulp/stromal				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
inflammation, peritoneal				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6708

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
stomach, glandular				
erosion/ulcer				
Overall Rates (a)	0/70 (0.00%)	2/50 (4.00%)	3/53 (5.66%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.1716	0.0774	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4941
gastropathy, uremic				
Overall Rates (a)	4/70 (5.71%)	1/50 (2.00%)	2/53 (3.77%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.3998	0.6982	0.1196
Cochran-Armitage Trend Test; P-value		NT	NT	0.0732
hyperplasia, mucosal				
Overall Rates (a)	0/70 (0.00%)	1/50 (2.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4167	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6690
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6767

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
stomach, nonglandular				
cyst, keratin				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2059
erosion/ulcer				
Overall Rates (a)	5/70 (7.14%)	4/51 (7.84%)	5/52 (9.62%)	5/70 (7.14%)
Fisher's Exact Test; P-value		1.0000	0.7424	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9261
gastropathy, uremic				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6741
hyperplasia, epithelial, limiting ridge				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6716

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
stomach, nonglandular				
hyperplasia, epithelial, nonglandular				
Overall Rates (a)	6/70 (8.57%)	3/51 (5.88%)	4/52 (7.69%)	8/70 (11.43%)
Fisher's Exact Test; P-value		0.7323	1.0000	0.7792
Cochran-Armitage Trend Test; P-value		NT	NT	0.5060
inflammation				
Overall Rates (a)	7/70 (10.00%)	3/51 (5.88%)	5/52 (9.62%)	7/70 (10.00%)
Fisher's Exact Test; P-value		0.5163	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8573
testes				
degeneration/atrophy, seminiferous tubules, bilateral				
Overall Rates (a)	7/70 (10.00%)	4/70 (5.71%)	5/70 (7.14%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.5319	0.7641	0.3255
Cochran-Armitage Trend Test; P-value		NT	NT	0.2433
degeneration/atrophy, seminiferous tubules, unilateral				
Overall Rates (a)	3/70 (4.29%)	3/70 (4.29%)	1/70 (1.43%)	4/70 (5.71%)
Fisher's Exact Test; P-value		1.0000	0.6195	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8908

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
testes				
dilatation, seminiferous tubules, bilateral				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
dilatation, seminiferous tubules, unilateral				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	2/70 (2.86%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4964	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5263
edema				
Overall Rates (a)	1/70 (1.43%)	1/70 (1.43%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4369
granuloma, spermatic				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
testes				
hyperplasia, interstitial cell				
Overall Rates (a)	7/70 (10.00%)	7/70 (10.00%)	3/70 (4.29%)	15/70 (21.43%)
Fisher's Exact Test; P-value		1.0000	0.3255	0.1025
Cochran-Armitage Trend Test; P-value		NT	NT	0.0935
inflammation, peritoneal				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
mesothelioma, malignant, secondary				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
polyarteritis				
Overall Rates (a)	6/70 (8.57%)	5/70 (7.14%)	7/70 (10.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.1156
Cochran-Armitage Trend Test; P-value		NT	NT	0.1679

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
thymus				
depletion, lymphoid, generalized				
Overall Rates (a)	67/69 (97.10%)	46/50 (92.00%)	49/52 (94.23%)	68/68 (100.00%)
Fisher's Exact Test; P-value		0.2370	0.6505	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.3178
hyperplasia, epithelial cell				
Overall Rates (a)	0/69 (0.00%)	1/50 (2.00%)	0/52 (0.00%)	0/68 (0.00%)
Fisher's Exact Test; P-value		0.4202	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6735
hyperplasia, lymphoid, medulla				
Overall Rates (a)	0/69 (0.00%)	1/50 (2.00%)	0/52 (0.00%)	0/68 (0.00%)
Fisher's Exact Test; P-value		0.4202	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6735
thyroid gland				
cyst, follicular				
Overall Rates (a)	0/70 (0.00%)	2/51 (3.92%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.1756	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8016

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
thyroid gland				
hyperplasia, c-cell, focal				
Overall Rates (a)	9/70 (12.86%)	3/51 (5.88%)	3/53 (5.66%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.2363	0.2297	0.1284
Cochran-Armitage Trend Test; P-value		NT	NT	0.0607
hyperplasia, follicular cell				
Overall Rates (a)	1/70 (1.43%)	0/51 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2033
hypertrophy/hyperplasia, follicular cell				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5522
inflammation, subacute/chronic				
Overall Rates (a)	0/70 (0.00%)	1/51 (1.96%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4215	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6698

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
tongue				
hyperplasia, squamous cell				
Overall Rates (a)	0/70 (0.00%)	0/69 (0.00%)	0/70 (0.00%)	2/69 (2.90%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.0567
inflammation, subacute/chronic				
Overall Rates (a)	1/70 (1.43%)	0/69 (0.00%)	0/70 (0.00%)	2/69 (2.90%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.4336
mineralization, vascular				
Overall Rates (a)	0/70 (0.00%)	0/69 (0.00%)	1/70 (1.43%)	0/69 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6524
trachea				
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6759

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
trachea				
exudate, luminal				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2073
inflammation, acute				
Overall Rates (a)	1/70 (1.43%)	0/50 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2048
ureters				
crystals, hemoglobin				
Overall Rates (a)	1/70 (1.43%)	0/51 (0.00%)	0/52 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2046
dilatation				
Overall Rates (a)	5/70 (7.14%)	2/51 (3.92%)	5/52 (9.62%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.6976	0.7424	0.2086
Cochran-Armitage Trend Test; P-value		NT	NT	0.2768

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
ureters				
hemorrhage				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	1/52 (1.92%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4262	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6741
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/51 (0.00%)	0/52 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2059
urinary bladder				
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2044
calculus/calculi				
Overall Rates (a)	0/70 (0.00%)	2/52 (3.85%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.1797	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5466

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
urinary bladder				
dilatation				
Overall Rates (a)	2/70 (2.86%)	1/52 (1.92%)	4/53 (7.55%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	0.4009	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6705
erosion/ulcer				
Overall Rates (a)	1/70 (1.43%)	0/52 (0.00%)	0/53 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2031
hemorrhage				
Overall Rates (a)	2/70 (2.86%)	0/52 (0.00%)	3/53 (5.66%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.5068	0.6509	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6300
hyperplasia, papillary/nodular transitional cell				
Overall Rates (a)	1/70 (1.43%)	2/52 (3.85%)	0/53 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.5747	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6674

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - MALE

Tissue Diagnosis	0 mg/kg/day	0.1 mg/kg/day	1 mg/kg/day	50 mg/kg/day
urinary bladder				
hyperplasia, simple transitional cell				
Overall Rates (a)	3/70 (4.29%)	3/52 (5.77%)	6/53 (11.32%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.6992	0.1718	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9947
inflammation				
Overall Rates (a)	6/70 (8.57%)	6/52 (11.54%)	6/53 (11.32%)	4/70 (5.71%)
Fisher's Exact Test; P-value		0.7600	0.7608	0.7447
Cochran-Armitage Trend Test; P-value		NT	NT	0.5650
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	0/52 (0.00%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6731
inflammation, peritoneal				
Overall Rates (a)	0/70 (0.00%)	1/52 (1.92%)	1/53 (1.89%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4262	0.4309	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9980

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
adrenal glands				
angiectasis/cystic degeneration, focal cortical				
Overall Rates (a)	64/70 (91.43%)	64/70 (91.43%)	61/70 (87.14%)	60/70 (85.71%)
Fisher's Exact Test; P-value		1.0000	0.5861	0.4264
Cochran-Armitage Trend Test; P-value		NT	NT	0.2022
atrophy, cortical				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	2/70 (2.86%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3138
hematopoiesis, extramedullary				
Overall Rates (a)	1/70 (1.43%)	1/70 (1.43%)	3/70 (4.29%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.6195	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7125
hyperplasia, focal cortical				
Overall Rates (a)	8/70 (11.43%)	15/70 (21.43%)	10/70 (14.29%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.1703	0.8014	0.2076
Cochran-Armitage Trend Test; P-value		NT	NT	0.1109

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
adrenal glands				
hyperplasia, focal medullary				
Overall Rates (a)	6/70 (8.57%)	8/70 (11.43%)	8/70 (11.43%)	10/70 (14.29%)
Fisher's Exact Test; P-value		0.7792	0.7792	0.4264
Cochran-Armitage Trend Test; P-value		NT	NT	0.3143
hypertrophy, focal cortical				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
vacuolation, focal				
Overall Rates (a)	2/70 (2.86%)	1/70 (1.43%)	1/70 (1.43%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000
aorta				
mineralization				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2009

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
bone marrow, femur				
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
hyperplasia, granulocytic				
Overall Rates (a)	13/70 (18.57%)	14/48 (29.17%)	5/55 (9.09%)	15/70 (21.43%)
Fisher's Exact Test; P-value		0.1893	0.1991	0.8330
Cochran-Armitage Trend Test; P-value		NT	NT	0.7657
hyperplasia, mixed				
Overall Rates (a)	2/70 (2.86%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5133	0.5032	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0699
bone marrow, sternum				
angiectasis				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2009

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
bone marrow, sternum				
hyperplasia, granulocytic				
Overall Rates (a)	11/70 (15.71%)	10/48 (20.83%)	5/55 (9.09%)	6/70 (8.57%)
Fisher's Exact Test; P-value		0.4756	0.2970	0.3007
Cochran-Armitage Trend Test; P-value		NT	NT	0.0944
hyperplasia, mixed				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2009
proliferation, fibro-osseous				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
bone, femur				
hyperostosis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
bone, sternum				
hyperostosis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
brain				
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
carcinoma, pars distalis, malignant, secondary				
Overall Rates (a)	5/70 (7.14%)	3/48 (6.25%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.0664	0.0581
Cochran-Armitage Trend Test; P-value		NT	0.0660	0.0057*
compression, ventral (pituitary tumor)				
Overall Rates (a)	32/70 (45.71%)	31/48 (64.58%)	35/55 (63.64%)	19/70 (27.14%)
Fisher's Exact Test; P-value		0.0601	0.0498	0.0346
Cochran-Armitage Trend Test; P-value		0.0444*	0.0375*	0.0379*

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
brain				
hemorrhage				
Overall Rates (a)	2/70 (2.86%)	5/48 (10.42%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.1189	0.5032	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0702
inflammation, embolic				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
eyes				
cataract				
Overall Rates (a)	0/69 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.2446
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0296*
inflammation, acute				
Overall Rates (a)	0/69 (0.00%)	0/48 (0.00%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4435	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6852

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
eyes, retina				
degeneration/atrophy, retina, bilateral				
Overall Rates (a)	1/62 (1.61%)	2/43 (4.65%)	1/53 (1.89%)	0/65 (0.00%)
Fisher's Exact Test; P-value		0.5662	1.0000	0.4882
Cochran-Armitage Trend Test; P-value		NT	NT	0.3536
degeneration/atrophy, retina, unilateral				
Overall Rates (a)	0/62 (0.00%)	3/43 (6.98%)	2/53 (3.77%)	2/65 (3.08%)
Fisher's Exact Test; P-value		0.0658	0.2102	0.4963
Cochran-Armitage Trend Test; P-value		NT	NT	0.4738
detachment, retinal				
Overall Rates (a)	0/62 (0.00%)	0/43 (0.00%)	0/53 (0.00%)	1/65 (1.54%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2159
fold/rosette, retinal				
Overall Rates (a)	0/62 (0.00%)	1/43 (2.33%)	0/53 (0.00%)	0/65 (0.00%)
Fisher's Exact Test; P-value		0.4095	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6450

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
harderian glands				
hyperplasia, focal				
Overall Rates (a)	6/69 (8.70%)	1/48 (2.08%)	2/55 (3.64%)	2/69 (2.90%)
Fisher's Exact Test; P-value		0.2373	0.2988	0.2744
Cochran-Armitage Trend Test; P-value		NT	NT	0.1400
heart				
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
cardiomyopathy				
Overall Rates (a)	39/70 (55.71%)	27/48 (56.25%)	23/55 (41.82%)	35/70 (50.00%)
Fisher's Exact Test; P-value		1.0000	0.1504	0.6117
Cochran-Armitage Trend Test; P-value		NT	NT	0.2899
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
heart				
thrombus				
Overall Rates (a)	0/70 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4068	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5611
kidneys				
adenocarcinoma, malignant, secondary				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
cyst				
Overall Rates (a)	1/70 (1.43%)	2/70 (2.86%)	1/70 (1.43%)	4/70 (5.71%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.3659
Cochran-Armitage Trend Test; P-value		NT	NT	0.2002

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
kidneys				
dilatation, tubular				
Overall Rates (a)	4/70 (5.71%)	2/70 (2.86%)	5/70 (7.14%)	28/70 (40.00%)
Fisher's Exact Test; P-value		0.6806	1.0000	0.0000
Cochran-Armitage Trend Test; P-value		NT	0.7051	0.0000*
edema, papilla				
Overall Rates (a)	4/70 (5.71%)	1/70 (1.43%)	2/70 (2.86%)	43/70 (61.43%)
Fisher's Exact Test; P-value		0.3659	0.6806	0.0000
Cochran-Armitage Trend Test; P-value		NT	0.3475	0.0000*
fibrosis				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
hyaline, droplets, increased				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	2/70 (2.86%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4964	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5263

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
kidneys				
hydronephrosis, bilateral				
Overall Rates (a)	1/70 (1.43%)	2/70 (2.86%)	0/70 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8403
hydronephrosis, unilateral				
Overall Rates (a)	5/70 (7.14%)	2/70 (2.86%)	2/70 (2.86%)	4/70 (5.71%)
Fisher's Exact Test; P-value		0.4411	0.4411	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7037
hyperplasia, transitional cell				
Overall Rates (a)	6/70 (8.57%)	3/70 (4.29%)	12/70 (17.14%)	33/70 (47.14%)
Fisher's Exact Test; P-value		0.4932	0.2060	0.0000
Cochran-Armitage Trend Test; P-value		NT	0.0917	0.0000*
hyperplasia, tubular				
Overall Rates (a)	0/70 (0.00%)	2/70 (2.86%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4964	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5263

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
kidneys				
infarct				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
inflammation, embolic				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
macrophages, pigmented				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
kidneys				
mineralization, pelvic				
Overall Rates (a)	52/70 (74.29%)	63/70 (90.00%)	58/70 (82.86%)	63/70 (90.00%)
Fisher's Exact Test; P-value		0.0259	0.3031	0.0259
Cochran-Armitage Trend Test; P-value		NT	0.1842	0.0401*
mineralization, tubular				
Overall Rates (a)	25/70 (35.71%)	32/70 (45.71%)	28/70 (40.00%)	42/70 (60.00%)
Fisher's Exact Test; P-value		0.3020	0.7277	0.0066
Cochran-Armitage Trend Test; P-value		NT	0.6063	0.0118*
necrosis, papillary				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	16/70 (22.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.0000
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0000*
nephropathy, chronic progressive				
Overall Rates (a)	39/70 (55.71%)	40/70 (57.14%)	41/70 (58.57%)	64/70 (91.43%)
Fisher's Exact Test; P-value		1.0000	0.8645	0.0000
Cochran-Armitage Trend Test; P-value		NT	0.7333	0.0000*

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
kidneys				
polyarteritis				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
pyelitis				
Overall Rates (a)	11/70 (15.71%)	10/70 (14.29%)	15/70 (21.43%)	4/70 (5.71%)
Fisher's Exact Test; P-value		1.0000	0.5150	0.0986
Cochran-Armitage Trend Test; P-value		NT	NT	0.2225
lacrimal glands, exorbital				
atrophy				
Overall Rates (a)	0/69 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4103	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6597
depletion, secretory				
Overall Rates (a)	0/69 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2109

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
large intestine, cecum				
erosion/ulcer				
Overall Rates (a)	1/70 (1.43%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2247
hypertrophy/hyperplasia, goblet cell				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
polyarteritis				
Overall Rates (a)	2/70 (2.86%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5133	0.5032	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0699
large intestine, colon				
hypertrophy/hyperplasia, goblet cell				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
large intestine, rectum				
hypertrophy/hyperplasia, goblet cell				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
larynx				
exudate, luminal				
Overall Rates (a)	0/69 (0.00%)	0/48 (0.00%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4435	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6852
foreign material				
Overall Rates (a)	0/69 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4103	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6597
inflammation				
Overall Rates (a)	0/69 (0.00%)	0/48 (0.00%)	2/55 (3.64%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.1947	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5657

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
larynx				
mucus increased				
Overall Rates (a)	0/69 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4103	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6597
liver				
angiectasis				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	3/70 (4.29%)	5/70 (7.14%)
Fisher's Exact Test; P-value		1.0000	0.6195	0.2086
Cochran-Armitage Trend Test; P-value		NT	0.2173	0.0233*
cyst, biliary, simple				
Overall Rates (a)	2/70 (2.86%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4964	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0697
degeneration, cystic, focal				
Overall Rates (a)	2/70 (2.86%)	2/70 (2.86%)	2/70 (2.86%)	14/70 (20.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.0024
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0002*

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
liver				
dilatation, cystic, bile ducts				
Overall Rates (a)	2/70 (2.86%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4964	0.4964	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0573
dilatation, sinusoidal				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
fibrosis				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	2/70 (2.86%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6530
focus of cellular alteration, basophilic				
Overall Rates (a)	30/70 (42.86%)	26/70 (37.14%)	32/70 (45.71%)	19/70 (27.14%)
Fisher's Exact Test; P-value		0.6050	0.8650	0.0759
Cochran-Armitage Trend Test; P-value		NT	NT	0.1382

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
liver				
focus of cellular alteration, clear				
Overall Rates (a)	2/70 (2.86%)	1/70 (1.43%)	3/70 (4.29%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7488
focus of cellular alteration, eosinophilic				
Overall Rates (a)	10/70 (14.29%)	6/70 (8.57%)	12/70 (17.14%)	12/70 (17.14%)
Fisher's Exact Test; P-value		0.4264	0.8169	0.8169
Cochran-Armitage Trend Test; P-value		NT	NT	0.3603
hematopoiesis, extramedullary				
Overall Rates (a)	13/70 (18.57%)	26/70 (37.14%)	24/70 (34.29%)	11/70 (15.71%)
Fisher's Exact Test; P-value		0.0230	0.0545	0.8230
Cochran-Armitage Trend Test; P-value		NT	NT	0.6284
hyperplasia, bile duct				
Overall Rates (a)	34/70 (48.57%)	34/70 (48.57%)	34/70 (48.57%)	28/70 (40.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.3950
Cochran-Armitage Trend Test; P-value		NT	NT	0.3356

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
liver				
hypertrophy, hepatocyte, centrilobular				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	3/70 (4.29%)	65/70 (92.86%)
Fisher's Exact Test; P-value		1.0000	0.2446	0.0000
Cochran-Armitage Trend Test; P-value		1.0000	0.0330*	0.0000*
hypertrophy, hepatocyte, panlobular				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.2446
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0197*
infiltration, mononuclear cell				
Overall Rates (a)	18/70 (25.71%)	11/70 (15.71%)	9/70 (12.86%)	17/70 (24.29%)
Fisher's Exact Test; P-value		0.2104	0.0854	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7371
infiltration/inflammation, mixed cell				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
liver				
inflammation, acute				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
inflammation, chronic-active				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
leukocytosis, sinusoidal				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5263
macrophages, pigmented				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4369

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
liver				
multinucleated, hepatocytes				
Overall Rates (a)	2/70 (2.86%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4964	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0697
necrosis				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
necrosis, focal				
Overall Rates (a)	5/70 (7.14%)	4/70 (5.71%)	6/70 (8.57%)	8/70 (11.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.5619
Cochran-Armitage Trend Test; P-value		NT	NT	0.2852
necrosis, hepatocytes, centrilobular				
Overall Rates (a)	1/70 (1.43%)	1/70 (1.43%)	4/70 (5.71%)	7/70 (10.00%)
Fisher's Exact Test; P-value		1.0000	0.3659	0.0625
Cochran-Armitage Trend Test; P-value		NT	0.1289	0.0078*

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
liver				
necrosis, individual hepatocyte				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.2446
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0197*
vacuolation, centrilobular				
Overall Rates (a)	3/70 (4.29%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.6195	0.2446	0.2446
Cochran-Armitage Trend Test; P-value		NT	0.0642	0.0246*
vacuolation, diffuse				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
vacuolation, focal				
Overall Rates (a)	1/70 (1.43%)	1/70 (1.43%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7955

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
liver				
vacuolation, median cleft				
Overall Rates (a)	1/70 (1.43%)	1/70 (1.43%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7955
vacuolation, periportal				
Overall Rates (a)	17/70 (24.29%)	23/70 (32.86%)	22/70 (31.43%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.3497	0.4510	0.0003
Cochran-Armitage Trend Test; P-value		NT	0.3554	0.0035*
lung				
adenocarcinoma, malignant, secondary				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4369
bacterial colonies				
Overall Rates (a)	2/70 (2.86%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4964	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.1951

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
lung				
congestion, chronic passive				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
fibrosis				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
foreign material				
Overall Rates (a)	0/70 (0.00%)	2/70 (2.86%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4964	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5263
granuloma				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
lung				
hemorrhage				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000
histiocytosis, alveolar				
Overall Rates (a)	22/70 (31.43%)	20/70 (28.57%)	21/70 (30.00%)	42/70 (60.00%)
Fisher's Exact Test; P-value		0.8538	1.0000	0.0012
Cochran-Armitage Trend Test; P-value		NT	0.8540	0.0008*
infiltration, lymphoid, perivascular				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	3/70 (4.29%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.2446	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
lung				
inflammation, subacute/chronic				
Overall Rates (a)	1/70 (1.43%)	3/70 (4.29%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.6195	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3138
leukocytosis, vascular				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
macrophages, pigmented alveolar				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000
mucus increased				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
lymph node, axillary				
erythrocytosis/erythrophagocytosis, sinus				
Overall Rates (a)	1/23 (4.35%)	0/22 (0.00%)	0/18 (0.00%)	1/12 (8.33%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7403
histiocytosis, sinus				
Overall Rates (a)	1/23 (4.35%)	1/22 (4.55%)	1/18 (5.56%)	0/12 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6746
hyperplasia, lymphocyte/plasmacyte, medulla				
Overall Rates (a)	1/23 (4.35%)	2/22 (9.09%)	1/18 (5.56%)	1/12 (8.33%)
Fisher's Exact Test; P-value		0.6078	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7503
lymph node, iliac				
dilatation, sinus				
Overall Rates (a)	0/1 (0.00%)	0/4 (0.00%)	1/3 (33.33%)	0/7 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9467

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
lymph node, iliac				
hyperplasia, lymphocyte/plasmacyte, medulla				
Overall Rates (a)	0/1 (0.00%)	1/4 (25.00%)	0/3 (0.00%)	0/7 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2850
lymph node, mandibular				
dilatation, sinus				
Overall Rates (a)	0/69 (0.00%)	1/51 (1.96%)	0/56 (0.00%)	1/69 (1.45%)
Fisher's Exact Test; P-value		0.4250	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5541
erythrocytosis/erythrophagocytosis, sinus				
Overall Rates (a)	16/69 (23.19%)	11/51 (21.57%)	14/56 (25.00%)	8/69 (11.59%)
Fisher's Exact Test; P-value		1.0000	0.8359	0.1147
Cochran-Armitage Trend Test; P-value		NT	NT	0.1351
hyperplasia, lymphocyte/plasmacyte, medulla				
Overall Rates (a)	1/69 (1.45%)	1/51 (1.96%)	0/56 (0.00%)	1/69 (1.45%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7932

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
lymph node, mesenteric				
dilatation, sinus				
Overall Rates (a)	2/70 (2.86%)	0/48 (0.00%)	1/56 (1.79%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5133	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.2112
erythrocytosis/erythrophagocytosis, sinus				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	1/56 (1.79%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5359
hyperplasia, lymphocyte/plasmacyte, medulla				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/56 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2094
mammary gland				
abscess				
Overall Rates (a)	1/70 (1.43%)	0/67 (0.00%)	0/66 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1847

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
mammary gland				
dilatation, gland/lumen				
Overall Rates (a)	1/70 (1.43%)	0/67 (0.00%)	0/66 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1847
galactocele				
Overall Rates (a)	0/70 (0.00%)	3/67 (4.48%)	1/66 (1.52%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.1143	0.4853	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6586
hyperplasia, lobular				
Overall Rates (a)	64/70 (91.43%)	47/67 (70.15%)	56/66 (84.85%)	62/70 (88.57%)
Fisher's Exact Test; P-value		0.0020	0.2913	0.7792
Cochran-Armitage Trend Test; P-value		NT	NT	0.7801
nerve, sciatic				
degeneration, axonal/myelin				
Overall Rates (a)	37/70 (52.86%)	21/48 (43.75%)	23/55 (41.82%)	39/70 (55.71%)
Fisher's Exact Test; P-value		0.3544	0.2795	0.8654
Cochran-Armitage Trend Test; P-value		NT	NT	0.8060

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
nerve, sciatic				
inflammation, subacute/chronic				
Overall Rates (a)	0/70 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4068	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6640
nose, level a				
exudate, nasal passage				
Overall Rates (a)	0/70 (0.00%)	5/48 (10.42%)	2/55 (3.64%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.0098	0.1916	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9721
foreign material				
Overall Rates (a)	1/70 (1.43%)	2/48 (4.17%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.5657	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3820
hyperostosis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
nose, level a				
inflammation				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	1/55 (1.82%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.1917
inflammation, hair follicle/epidermis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
nose, level b				
degeneration				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2009
exudate, nasal passage				
Overall Rates (a)	2/70 (2.86%)	6/48 (12.50%)	1/55 (1.82%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.0610	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2594

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
nose, level b				
foreign material				
Overall Rates (a)	1/70 (1.43%)	5/48 (10.42%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.0401	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1545
hyperostosis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	1/55 (1.82%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2382
metaplasia, squamous				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
nose, level b				
mucus increased				
Overall Rates (a)	0/70 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4068	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6640
nose, level c				
erosion/ulcer				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
exudate, nasal passage				
Overall Rates (a)	0/70 (0.00%)	3/48 (6.25%)	1/55 (1.82%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.0648	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8705
foreign material				
Overall Rates (a)	2/70 (2.86%)	2/48 (4.17%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.5032	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3273

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
nose, level c				
hyperostosis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
mucus increased				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6817
nose, level d				
degeneration/necrosis, olfactory epithelium				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6817

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
nose, level d				
erosion/ulcer				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
exudate, nasal passage				
Overall Rates (a)	0/70 (0.00%)	2/48 (4.17%)	1/55 (1.82%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.1634	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6888
foreign material				
Overall Rates (a)	1/70 (1.43%)	2/48 (4.17%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.5657	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6532
hyperostosis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
nose, level d				
inflammation				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
mucus increased				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6817
ovaries				
cyst				
Overall Rates (a)	16/70 (22.86%)	16/50 (32.00%)	11/56 (19.64%)	13/70 (18.57%)
Fisher's Exact Test; P-value		0.2991	0.8274	0.6771
Cochran-Armitage Trend Test; P-value		NT	NT	0.3224
fibrosis				
Overall Rates (a)	0/70 (0.00%)	0/50 (0.00%)	0/56 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2067

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
ovaries				
hyperplasia, sex-cord/stromal				
Overall Rates (a)	9/70 (12.86%)	1/50 (2.00%)	4/56 (7.14%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.0442	0.3827	0.1284
Cochran-Armitage Trend Test; P-value		NT	NT	0.1008
pancreas				
atrophy, acinar				
Overall Rates (a)	9/70 (12.86%)	16/70 (22.86%)	10/70 (14.29%)	7/70 (10.00%)
Fisher's Exact Test; P-value		0.1848	1.0000	0.7914
Cochran-Armitage Trend Test; P-value		NT	NT	0.3699
bacterial colonies				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
dilatation, duct				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
pancreas				
fibrosis				
Overall Rates (a)	4/70 (5.71%)	0/70 (0.00%)	2/70 (2.86%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.1196	0.6806	0.3659
Cochran-Armitage Trend Test; P-value		NT	NT	0.2316
hyperplasia, acinar cell, focal				
Overall Rates (a)	0/70 (0.00%)	2/70 (2.86%)	5/70 (7.14%)	5/70 (7.14%)
Fisher's Exact Test; P-value		0.4964	0.0581	0.0581
Cochran-Armitage Trend Test; P-value		0.1558	0.0188*	0.0177*
hyperplasia, islet cell				
Overall Rates (a)	1/70 (1.43%)	2/70 (2.86%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3685
polyarteritis				
Overall Rates (a)	2/70 (2.86%)	0/70 (0.00%)	2/70 (2.86%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4964	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.8403

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
parathyroid glands				
hyperplasia, focal				
Overall Rates (a)	3/53 (5.66%)	1/37 (2.70%)	1/41 (2.44%)	1/53 (1.89%)
Fisher's Exact Test; P-value		0.6408	0.6295	0.6178
Cochran-Armitage Trend Test; P-value		NT	NT	0.2839
pituitary gland				
cyst				
Overall Rates (a)	1/70 (1.43%)	0/65 (0.00%)	0/65 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4435
hyperplasia, diffuse, pars distalis				
Overall Rates (a)	3/70 (4.29%)	1/65 (1.54%)	1/65 (1.54%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.6204	0.6204	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000
hyperplasia, focal, pars distalis				
Overall Rates (a)	2/70 (2.86%)	0/65 (0.00%)	0/65 (0.00%)	4/70 (5.71%)
Fisher's Exact Test; P-value		0.4970	0.4970	0.6806
Cochran-Armitage Trend Test; P-value		NT	NT	0.2758

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
salivary gland, mandibular				
atrophy				
Overall Rates (a)	1/69 (1.45%)	0/47 (0.00%)	0/54 (0.00%)	0/69 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2012
salivary gland, parotid				
atrophy				
Overall Rates (a)	0/69 (0.00%)	1/48 (2.08%)	0/54 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4103	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6615
edema				
Overall Rates (a)	0/69 (0.00%)	0/48 (0.00%)	0/54 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2111
skeletal muscle, biceps femoris				
degeneration/necrosis, myofiber				
Overall Rates (a)	15/70 (21.43%)	0/48 (0.00%)	4/55 (7.27%)	14/70 (20.00%)
Fisher's Exact Test; P-value		0.0003	0.0429	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9969

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
skeletal muscle, biceps femoris				
degeneration/regeneration, myofiber				
Overall Rates (a)	0/70 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.4068	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5611
skin/skin, subcutis				
abscess				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
alopecia/hypotrichosis				
Overall Rates (a)	1/70 (1.43%)	2/48 (4.17%)	5/55 (9.09%)	9/70 (12.86%)
Fisher's Exact Test; P-value		0.5657	0.0860	0.0173
Cochran-Armitage Trend Test; P-value		0.3553	0.0451*	0.0050*
cyst, keratin				
Overall Rates (a)	0/70 (0.00%)	1/48 (2.08%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4068	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9862

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
skin/skin, subcutis				
erosion/ulcer				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2009
hyperplasia, epidermal				
Overall Rates (a)	0/70 (0.00%)	1/48 (2.08%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4068	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9862
small intestine, duodenum				
hypertrophy/hyperplasia, goblet cell				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
small intestine, ileum				
hypertrophy/hyperplasia, goblet cell				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
small intestine, jejunum				
hypertrophy/hyperplasia, goblet cell				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
spinal cord, thoracic				
degeneration, axonal/myelin				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
spleen				
depletion, lymphoid, generalized				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/57 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0752
fibrosis, capsular				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	1/57 (1.75%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.4488	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6832

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
spleen				
hematopoiesis, extramedullary, increased				
Overall Rates (a)	31/70 (44.29%)	20/48 (41.67%)	25/57 (43.86%)	40/70 (57.14%)
Fisher's Exact Test; P-value		0.8509	1.0000	0.1761
Cochran-Armitage Trend Test; P-value		NT	NT	0.1334
stomach, glandular				
erosion/ulcer				
Overall Rates (a)	2/70 (2.86%)	0/48 (0.00%)	0/55 (0.00%)	3/70 (4.29%)
Fisher's Exact Test; P-value		0.5133	0.5032	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5865
fibrosis				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0754
inflammation				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2009

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
stomach, glandular				
mineralization				
Overall Rates (a)	0/70 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2096
stomach, nonglandular				
cyst, keratin				
Overall Rates (a)	1/70 (1.43%)	1/70 (1.43%)	0/70 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6530
edema				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
erosion/ulcer				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	2/70 (2.86%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7955

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
stomach, nonglandular				
erosion/ulcer, limiting ridge				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.4964
Cochran-Armitage Trend Test; P-value		NT	NT	0.0697
hyperplasia, epithelial, limiting ridge				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)	9/70 (12.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.0030
Cochran-Armitage Trend Test; P-value		NT	1.0000	0.0000*
hyperplasia, epithelial, nonglandular				
Overall Rates (a)	3/70 (4.29%)	3/70 (4.29%)	5/70 (7.14%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	0.7184	0.2446
Cochran-Armitage Trend Test; P-value		NT	NT	0.3364
inflammation				
Overall Rates (a)	4/70 (5.71%)	2/70 (2.86%)	6/70 (8.57%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.6806	0.7447	0.1196
Cochran-Armitage Trend Test; P-value		NT	NT	0.2920

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
thymus				
depletion, lymphoid, generalized				
Overall Rates (a)	67/68 (98.53%)	46/48 (95.83%)	51/55 (92.73%)	66/67 (98.51%)
Fisher's Exact Test; P-value		0.5686	0.1717	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7760
hyperplasia, epithelial cell				
Overall Rates (a)	26/68 (38.24%)	21/48 (43.75%)	19/55 (34.55%)	21/67 (31.34%)
Fisher's Exact Test; P-value		0.5702	0.7098	0.4710
Cochran-Armitage Trend Test; P-value		NT	NT	0.2920
hyperplasia, lymphoid, medulla				
Overall Rates (a)	1/68 (1.47%)	3/48 (6.25%)	0/55 (0.00%)	2/67 (2.99%)
Fisher's Exact Test; P-value		0.3052	1.0000	0.6194
Cochran-Armitage Trend Test; P-value		NT	NT	0.9859
thyroid gland				
cyst, follicular				
Overall Rates (a)	0/69 (0.00%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2109

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
thyroid gland				
hyperplasia, c-cell, focal				
Overall Rates (a)	10/69 (14.49%)	3/48 (6.25%)	6/55 (10.91%)	7/70 (10.00%)
Fisher's Exact Test; P-value		0.2341	0.6010	0.4496
Cochran-Armitage Trend Test; P-value		NT	NT	0.5355
hyperplasia, follicular cell				
Overall Rates (a)	1/69 (1.45%)	0/48 (0.00%)	0/55 (0.00%)	2/70 (2.86%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4808
tongue				
erosion/ulcer				
Overall Rates (a)	0/70 (0.00%)	1/70 (1.43%)	1/70 (1.43%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.4369
hyperplasia, squamous cell				
Overall Rates (a)	2/70 (2.86%)	8/70 (11.43%)	4/70 (5.71%)	13/70 (18.57%)
Fisher's Exact Test; P-value		0.0967	0.6806	0.0047
Cochran-Armitage Trend Test; P-value		NT	0.4990	0.0088*

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
tongue				
inflammation, acute				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
inflammation, subacute/chronic				
Overall Rates (a)	3/70 (4.29%)	8/70 (11.43%)	4/70 (5.71%)	13/70 (18.57%)
Fisher's Exact Test; P-value		0.2076	1.0000	0.0146
Cochran-Armitage Trend Test; P-value		NT	0.7434	0.0208*
trachea				
inflammation, acute				
Overall Rates (a)	0/70 (0.00%)	1/48 (2.08%)	1/55 (1.82%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4068	0.4400	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9862
ureters				
dilatation				
Overall Rates (a)	4/70 (5.71%)	2/47 (4.26%)	0/54 (0.00%)	2/69 (2.90%)
Fisher's Exact Test; P-value		1.0000	0.1314	0.6806
Cochran-Armitage Trend Test; P-value		NT	NT	0.2188

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
urinary bladder				
dilatation				
Overall Rates (a)	0/69 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4103	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6597
hemorrhage				
Overall Rates (a)	0/69 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4103	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6597
hyperplasia, simple transitional cell				
Overall Rates (a)	1/69 (1.45%)	1/48 (2.08%)	0/55 (0.00%)	3/70 (4.29%)
Fisher's Exact Test; P-value		1.0000	1.0000	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.3607
inflammation				
Overall Rates (a)	1/69 (1.45%)	1/48 (2.08%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7829

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
urinary bladder				
leiomyosarcoma, malignant, secondary				
Overall Rates (a)	0/69 (0.00%)	1/48 (2.08%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		0.4103	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6597
uterus with cervix				
dilatation, gland/lumen				
Overall Rates (a)	17/70 (24.29%)	19/70 (27.14%)	22/70 (31.43%)	13/70 (18.57%)
Fisher's Exact Test; P-value		0.8469	0.4510	0.5371
Cochran-Armitage Trend Test; P-value		NT	NT	0.5810
hyperkeratosis				
Overall Rates (a)	2/70 (2.86%)	1/70 (1.43%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	0.4964	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.3685
hyperplasia, cervical fibromuscular				
Overall Rates (a)	1/70 (1.43%)	4/70 (5.71%)	1/70 (1.43%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.3659	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	1.0000

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
uterus with cervix				
hyperplasia, cystic endometrial				
Overall Rates (a)	1/70 (1.43%)	0/70 (0.00%)	0/70 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.1797
hyperplasia, endometrial				
Overall Rates (a)	3/70 (4.29%)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		0.2446	0.2446	0.6195
Cochran-Armitage Trend Test; P-value		NT	NT	0.1774
hyperplasia, squamous cell				
Overall Rates (a)	4/70 (5.71%)	3/70 (4.29%)	1/70 (1.43%)	4/70 (5.71%)
Fisher's Exact Test; P-value		1.0000	0.3659	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.7922
metaplasia, squamous				
Overall Rates (a)	2/70 (2.86%)	0/70 (0.00%)	4/70 (5.71%)	2/70 (2.86%)
Fisher's Exact Test; P-value		0.4964	0.6806	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.5218

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

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

Statistical Analysis of Non-Neoplastic Lesions - FEMALE

Tissue Diagnosis	0 mg/kg/day	1 mg/kg/day	50 mg/kg/day	500 mg/kg/day
uterus with cervix				
thrombus				
Overall Rates (a)	0/70 (0.00%)	0/70 (0.00%)	1/70 (1.43%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.6547
vagina				
hyperplasia, fibromuscular				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	1/70 (1.43%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.9862
prolapse				
Overall Rates (a)	1/70 (1.43%)	0/48 (0.00%)	0/55 (0.00%)	0/70 (0.00%)
Fisher's Exact Test; P-value		1.0000	1.0000	1.0000
Cochran-Armitage Trend Test; P-value		NT	NT	0.2009

(a) - Number of animals with lesion/number of animals with the tissue examined
NT - Not Tested

Table 9
Individual Animal Final Body and Organ Weights

Codes For Individual Organ Weight Values

Abbreviations

BrWt – Brain Weight
BWt – Body Weight
gl – gland
w/ – with

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

Individual Animal Final Body and Organ Weights - MALE

Interim

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Epididymides g	Epididymides/ BWt %	Epididymides/ BrWt ratio
0 mg/kg/day									
1001	630	2.251	0.3573	0.073	0.0116	0.0324	1.666	0.2644	0.7401
1002	838	2.437	0.2908	0.059	0.0070	0.0242	1.754	0.2093	0.7197
1003	796	2.338	0.2937	0.048	0.0060	0.0205	1.416	0.1779	0.6056
1004	728	2.368	0.3253	0.057	0.0078	0.0241	1.377	0.1891	0.5815
1005	963	2.153	0.2236	0.073	0.0076	0.0339	1.513	0.1571	0.7027
1006	1049	2.286	0.2179	0.057	0.0054	0.0249	1.679	0.1601	0.7345
1007	801	2.275	0.2840	0.049	0.0061	0.0215	1.297	0.1619	0.5701
1008	878	2.361	0.2689	0.084	0.0096	0.0356	1.395	0.1589	0.5909
1009	805	2.437	0.3027	0.053	0.0066	0.0217	1.518	0.1886	0.6229
1010	836	2.282	0.2730	0.056	0.0067	0.0245	1.532	0.1833	0.6713
0.1 mg/kg/day									
1081	718	2.529	0.3522	0.061	0.0085	0.0241	1.351	0.1882	0.5342
1082	1011	2.171	0.2147	0.082	0.0081	0.0378	1.461	0.1445	0.6730
1083	937	2.632	0.2809	0.087	0.0093	0.0331	1.297	0.1384	0.4928
1084	819	2.387	0.2915	0.062	0.0076	0.0260	1.354	0.1653	0.5672
1085	746	2.364	0.3169	0.049	0.0066	0.0207	1.384	0.1855	0.5854
1086	778	2.164	0.2781	0.060	0.0077	0.0277	1.510	0.1941	0.6978
1087	634	2.130	0.3360	0.049	0.0077	0.0230	1.418	0.2237	0.6657
1088	680	2.267	0.3334	0.095	0.0140	0.0419	1.446	0.2126	0.6378
1089	853	2.272	0.2664	0.073	0.0086	0.0321	1.376	0.1613	0.6056
1090	700	2.212	0.3160	0.071	0.0101	0.0321	1.547	0.2210	0.6994

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

Individual Animal Final Body and Organ Weights - MALE

Interim

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Epididymides g	Epididymides/ BWt %	Epididymides/ BrWt ratio
1 mg/kg/day									
1161	810	2.357	0.2910	0.064	0.0079	0.0272	1.501	0.1853	0.6368
1162	785	2.200	0.2803	0.047	0.0060	0.0214	1.222	0.1557	0.5555
1163	850	2.082	0.2449	0.051	0.0060	0.0245	1.393	0.1639	0.6691
1164	697	2.011	0.2885	0.092	0.0132	0.0457	1.718	0.2465	0.8543
1165	715	2.359	0.3299	0.060	0.0084	0.0254	1.665	0.2329	0.7058
1166	866	2.184	0.2522	0.098	0.0113	0.0449	1.446	0.1670	0.6621
1167	761	2.221	0.2919	0.069	0.0091	0.0311	1.564	0.2055	0.7042
1168	794	2.366	0.2980	0.076	0.0096	0.0321	1.608	0.2025	0.6796
1169	791	2.344	0.2963	0.087	0.0110	0.0371	1.911	0.2416	0.8153
1170	725	2.288	0.3156	0.038	0.0052	0.0166	1.416	0.1953	0.6189
50 mg/kg/day									
1241	816	2.325	0.2849	0.092	0.0113	0.0396	1.703	0.2087	0.7325
1242	771	2.199	0.2852	0.035	0.0045	0.0159	1.360	0.1764	0.6185
1243	758	2.357	0.3109	0.060	0.0079	0.0255	1.265	0.1669	0.5367
1244	778	2.349	0.3019	0.082	0.0105	0.0349	1.491	0.1916	0.6347
1245	779	2.320	0.2978	0.055	0.0071	0.0237	1.287	0.1652	0.5547
1246	890	2.400	0.2697	0.110	0.0124	0.0458	1.626	0.1827	0.6775
1247	839	2.309	0.2752	0.073	0.0087	0.0316	1.684	0.2007	0.7293
1248	739	2.230	0.3018	0.057	0.0077	0.0256	1.496	0.2024	0.6709
1249[r]	974	2.251	0.2311	0.104	0.0107	0.0462	1.650	0.1694	0.7330
1250	687	2.611	0.3801	0.076	0.0111	0.0291	1.568	0.2282	0.6005

[r] Replacement animal

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

Individual Animal Final Body and Organ Weights - MALE

Interim

Group, Animal Number	Heart g	Heart/BWt %	Heart/BrWt ratio	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio
0 mg/kg/day									
1001	2.142	0.3400	0.9516	4.621	0.7335	2.0529	19.489	3.0935	8.6579
1002	2.215	0.2643	0.9089	6.107	0.7288	2.5059	28.193	3.3643	11.5687
1003	2.223	0.2793	0.9508	7.367	0.9255	3.1510	30.063	3.7768	12.8584
1004	2.046	0.2810	0.8640	5.321	0.7309	2.2470	19.352	2.6582	8.1723
1005	2.324	0.2413	1.0794	6.294	0.6536	2.9234	31.679	3.2896	14.7139
1006	2.475	0.2359	1.0827	6.853	0.6533	2.9978	34.746	3.3123	15.1995
1007	1.951	0.2436	0.8576	5.057	0.6313	2.2229	26.836	3.3503	11.7960
1008	2.210	0.2517	0.9360	5.556	0.6328	2.3532	27.313	3.1108	11.5684
1009	2.274	0.2825	0.9331	5.433	0.6749	2.2294	23.663	2.9395	9.7099
1010	2.387	0.2855	1.0460	5.578	0.6672	2.4443	27.860	3.3325	12.2086
0.1 mg/kg/day									
1081	2.029	0.2826	0.8023	5.542	0.7719	2.1914	27.846	3.8783	11.0107
1082	2.473	0.2446	1.1391	6.130	0.6063	2.8236	33.461	3.3097	15.4127
1083	2.361	0.2520	0.8970	6.423	0.6855	2.4403	31.236	3.3336	11.8678
1084	2.087	0.2548	0.8743	4.892	0.5973	2.0494	26.530	3.2393	11.1144
1085	2.087	0.2798	0.8828	5.633	0.7551	2.3828	24.947	3.3441	10.5529
1086	1.979	0.2544	0.9145	5.098	0.6553	2.3558	23.091	2.9680	10.6705
1087	1.757	0.2771	0.8249	4.473	0.7055	2.1000	18.735	2.9550	8.7958
1088	1.991	0.2928	0.8783	4.944	0.7271	2.1809	23.657	3.4790	10.4354
1089	2.017	0.2365	0.8878	4.741	0.5558	2.0867	28.178	3.3034	12.4023
1090	2.087	0.2981	0.9435	5.619	0.8027	2.5402	23.543	3.3633	10.6433

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

Individual Animal Final Body and Organ Weights - MALE

Interim

Group, Animal Number	Heart g	Heart/BWt %	Heart/BrWt ratio	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio
1 mg/kg/day									
1161	1.978	0.2442	0.8392	5.045	0.6228	2.1404	25.982	3.2077	11.0233
1162	2.092	0.2665	0.9509	5.118	0.6520	2.3264	26.405	3.3637	12.0023
1163	2.180	0.2565	1.0471	5.348	0.6292	2.5687	24.905	2.9300	11.9621
1164	2.147	0.3080	1.0676	5.083	0.7293	2.5276	23.003	3.3003	11.4386
1165	2.080	0.2909	0.8817	5.456	0.7631	2.3128	25.753	3.6018	10.9169
1166	2.120	0.2448	0.9707	5.177	0.5978	2.3704	29.397	3.3946	13.4602
1167	2.210	0.2904	0.9950	5.121	0.6729	2.3057	23.339	3.0669	10.5083
1168	2.458	0.3096	1.0389	6.177	0.7780	2.6107	26.854	3.3821	11.3500
1169	2.848	0.3601	1.2150	5.394	0.6819	2.3012	25.866	3.2700	11.0350
1170	1.900	0.2621	0.8304	4.148	0.5721	1.8129	23.719	3.2716	10.3667
50 mg/kg/day									
1241	2.142	0.2625	0.9213	6.015	0.7371	2.5871	29.313	3.5923	12.6077
1242	2.263	0.2935	1.0291	5.048	0.6547	2.2956	24.889	3.2281	11.3183
1243	1.859	0.2453	0.7887	4.917	0.6487	2.0861	23.772	3.1361	10.0857
1244	2.183	0.2806	0.9293	5.272	0.6776	2.2444	28.604	3.6766	12.1771
1245	2.016	0.2588	0.8690	5.450	0.6996	2.3491	26.162	3.3584	11.2767
1246	2.312	0.2598	0.9633	6.580	0.7393	2.7417	37.455	4.2084	15.6063
1247	2.479	0.2955	1.0736	6.943	0.8275	3.0069	36.535	4.3546	15.8229
1248	2.125	0.2876	0.9529	5.245	0.7097	2.3520	28.573	3.8664	12.8130
1249[r]	2.410	0.2474	1.0706	6.768	0.6949	3.0067	35.510	3.6458	15.7752
1250	1.981	0.2884	0.7587	5.367	0.7812	2.0555	26.419	3.8456	10.1183

[r] Replacement animal

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

Individual Animal Final Body and Organ Weights - MALE

Interim

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Testes g	Testes/BWt %	Testes/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio
0 mg/kg/day									
1001	1.117	0.1773	0.4962	3.794	0.6022	1.6855	0.043	0.0069	0.0192
1002	1.281	0.1529	0.5256	4.201	0.5013	1.7238	0.037	0.0044	0.0152
1003	1.209	0.1519	0.5171	4.212	0.5291	1.8015	0.034	0.0042	0.0145
1004	1.064	0.1462	0.4493	3.296	0.4527	1.3919	0.031	0.0042	0.0129
1005	1.363	0.1415	0.6331	3.555	0.3692	1.6512	0.046	0.0048	0.0215
1006	1.384	0.1319	0.6054	3.506	0.3342	1.5337	0.040	0.0038	0.0176
1007	1.179	0.1472	0.5182	3.206	0.4002	1.4092	0.039	0.0048	0.0170
1008	1.180	0.1344	0.4998	3.620	0.4123	1.5332	0.045	0.0051	0.0188
1009	1.283	0.1594	0.5265	3.464	0.4303	1.4214	0.038	0.0047	0.0154
1010	1.302	0.1557	0.5706	4.012	0.4799	1.7581	0.048	0.0057	0.0208
0.1 mg/kg/day									
1081	1.067	0.1486	0.4219	3.681	0.5127	1.4555	0.039	0.0054	0.0154
1082	1.195	0.1182	0.5504	4.091	0.4046	1.8844	0.036	0.0036	0.0168
1083	1.273	0.1359	0.4837	3.542	0.3780	1.3457	0.045	0.0048	0.0172
1084	1.052	0.1284	0.4407	3.979	0.4858	1.6669	0.056	0.0068	0.0235
1085	0.996	0.1335	0.4213	4.199	0.5629	1.7762	0.053	0.0071	0.0223
1086	1.214	0.1560	0.5610	4.259	0.5474	1.9681	0.043	0.0055	0.0198
1087	0.902	0.1423	0.4235	3.799	0.5992	1.7836	0.042	0.0066	0.0198
1088	0.919	0.1351	0.4054	4.343	0.6387	1.9157	0.032	0.0047	0.0142
1089	0.902	0.1057	0.3970	3.797	0.4451	1.6712	0.045	0.0053	0.0199
1090	1.167	0.1667	0.5276	3.960	0.5657	1.7902	0.029	0.0041	0.0130

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

Individual Animal Final Body and Organ Weights - MALE

Interim

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Testes g	Testes/BWt %	Testes/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio
1 mg/kg/day									
1161	1.084	0.1338	0.4599	4.077	0.5033	1.7297	0.044	0.0055	0.0188
1162	0.963	0.1227	0.4377	3.487	0.4442	1.5850	0.046	0.0058	0.0208
1163	1.246	0.1466	0.5985	2.881	0.3389	1.3838	0.029	0.0034	0.0137
1164	1.163	0.1669	0.5783	4.290	0.6155	2.1333	0.033	0.0048	0.0165
1165	1.017	0.1422	0.4311	4.648	0.6501	1.9703	0.041	0.0057	0.0173
1166	1.104	0.1275	0.5055	3.904	0.4508	1.7875	0.046	0.0053	0.0211
1167	1.372	0.1803	0.6177	4.616	0.6066	2.0783	0.046	0.0061	0.0208
1168	1.255	0.1581	0.5304	3.933	0.4953	1.6623	0.104	0.0131	0.0439
1169	1.108	0.1401	0.4727	4.711	0.5956	2.0098	0.046	0.0059	0.0198
1170	0.944	0.1302	0.4126	4.020	0.5545	1.7570	0.045	0.0062	0.0195
50 mg/kg/day									
1241	1.037	0.1271	0.4460	3.817	0.4678	1.6417	0.044	0.0054	0.0189
1242	0.982	0.1274	0.4466	4.034	0.5232	1.8345	0.035	0.0045	0.0159
1243	1.146	0.1512	0.4862	3.868	0.5103	1.6411	0.038	0.0050	0.0161
1244	0.994	0.1278	0.4232	4.222	0.5427	1.7974	0.043	0.0055	0.0182
1245	1.260	0.1617	0.5431	3.063	0.3932	1.3203	0.035	0.0045	0.0152
1246	1.421	0.1597	0.5921	5.751	0.6462	2.3963	0.054	0.0060	0.0223
1247	1.577	0.1880	0.6830	4.112	0.4901	1.7809	0.044	0.0052	0.0189
1248	1.021	0.1382	0.4578	4.156	0.5624	1.8637	0.040	0.0054	0.0178
1249[r]	1.574	0.1616	0.6992	4.431	0.4549	1.9685	0.050	0.0051	0.0221
1250	1.206	0.1755	0.4619	4.678	0.6809	1.7917	0.033	0.0047	0.0125

[r] Replacement animal

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

Individual Animal Final Body and Organ Weights - FEMALE

Interim

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Heart g	Heart/BWt %	Heart/BrWt ratio
0 mg/kg/day									
1322	393	1.796	0.4570	0.087	0.0221	0.0484	1.338	0.3405	0.7450
1324	432	2.015	0.4664	0.064	0.0148	0.0318	1.283	0.2970	0.6367
1325	364	1.798	0.4940	0.054	0.0148	0.0300	1.156	0.3176	0.6429
1326	425	2.013	0.4736	0.053	0.0125	0.0263	1.321	0.3108	0.6562
1327	448	2.060	0.4598	0.083	0.0185	0.0403	1.330	0.2969	0.6456
1328	408	2.032	0.4980	0.073	0.0179	0.0359	1.312	0.3216	0.6457
1329	419	2.046	0.4883	0.105	0.0251	0.0513	1.176	0.2807	0.5748
1330	598	1.833	0.3065	0.109	0.0182	0.0595	2.412	0.4033	1.3159
1331	495	2.072	0.4186	0.062	0.0125	0.0299	1.591	0.3214	0.7679
1332	532	2.019	0.3795	0.096	0.0180	0.0475	1.474	0.2771	0.7301
1 mg/kg/day									
1401	346	1.997	0.5772	0.043	0.0124	0.0215	1.190	0.3439	0.5959
1402	375	1.915	0.5107	0.100	0.0267	0.0522	1.224	0.3264	0.6392
1403	350	2.034	0.5811	0.089	0.0254	0.0438	1.205	0.3443	0.5924
1404	362	2.004	0.5536	0.081	0.0224	0.0404	1.152	0.3182	0.5749
1405	333	1.807	0.5426	0.114	0.0342	0.0631	1.188	0.3568	0.6574
1406	459	2.038	0.4440	0.073	0.0159	0.0358	1.301	0.2834	0.6384
1407	465	2.022	0.4348	0.088	0.0189	0.0435	1.340	0.2882	0.6627
1408	473	2.033	0.4298	0.060	0.0127	0.0295	1.274	0.2693	0.6267
1409	405	1.937	0.4783	0.065	0.0160	0.0336	1.312	0.3240	0.6773
1410	481	2.016	0.4191	0.055	0.0114	0.0273	1.342	0.2790	0.6657

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

Individual Animal Final Body and Organ Weights - FEMALE

Interim

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Heart g	Heart/BWt %	Heart/BrWt ratio
50 mg/kg/day									
1481	408	1.960	0.4804	0.094	0.0230	0.0480	1.195	0.2929	0.6097
1482	568	1.947	0.3428	0.106	0.0187	0.0544	1.620	0.2852	0.8320
1483	429	1.971	0.4594	0.106	0.0247	0.0538	1.284	0.2993	0.6514
1484	479	2.160	0.4509	0.088	0.0184	0.0407	1.389	0.2900	0.6431
1485	347	2.087	0.6014	0.064	0.0184	0.0307	1.032	0.2974	0.4945
1486	565	2.014	0.3565	0.114	0.0202	0.0566	1.514	0.2680	0.7517
1487	457	1.984	0.4341	0.071	0.0155	0.0358	1.310	0.2867	0.6603
1488	296	2.006	0.6777	0.102	0.0345	0.0508	1.127	0.3807	0.5618
1489	412	1.916	0.4650	0.074	0.0180	0.0386	1.131	0.2745	0.5903
1490	490	1.915	0.3908	0.091	0.0186	0.0475	1.642	0.3351	0.8574
500 mg/kg/day									
1561	342	1.936	0.5661	0.088	0.0257	0.0455	1.185	0.3465	0.6121
1562	270	2.000	0.7407	0.054	0.0200	0.0270	0.926	0.3430	0.4630
1563	397	1.824	0.4594	0.304	0.0766	0.1667	1.195	0.3010	0.6552
1564	321	1.842	0.5738	0.069	0.0215	0.0375	1.132	0.3526	0.6145
1565	325	1.915	0.5892	0.072	0.0222	0.0376	1.257	0.3868	0.6564
1568	408	1.949	0.4777	0.103	0.0252	0.0528	1.299	0.3184	0.6665
1569	444	2.025	0.4561	0.085	0.0191	0.0420	1.432	0.3225	0.7072
1570	350	1.928	0.5509	0.078	0.0223	0.0405	1.353	0.3866	0.7018
1571	407	1.904	0.4678	0.052	0.0128	0.0273	1.173	0.2882	0.6161
1572	363	1.975	0.5441	0.071	0.0196	0.0359	1.271	0.3501	0.6435

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

Individual Animal Final Body and Organ Weights - FEMALE

Interim

Group, Animal Number	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio	Ovaries w/ oviducts g	Ovaries w/ oviducts/BWt %	Ovaries w/ oviducts/BrWt ratio
0 mg/kg/day									
1322	2.434	0.6193	1.3552	11.439	2.9107	6.3692	0.090	0.0229	0.0501
1324	2.731	0.6322	1.3553	12.089	2.7984	5.9995	0.117	0.0271	0.0581
1325	2.304	0.6330	1.2814	11.603	3.1876	6.4533	0.084	0.0231	0.0467
1326	2.735	0.6435	1.3587	11.442	2.6922	5.6841	0.116	0.0273	0.0576
1327	2.781	0.6208	1.3500	12.060	2.6920	5.8544	0.101	0.0225	0.0490
1328	2.590	0.6348	1.2746	12.883	3.1576	6.3401	0.089	0.0218	0.0438
1329	2.816	0.6721	1.3763	12.939	3.0881	6.3240	0.111	0.0265	0.0543
1330	4.193	0.7012	2.2875	19.849	3.3192	10.8287	0.121	0.0202	0.0660
1331	2.826	0.5709	1.3639	14.088	2.8461	6.7992	0.107	0.0216	0.0516
1332	3.086	0.5801	1.5285	13.605	2.5573	6.7385	0.112	0.0211	0.0555
1 mg/kg/day									
1401	2.351	0.6795	1.1773	11.128	3.2162	5.5724	0.199	0.0575	0.0996
1402	2.801	0.7469	1.4627	11.122	2.9659	5.8078	0.096	0.0256	0.0501
1403	2.719	0.7769	1.3368	10.505	3.0014	5.1647	0.070	0.0200	0.0344
1404	2.627	0.7257	1.3109	11.451	3.1633	5.7141	0.110	0.0304	0.0549
1405	2.721	0.8171	1.5058	11.435	3.4339	6.3282	0.137	0.0411	0.0758
1406	2.941	0.6407	1.4431	14.671	3.1963	7.1987	0.131	0.0285	0.0643
1407	2.685	0.5774	1.3279	11.980	2.5763	5.9248	0.077	0.0166	0.0381
1408	2.819	0.5960	1.3866	13.633	2.8822	6.7059	0.143	0.0302	0.0703
1409	2.409	0.5948	1.2437	9.847	2.4314	5.0836	0.167	0.0412	0.0862
1410	2.875	0.5977	1.4261	13.837	2.8767	6.8636	0.080	0.0166	0.0397

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

Individual Animal Final Body and Organ Weights - FEMALE

Interim

Group, Animal Number	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio	Ovaries w/ oviducts g	Ovaries w/ oviducts/BWt %	Ovaries w/ oviducts/BrWt ratio
50 mg/kg/day									
1481	3.239	0.7939	1.6526	15.393	3.7728	7.8536	0.076	0.0186	0.0388
1482	2.741	0.4826	1.4078	17.941	3.1586	9.2147	0.123	0.0217	0.0632
1483	2.929	0.6828	1.4860	11.986	2.7939	6.0812	0.154	0.0359	0.0781
1484	3.230	0.6743	1.4954	15.664	3.2701	7.2519	0.119	0.0248	0.0551
1485	2.594	0.7476	1.2429	10.450	3.0115	5.0072	0.163	0.0470	0.0781
1486	3.123	0.5527	1.5506	22.113	3.9138	10.9796	0.222	0.0393	0.1102
1487	2.679	0.5862	1.3503	13.063	2.8584	6.5842	0.087	0.0190	0.0439
1488	2.529	0.8544	1.2607	10.722	3.6223	5.3450	0.102	0.0345	0.0508
1489	2.930	0.7112	1.5292	13.688	3.3223	7.1441	0.134	0.0325	0.0699
1490	3.639	0.7427	1.9003	16.521	3.3716	8.6272	0.158	0.0322	0.0825
500 mg/kg/day									
1561	3.088	0.9029	1.5950	17.492	5.1146	9.0351	0.093	0.0272	0.0480
1562	2.426	0.8985	1.2130	13.376	4.9541	6.6880	0.058	0.0215	0.0290
1563	2.898	0.7300	1.5888	18.345	4.6209	10.0576	0.070	0.0176	0.0384
1564	2.551	0.7947	1.3849	16.090	5.0125	8.7351	0.161	0.0502	0.0874
1565	2.861	0.8803	1.4940	16.134	4.9643	8.4251	0.121	0.0372	0.0632
1568	3.008	0.7373	1.5434	17.830	4.3701	9.1483	0.117	0.0287	0.0600
1569	2.800	0.6306	1.3827	22.186	4.9968	10.9560	0.254	0.0572	0.1254
1570	3.146	0.8989	1.6317	21.198	6.0566	10.9948	0.122	0.0349	0.0633
1571	2.522	0.6197	1.3246	15.876	3.9007	8.3382	0.081	0.0199	0.0425
1572	2.768	0.7625	1.4015	17.359	4.7821	8.7894	0.108	0.0298	0.0547

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

Individual Animal Final Body and Organ Weights - FEMALE

Interim

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio	Uterus w/ cervix g	Uterus w/ cervix/BWt %	Uterus w/ cervix/BrWt ratio
0 mg/kg/day									
1322	0.621	0.1580	0.3458	0.022	0.0057	0.0125	1.061	0.2700	0.5908
1324	0.715	0.1655	0.3548	0.029	0.0067	0.0144	0.439	0.1016	0.2179
1325	0.590	0.1621	0.3281	0.024	0.0065	0.0131	0.922	0.2533	0.5128
1326	0.624	0.1468	0.3100	0.024	0.0057	0.0121	0.668	0.1572	0.3318
1327	0.727	0.1623	0.3529	0.024	0.0052	0.0114	1.093	0.2440	0.5306
1328	0.683	0.1674	0.3361	0.034	0.0084	0.0169	0.759	0.1860	0.3735
1329	0.680	0.1623	0.3324	0.021	0.0051	0.0104	1.225	0.2924	0.5987
1330	0.880	0.1472	0.4801	0.039	0.0065	0.0213	1.029	0.1721	0.5614
1331	0.643	0.1299	0.3103	0.028	0.0057	0.0137	0.998	0.2016	0.4817
1332	0.779	0.1464	0.3858	0.040	0.0075	0.0199	0.692	0.1301	0.3427
1 mg/kg/day									
1401	0.678	0.1960	0.3395	0.017	0.0049	0.0084	0.669	0.1934	0.3350
1402	0.664	0.1771	0.3467	0.024	0.0063	0.0123	1.118	0.2981	0.5838
1403	0.492	0.1406	0.2419	0.023	0.0066	0.0113	0.858	0.2451	0.4218
1404	0.583	0.1610	0.2909	0.025	0.0068	0.0123	0.930	0.2569	0.4641
1405	0.560	0.1682	0.3099	0.023	0.0068	0.0126	1.456	0.4372	0.8058
1406	0.649	0.1414	0.3184	0.027	0.0059	0.0134	0.626	0.1364	0.3072
1407	0.654	0.1406	0.3234	0.030	0.0065	0.0148	0.963	0.2071	0.4763
1408	0.622	0.1315	0.3060	0.031	0.0066	0.0153	0.712	0.1505	0.3502
1409	0.552	0.1363	0.2850	0.030	0.0075	0.0156	0.623	0.1538	0.3216
1410	0.677	0.1407	0.3358	0.024	0.0049	0.0117	1.140	0.2370	0.5655

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

Individual Animal Final Body and Organ Weights - FEMALE

Interim

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio	Uterus w/ cervix g	Uterus w/ cervix/BWt %	Uterus w/ cervix/BrWt ratio
50 mg/kg/day									
1481	0.478	0.1172	0.2439	0.026	0.0064	0.0134	1.130	0.2770	0.5765
1482	0.769	0.1354	0.3950	0.054	0.0095	0.0278	1.281	0.2255	0.6579
1483	0.677	0.1578	0.3435	0.028	0.0065	0.0141	1.310	0.3054	0.6646
1484	0.586	0.1223	0.2713	0.029	0.0060	0.0133	1.326	0.2768	0.6139
1485	0.459	0.1323	0.2199	0.033	0.0096	0.0160	1.262	0.3637	0.6047
1486	0.752	0.1331	0.3734	0.043	0.0076	0.0213	1.390	0.2460	0.6902
1487	0.564	0.1234	0.2843	0.024	0.0053	0.0122	1.202	0.2630	0.6058
1488	0.720	0.2432	0.3589	0.022	0.0074	0.0109	0.962	0.3250	0.4796
1489	0.556	0.1350	0.2902	0.021	0.0050	0.0107	1.113	0.2701	0.5809
1490	0.580	0.1184	0.3029	0.032	0.0064	0.0164	0.739	0.1508	0.3859
500 mg/kg/day									
1561	0.530	0.1550	0.2738	0.024	0.0070	0.0124	1.170	0.3421	0.6043
1562	0.390	0.1444	0.1950	0.029	0.0107	0.0145	0.436	0.1615	0.2180
1563	0.540	0.1360	0.2961	0.036	0.0090	0.0197	1.029	0.2592	0.5641
1564	0.582	0.1813	0.3160	0.024	0.0075	0.0131	0.729	0.2271	0.3958
1565	0.520	0.1600	0.2715	0.025	0.0077	0.0130	1.839	0.5658	0.9603
1568	0.607	0.1488	0.3114	0.025	0.0062	0.0129	1.106	0.2711	0.5675
1569	0.626	0.1410	0.3091	0.043	0.0098	0.0214	0.439	0.0989	0.2168
1570	0.653	0.1866	0.3387	0.026	0.0073	0.0132	1.221	0.3489	0.6333
1571	0.552	0.1356	0.2899	0.029	0.0072	0.0154	0.949	0.2332	0.4984
1572	0.660	0.1818	0.3342	0.033	0.0090	0.0165	1.766	0.4865	0.8942

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Epididymides g	Epididymides/ BWt %	Epididymides/ BrWt ratio
0 mg/kg/day									
1011	811	2.358	0.2908	0.097	0.0120	0.0411	1.345	0.1658	0.5704
1014	851	2.367	0.2781	0.090	0.0106	0.0380	1.275	0.1498	0.5387
1015	897	2.306	0.2571	0.056	0.0062	0.0243	1.420	0.1583	0.6158
1025	985	2.334	0.2370	0.115	0.0117	0.0493	1.387	0.1408	0.5943
1026	656	2.070	0.3155	0.101	0.0154	0.0488	1.654	0.2521	0.7990
1029	960	2.796	0.2913	0.102	0.0106	0.0365	1.455	0.1516	0.5204
1031	685	2.411	0.3520	0.099	0.0145	0.0411	1.034	0.1509	0.4289
1035	932	2.351	0.2523	0.076	0.0082	0.0323	1.456	0.1562	0.6193
1036	595	1.986	0.3338	0.102	0.0171	0.0514	1.269	0.2133	0.6390
1041	893	2.510	0.2811	0.077	0.0086	0.0307	1.254	0.1404	0.4996
1045	852	2.392	0.2808	0.081	0.0095	0.0339	1.528	0.1793	0.6388
1062	863	2.237	0.2592	0.095	0.0110	0.0425	1.469	0.1702	0.6567
1067	808	2.336	0.2891	0.089	0.0110	0.0381	1.459	0.1806	0.6246
1068	788	2.370	0.3008	0.103	0.0131	0.0435	1.268	0.1609	0.5350
1076	873	2.266	0.2596	0.292[e]	0.0334[e]	0.1289[e]	1.871	0.2143	0.8257
0.1 mg/kg/day									
1091	745	2.374	0.3187	0.077	0.0103	0.0324	1.506	0.2021	0.6344
1093	638	2.476	0.3881	0.126	0.0197	0.0509	1.240	0.1944	0.5008
1094	884	2.328	0.2633	0.070	0.0079	0.0301	1.414	0.1600	0.6074
1096	1045	2.339	0.2238	0.157	0.0150	0.0671	1.623	0.1553	0.6939
1097	976	2.286	0.2342	0.127	0.0130	0.0556	1.568	0.1607	0.6859
1099	859	2.433	0.2832	0.083[e]	0.0097[e]	0.0341[e]	1.332	0.1551	0.5475

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Epididymides g	Epididymides/ BWt %	Epididymides/ BrWt ratio
0.1 mg/kg/day									
1107	887	2.364	0.2665	0.055	0.0062	0.0233	1.260	0.1421	0.5330
1109	704	2.205	0.3132	0.046	0.0065	0.0209	1.314	0.1866	0.5959
1112	1056	2.196	0.2080	0.086	0.0081	0.0392	1.567	0.1484	0.7136
1120	853	2.406	0.2821	0.267[e]	0.0313[e]	0.1110[e]	1.378	0.1615	0.5727
1122	821	2.478	0.3018	1.934[e]	0.2356[e]	0.7805[e]	1.487	0.1811	0.6001
1123	1181	2.589	0.2192	0.113	0.0096	0.0436	1.546	0.1309	0.5971
1124	623	2.357	0.3783	0.070	0.0112	0.0297	1.249	0.2005	0.5299
1127	667	2.158	0.3235	0.118	0.0177	0.0547	1.317	0.1975	0.6103
1132	866	2.308	0.2665	0.080	0.0092	0.0347	1.358	0.1568	0.5884
1140	906	2.180	0.2406	0.105	0.0116	0.0482	1.578	0.1742	0.7239
1143	550	2.098	0.3815	0.093	0.0169	0.0443	0.960	0.1745	0.4576
1147	914	2.486	0.2720	0.091	0.0100	0.0366	1.500	0.1641	0.6034
1150	738	2.210	0.2995	0.063	0.0085	0.0285	1.257	0.1703	0.5688
1154	832	1.949	0.2343	0.115	0.0138	0.0590	1.378	0.1656	0.7070
1 mg/kg/day									
1171	664	2.339	0.3523	0.038	0.0057	0.0162	0.862	0.1298	0.3685
1176	786	2.306	0.2934	0.055	0.0070	0.0239	1.424	0.1812	0.6175
1178	660	2.213	0.3353	0.121	0.0183	0.0547	1.317	0.1995	0.5951
1180	863	2.283	0.2645	0.088	0.0102	0.0385	1.178	0.1365	0.5160
1186	643	2.377	0.3697	0.068	0.0106	0.0286	1.413	0.2198	0.5944
1192	855	2.275	0.2661	0.104	0.0122	0.0457	1.484	0.1736	0.6523
1193	723	2.355	0.3257	0.093	0.0129	0.0395	1.325	0.1833	0.5626

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Epididymides g	Epididymides/ BWt %	Epididymides/ BrWt ratio
1 mg/kg/day									
1194	453	2.299	0.5075	0.044	0.0097	0.0191	0.964	0.2128	0.4193
1199	747	2.184	0.2924	0.102	0.0137	0.0467	1.834	0.2455	0.8397
1204	773	2.221	0.2873	0.088	0.0114	0.0396	1.295	0.1675	0.5831
1211	987	2.409	0.2441	0.142	0.0144	0.0589	1.360	0.1378	0.5645
1212	671	2.154	0.3210	0.078	0.0116	0.0362	1.518	0.2262	0.7047
1218	877	2.499	0.2849	0.133	0.0152	0.0532	1.336	0.1523	0.5346
1221	725	2.290	0.3159	0.085	0.0117	0.0371	1.319	0.1819	0.5760
1223	902	2.288	0.2537	0.065	0.0072	0.0284	1.238	0.1373	0.5411
1225	959	2.440	0.2544	0.088	0.0092	0.0361	1.734	0.1808	0.7107
1227	655	2.311	0.3528	0.084	0.0128	0.0363	1.461	0.2231	0.6322
1240	790	2.187	0.2768	0.071	0.0090	0.0325	1.105	0.1399	0.5053
50 mg/kg/day									
1251	743	2.277	0.3065	0.080	0.0108	0.0351	1.262	0.1699	0.5542
1252	1033	2.370	0.2294	0.243[e]	0.0235[e]	0.1025[e]	1.371	0.1327	0.5785
1254	702	2.194	0.3125	0.048	0.0068	0.0219	1.835	0.2614	0.8364
1257	879	2.435	0.2770	0.114	0.0130	0.0468	1.649	0.1876	0.6772
1261	791	2.485	0.3142	0.113	0.0143	0.0455	1.411	0.1784	0.5678
1270	879	2.347	0.2670	0.062	0.0071	0.0264	1.434	0.1631	0.6110
1277	914	2.292	0.2508	0.068	0.0074	0.0297	1.516	0.1659	0.6614
1283	748	2.326	0.3110	0.079	0.0106	0.0340	1.399	0.1870	0.6015
1286	906	2.323	0.2564	0.133	0.0147	0.0573	1.399	0.1544	0.6022
1287	861	2.476	0.2876	0.125	0.0145	0.0505	1.459	0.1695	0.5893

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Epididymides g	Epididymides/ BWt %	Epididymides/ BrWt ratio
50 mg/kg/day									
1289	961	2.271	0.2363	0.750[e]	0.0780[e]	0.3303[e]	1.266	0.1317	0.5575
1294	658	2.121	0.3223	0.053	0.0081	0.0250	1.451	0.2205	0.6841
1295	850	2.564	0.3016	0.099	0.0116	0.0386	1.459	0.1716	0.5690
1297	734	2.252	0.3068	0.132	0.0180	0.0586	1.069	0.1456	0.4747
1309	912	2.458	0.2695	0.085	0.0093	0.0346	1.744	0.1912	0.7095
1311	845	2.191	0.2593	0.087	0.0103	0.0397	1.538	0.1820	0.7020
1315	808	2.429	0.3006	0.083	0.0103	0.0342	1.399	0.1731	0.5760
1319	896	2.317	0.2586	0.066	0.0074	0.0285	1.163	0.1298	0.5019

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Heart g	Heart/BWt %	Heart/BrWt ratio	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio
0 mg/kg/day									
1011	2.256	0.2782	0.9567	5.108	0.6298	2.1662	25.830	3.1850	10.9542
1014	1.928	0.2266	0.8145	6.369	0.7484	2.6907	21.306	2.5036	9.0013
1015	2.119	0.2362	0.9189	5.607	0.6251	2.4315	24.545	2.7363	10.6440
1025	2.375	0.2411	1.0176	7.004	0.7111	3.0009	30.128	3.0587	12.9083
1026	2.042	0.3113	0.9865	6.096	0.9293	2.9449	21.417	3.2648	10.3464
1029	2.390	0.2490	0.8548	7.544	0.7858	2.6981	27.573	2.8722	9.8616
1031	1.872	0.2733	0.7764	4.543	0.6632	1.8843	16.214	2.3670	6.7250
1035	2.181	0.2340	0.9277	5.574	0.5981	2.3709	25.660	2.7532	10.9145
1036	2.139	0.3595	1.0770	5.589	0.9393	2.8142	22.983	3.8627	11.5725
1041	1.951	0.2185	0.7773	5.571	0.6239	2.2195	25.152	2.8166	10.0207
1045	2.435	0.2858	1.0180	5.349	0.6278	2.2362	22.119	2.5961	9.2471
1062	2.342	0.2714	1.0469	6.090	0.7057	2.7224	26.534	3.0746	11.8614
1067	2.091	0.2588	0.8951	6.106	0.7557	2.6139	24.048	2.9762	10.2945
1068	2.138	0.2713	0.9021	6.286	0.7977	2.6523	20.992	2.6640	8.8574
1076	2.538	0.2907	1.1200	6.231	0.7137	2.7498	29.861	3.4205	13.1778
0.1 mg/kg/day									
1091	2.501	0.3357	1.0535	6.730	0.9034	2.8349	35.220	4.7275	14.8357
1093	2.211	0.3466	0.8930	6.921	1.0848	2.7952	25.251	3.9578	10.1983
1094	2.110	0.2387	0.9064	5.023	0.5682	2.1576	22.710	2.5690	9.7552
1096	2.676	0.2561	1.1441	6.986	0.6685	2.9867	26.447	2.5308	11.3070
1097	2.515	0.2577	1.1002	9.562	0.9797	4.1829	34.137	3.4976	14.9331
1099	2.315	0.2695	0.9515	5.983	0.6965	2.4591	25.535	2.9726	10.4953

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Heart g	Heart/BWt %	Heart/BrWt ratio	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio
0.1 mg/kg/day									
1107	2.416	0.2724	1.0220	6.741	0.7600	2.8515	28.222	3.1817	11.9382
1109	1.869	0.2655	0.8476	4.934	0.7009	2.2376	20.336	2.8886	9.2227
1112	2.400	0.2273	1.0929	6.483	0.6139	2.9522	31.591	2.9916	14.3857
1120	2.466	0.2891	1.0249	6.847	0.8027	2.8458	26.899	3.1535	11.1800
1122	2.469	0.3007	0.9964	6.606	0.8046	2.6659	26.350	3.2095	10.6336
1123	2.591	0.2194	1.0008	6.153	0.5210	2.3766	30.508	2.5832	11.7837
1124	1.960	0.3146	0.8316	4.078	0.6546	1.7302	15.748	2.5278	6.6814
1127	2.455	0.3681	1.1376	27.052[e]	4.0558[e]	12.5357[e]	26.883	4.0304	12.4574
1132	2.116	0.2443	0.9168	6.126	0.7074	2.6542	26.463	3.0558	11.4658
1140	2.428	0.2680	1.1138	5.878	0.6488	2.6963	23.620	2.6071	10.8349
1143	1.876	0.3411	0.8942	7.425	1.3500	3.5391	43.710	7.9473	20.8341
1147	2.146	0.2348	0.8632	5.300	0.5799	2.1319	24.812	2.7147	9.9807
1150	1.876	0.2542	0.8489	5.155	0.6985	2.3326	18.787	2.5457	8.5009
1154	2.145	0.2578	1.1006	5.042	0.6060	2.5870	18.554	2.2300	9.5198
1 mg/kg/day									
1171	1.721	0.2592	0.7358	4.303	0.6480	1.8397	16.959	2.5541	7.2505
1176	1.589	0.2022	0.6891	4.280	0.5445	1.8560	17.372	2.2102	7.5334
1178	2.594	0.3930	1.1722	6.540	0.9909	2.9553	29.686	4.4979	13.4144
1180	2.047	0.2372	0.8966	6.014	0.6969	2.6343	22.514	2.6088	9.8616
1186	2.012	0.3129	0.8464	5.026	0.7816	2.1144	16.463	2.5603	6.9260
1192	2.315	0.2708	1.0176	5.687	0.6651	2.4998	27.361	3.2001	12.0268
1193	2.431	0.3362	1.0323	8.221	1.1371	3.4909	26.110	3.6113	11.0870

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Heart g	Heart/BWt %	Heart/BrWt ratio	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio
1 mg/kg/day									
1194	2.156	0.4759	0.9378	5.432	1.1991	2.3628	18.900	4.1722	8.2210
1199	2.076	0.2779	0.9505	5.413	0.7246	2.4785	21.748	2.9114	9.9579
1204	2.110	0.2730	0.9500	10.193	1.3186	4.5894	36.918	4.7759	16.6222
1211	2.951	0.2990	1.2250	7.373	0.7470	3.0606	33.914	3.4361	14.0780
1212	1.707	0.2544	0.7925	4.391	0.6544	2.0385	20.359	3.0341	9.4517
1218	2.488	0.2837	0.9956	7.799	0.8893	3.1208	25.452	2.9022	10.1849
1221	2.588	0.3570	1.1301	9.500	1.3103	4.1485	28.402	3.9175	12.4026
1223	1.965	0.2178	0.8588	5.311	0.5888	2.3212	22.544	2.4993	9.8531
1225	2.143	0.2235	0.8783	5.447	0.5680	2.2324	24.043	2.5071	9.8537
1227	2.026	0.3093	0.8767	6.436	0.9826	2.7849	21.376	3.2635	9.2497
1240	2.284	0.2891	1.0444	5.585	0.7070	2.5537	23.890	3.0241	10.9236
50 mg/kg/day									
1251	1.821	0.2451	0.7997	4.720	0.6353	2.0729	22.679	3.0524	9.9600
1252	3.466	0.3355	1.4624	7.433	0.7196	3.1363	33.809	3.2729	14.2654
1254	2.303	0.3281	1.0497	3.329	0.4742	1.5173	26.236	3.7373	11.9581
1257	2.192	0.2494	0.9002	6.908	0.7859	2.8370	29.767	3.3865	12.2246
1261	2.184	0.2761	0.8789	5.618	0.7102	2.2608	24.510	3.0986	9.8632
1270	2.460	0.2799	1.0481	6.146	0.6992	2.6187	26.815	3.0506	11.4252
1277	2.338	0.2558	1.0201	6.415	0.7019	2.7989	30.257	3.3104	13.2011
1283	1.980	0.2647	0.8512	5.470	0.7313	2.3517	20.001	2.6739	8.5989
1286	2.218	0.2448	0.9548	7.160	0.7903	3.0822	26.821	2.9604	11.5458
1287	2.252	0.2616	0.9095	6.029	0.7002	2.4350	25.031	2.9072	10.1095

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Heart g	Heart/BWt %	Heart/BrWt ratio	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio
50 mg/kg/day									
1289	2.316	0.2410	1.0198	5.773	0.6007	2.5421	26.031	2.7087	11.4624
1294	1.925	0.2926	0.9076	4.993	0.7588	2.3541	20.878	3.1729	9.8435
1295	2.384	0.2805	0.9298	9.068	1.0668	3.5367	40.692	4.7873	15.8705
1297	2.538	0.3458	1.1270	6.159	0.8391	2.7349	26.622	3.6270	11.8215
1309	2.317	0.2541	0.9426	6.334	0.6945	2.5769	28.108	3.0820	11.4353
1311	1.740	0.2059	0.7942	6.465	0.7651	2.9507	27.962	3.3091	12.7622
1315	2.152	0.2663	0.8860	5.246	0.6493	2.1597	22.334	2.7641	9.1947
1319	2.081	0.2323	0.8981	6.237	0.6961	2.6918	28.467	3.1771	12.2861

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Testes g	Testes/BWt %	Testes/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio
0 mg/kg/day									
1011	1.143	0.1409	0.4847	4.016	0.4952	1.7031	0.047	0.0058	0.0200
1014	0.973	0.1143	0.4111	3.070	0.3608	1.2970	0.037	0.0044	0.0157
1015	1.144	0.1275	0.4961	3.873	0.4318	1.6795	0.047	0.0052	0.0203
1025	1.642	0.1667	0.7035	3.446	0.3498	1.4764	0.197	0.0200	0.0846
1026	1.300	0.1982	0.6280	3.848	0.5866	1.8589	0.046	0.0070	0.0223
1029	1.753	0.1826	0.6270	3.669	0.3822	1.3122	0.066	0.0068	0.0235
1031	0.820	0.1197	0.3401	3.260	0.4759	1.3521	0.053	0.0077	0.0218
1035	1.009	0.1083	0.4292	4.104	0.4403	1.7456	0.046	0.0049	0.0194
1036	0.958	0.1610	0.4824	3.430	0.5765	1.7271	0.032	0.0053	0.0159
1041	1.222	0.1368	0.4869	3.389	0.3795	1.3502	0.040	0.0045	0.0159
1045	1.239	0.1454	0.5180	3.905	0.4583	1.6325	0.051	0.0060	0.0215
1062	1.476	0.1710	0.6598	4.111	0.4764	1.8377	0.047	0.0055	0.0211
1067	0.898	0.1111	0.3844	3.495	0.4325	1.4961	0.042	0.0052	0.0180
1068	1.009	0.1280	0.4257	4.037	0.5123	1.7034	0.046	0.0058	0.0194
1076	1.299	0.1488	0.5733	4.337	0.4968	1.9139	0.069	0.0079	0.0303
0.1 mg/kg/day									
1091	1.180	0.1584	0.4971	3.776	0.5068	1.5906	0.072	0.0096	0.0302
1093	1.839	0.2882	0.7427	3.303	0.5177	1.3340	0.171	0.0268	0.0690
1094	1.317	0.1490	0.5657	4.703	0.5320	2.0202	0.038	0.0043	0.0165
1096	1.194	0.1143	0.5105	3.914	0.3745	1.6734	0.127	0.0121	0.0541
1097	1.552	0.1590	0.6789	3.389	0.3472	1.4825	0.243[e]	0.0249[e]	0.1064[e]
1099	1.501	0.1747	0.6169	3.569	0.4155	1.4669	0.050	0.0058	0.0203

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Testes g	Testes/BWt %	Testes/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio
0.1 mg/kg/day									
1107	1.635	0.1843	0.6916	4.042	0.4557	1.7098	0.046	0.0051	0.0192
1109	1.072	0.1523	0.4862	4.027	0.5720	1.8263	0.044	0.0063	0.0201
1112	1.173	0.1111	0.5342	3.537	0.3349	1.6107	0.055	0.0052	0.0249
1120	1.345	0.1577	0.5590	4.219	0.4946	1.7535	0.080	0.0094	0.0332
1122	1.154	0.1406	0.4657	4.706	0.5732	1.8991	0.045	0.0054	0.0180
1123	1.697	0.1437	0.6555	3.502	0.2965	1.3526	0.108	0.0091	0.0417
1124	0.865	0.1388	0.3670	3.322	0.5332	1.4094	0.031	0.0050	0.0133
1127	1.558	0.2336	0.7220	2.799	0.4196	1.2970	0.051	0.0077	0.0238
1132	1.318	0.1522	0.5711	3.873	0.4472	1.6781	0.050	0.0058	0.0216
1140	1.205	0.1330	0.5528	3.976	0.4389	1.8239	0.058	0.0064	0.0265
1143	1.804	0.3280	0.8599	2.964	0.5389	1.4128	0.051	0.0092	0.0241
1147	1.362	0.1490	0.5479	3.590	0.3928	1.4441	0.052	0.0057	0.0208
1150	0.968	0.1312	0.4380	3.375	0.4573	1.5271	0.034	0.0046	0.0152
1154	1.197	0.1439	0.6142	3.056	0.3673	1.5680	0.039	0.0047	0.0200
1 mg/kg/day									
1171	0.882	0.1328	0.3771	1.963	0.2956	0.8392	0.041	0.0062	0.0176
1176	0.996	0.1267	0.4319	3.328	0.4234	1.4432	0.043	0.0055	0.0186
1178	1.075	0.1629	0.4858	3.137	0.4753	1.4175	0.044	0.0067	0.0201
1180	1.171	0.1357	0.5129	3.463	0.4013	1.5169	0.035	0.0041	0.0154
1186	1.185	0.1843	0.4985	3.831	0.5958	1.6117	0.049	0.0075	0.0204
1192	1.366	0.1598	0.6004	3.761	0.4399	1.6532	0.053	0.0062	0.0233
1193	1.341	0.1855	0.5694	3.960	0.5477	1.6815	0.061	0.0084	0.0259

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Testes g	Testes/BWt %	Testes/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio
1 mg/kg/day									
1194	1.804	0.3982	0.7847	4.324	0.9545	1.8808	0.030	0.0066	0.0130
1199	1.334	0.1786	0.6108	4.274	0.5722	1.9570	0.037	0.0050	0.0171
1204	1.964	0.2541	0.8843	3.676	0.4755	1.6551	0.056	0.0072	0.0252
1211	2.073	0.2100	0.8605	3.344	0.3388	1.3881	0.062	0.0063	0.0258
1212	0.953	0.1420	0.4424	3.494	0.5207	1.6221	0.028	0.0042	0.0130
1218	1.965	0.2241	0.7863	3.350	0.3820	1.3405	0.060	0.0068	0.0240
1221	1.327	0.1830	0.5795	3.787	0.5223	1.6537	0.048	0.0066	0.0209
1223	1.406	0.1559	0.6145	3.966	0.4397	1.7334	0.040	0.0045	0.0176
1225	1.014	0.1057	0.4156	3.962	0.4131	1.6238	0.037	0.0039	0.0153
1227	1.028	0.1569	0.4448	3.507	0.5354	1.5175	0.036	0.0055	0.0155
1240	1.809	0.2290	0.8272	6.309	0.7986	2.8848	0.036	0.0046	0.0165
50 mg/kg/day									
1251	0.781	0.1051	0.3430	3.702	0.4983	1.6258	0.045	0.0061	0.0199
1252	1.403	0.1358	0.5920	3.409	0.3300	1.4384	0.048	0.0046	0.0201
1254	1.586	0.2259	0.7229	3.782	0.5387	1.7238	0.134	0.0191	0.0610
1257	1.222	0.1390	0.5018	3.919	0.4458	1.6094	0.054	0.0061	0.0220
1261	1.150	0.1454	0.4628	4.249	0.5372	1.7099	0.045	0.0056	0.0179
1270	1.192	0.1356	0.5079	4.032	0.4587	1.7179	0.051	0.0058	0.0217
1277	1.312	0.1435	0.5724	6.278	0.6869	2.7391	0.046	0.0050	0.0201
1283	0.922	0.1233	0.3964	4.261	0.5697	1.8319	0.026	0.0035	0.0112
1286	1.333	0.1471	0.5738	3.356	0.3704	1.4447	0.045	0.0050	0.0195
1287	1.043	0.1211	0.4212	3.489	0.4052	1.4091	0.071	0.0083	0.0288

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

Individual Animal Final Body and Organ Weights - MALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Testes g	Testes/BWt %	Testes/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio
50 mg/kg/day									
1289	1.200	0.1249	0.5284	3.455	0.3595	1.5214	0.047	0.0049	0.0207
1294	1.148	0.1745	0.5413	3.450	0.5243	1.6266	0.047	0.0071	0.0220
1295	1.281	0.1507	0.4996	2.945	0.3465	1.1486	0.070	0.0082	0.0272
1297	1.225	0.1669	0.5440	5.465	0.7446	2.4267	0.033	0.0044	0.0144
1309	1.165	0.1277	0.4740	4.267	0.4679	1.7360	0.061	0.0067	0.0248
1311	1.445	0.1710	0.6595	3.916	0.4634	1.7873	0.052	0.0062	0.0239
1315	1.136	0.1406	0.4677	4.232	0.5238	1.7423	0.051	0.0063	0.0209
1319	1.475	0.1646	0.6366	5.123	0.5718	2.2110	0.053	0.0059	0.0227

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Heart g	Heart/BWt %	Heart/BrWt ratio
0 mg/kg/day									
1333	321	1.864	0.5807	0.065	0.0202	0.0349	1.052	0.3277	0.5644
1335	462	2.078	0.4498	0.111	0.0240	0.0534	1.191	0.2578	0.5731
1339	539	1.939	0.3597	0.099	0.0184	0.0511	1.531	0.2840	0.7896
1347	439	2.015	0.4590	0.114	0.0260	0.0566	1.525	0.3474	0.7568
1352	538	2.192	0.4074	0.160	0.0297	0.0730	1.867	0.3470	0.8517
1353	428	2.027	0.4736	0.097	0.0227	0.0479	1.390	0.3248	0.6857
1355	345	1.942	0.5629	0.076	0.0220	0.0391	1.404	0.4070	0.7230
1357	449	2.093	0.4661	0.087	0.0194	0.0416	1.405	0.3129	0.6713
1358	574	2.164	0.3770	0.110	0.0192	0.0508	1.529	0.2664	0.7066
1365	463	2.007	0.4335	0.101	0.0218	0.0503	1.487	0.3212	0.7409
1368	431	1.872	0.4343	0.135	0.0313	0.0721	1.345	0.3121	0.7185
1370	356	1.986	0.5579	0.068	0.0191	0.0342	1.112	0.3124	0.5599
1372	511	1.841	0.3603	0.105	0.0205	0.0570	1.644	0.3217	0.8930
1374	547	2.051	0.3750	0.147	0.0269	0.0717	1.468	0.2684	0.7157
1389	510	1.904	0.3733	0.068	0.0133	0.0357	1.461	0.2865	0.7673
1392	479	1.910	0.3987	0.054	0.0113	0.0283	1.598	0.3336	0.8366
1 mg/kg/day									
1416	527	2.093	0.3972	0.104	0.0197	0.0497	1.366	0.2592	0.6527
1418	587	2.026	0.3451	0.087	0.0148	0.0429	1.264	0.2153	0.6239
1419	545	2.130	0.3908	0.150	0.0275	0.0704	1.350	0.2477	0.6338
1424	394	2.069	0.5251	0.100	0.0254	0.0483	1.056	0.2680	0.5104
1425	463	2.098	0.4531	0.076	0.0164	0.0362	1.433	0.3095	0.6830

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Heart g	Heart/BWt %	Heart/BrWt ratio
1 mg/kg/day									
1429	434	1.906	0.4392	0.114	0.0263	0.0598	1.390	0.3203	0.7293
1430	689	2.041	0.2962	0.152	0.0221	0.0745	1.853	0.2689	0.9079
1431	492	2.178	0.4427	0.159	0.0323	0.0730	1.485	0.3018	0.6818
1432	513	2.003	0.3904	0.105	0.0205	0.0524	1.620	0.3158	0.8088
1434	388	1.940	0.5000	0.075	0.0193	0.0387	1.600	0.4124	0.8247
1435	626	1.850	0.2955	0.053	0.0085	0.0286	1.696	0.2709	0.9168
1437	399	1.939	0.4860	0.178	0.0446	0.0918	1.093	0.2739	0.5637
1438	569	2.060	0.3620	0.062	0.0109	0.0301	1.341	0.2357	0.6510
1440	530	2.053	0.3874	0.056	0.0106	0.0273	1.323	0.2496	0.6444
1447	477	1.965	0.4119	0.115	0.0241	0.0585	1.390	0.2914	0.7074
1450	538	2.143	0.3983	0.083	0.0154	0.0387	1.475	0.2742	0.6883
1454	442	1.920	0.4344	0.059	0.0133	0.0307	1.445	0.3269	0.7526
1460	546	2.059	0.3771	0.157	0.0288	0.0763	1.641	0.3005	0.7970
1467	491	2.092	0.4261	0.069	0.0141	0.0330	1.380	0.2811	0.6597
1469	302	1.869	0.6189	0.109	0.0361	0.0583	1.627	0.5387	0.8705
1471	330	2.009	0.6088	0.095	0.0288	0.0473	1.364	0.4133	0.6789
1475	325	2.205	0.6785	0.058	0.0178	0.0263	1.007	0.3098	0.4567
50 mg/kg/day									
1491	631	2.070	0.3281	0.070	0.0111	0.0338	1.690	0.2678	0.8164
1496	543	2.214	0.4077	0.098	0.0180	0.0443	1.637	0.3015	0.7394
1500	476	1.957	0.4111	0.045	0.0095	0.0230	1.198	0.2517	0.6122
1516	438	1.891	0.4317	0.104	0.0237	0.0550	1.711	0.3906	0.9048

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Heart g	Heart/BWt %	Heart/BrWt ratio
50 mg/kg/day									
1520	653	1.868	0.2861	0.068	0.0104	0.0364	1.527	0.2338	0.8175
1528	507	2.085	0.4112	0.137	0.0270	0.0657	2.422	0.4777	1.1616
1532	463	1.911	0.4127	0.114	0.0246	0.0597	1.271	0.2745	0.6651
1538	546	2.116	0.3875	0.512[e]	0.0938[e]	0.2420[e]	2.037	0.3731	0.9627
1541	510	1.910	0.3745	0.282	0.0553	0.1476	1.615	0.3167	0.8455
1543	484	2.026	0.4186	0.113	0.0233	0.0558	1.383	0.2857	0.6826
1546	544	1.994	0.3665	0.119	0.0219	0.0597	1.807	0.3322	0.9062
1547	474	1.904	0.4017	0.123	0.0259	0.0646	1.444	0.3046	0.7584
1549	590	1.750	0.2966	0.115	0.0195	0.0657	1.521	0.2578	0.8691
1553	525	2.141	0.4078	0.166	0.0316	0.0775	1.516	0.2888	0.7081
1559	399	1.935	0.4850	0.070	0.0175	0.0362	1.242	0.3113	0.6419
500 mg/kg/day									
1576	466	1.924	0.4129	0.089	0.0191	0.0463	1.375	0.2951	0.7147
1578	382	1.938	0.5073	0.101	0.0264	0.0521	1.586	0.4152	0.8184
1581	419	2.104	0.5021	0.102	0.0243	0.0485	1.293	0.3086	0.6145
1585	424	2.007	0.4733	0.082	0.0193	0.0409	1.345	0.3172	0.6702
1587	601	2.176	0.3621	0.145	0.0241	0.0666	1.891	0.3146	0.8690
1593	479	2.359	0.4925	0.395	0.0825	0.1674	1.731	0.3614	0.7338
1594	369	1.743	0.4724	0.086	0.0233	0.0493	1.441	0.3905	0.8267
1595	365	1.970	0.5397	0.329	0.0901	0.1670	1.243	0.3405	0.6310
1607	669	1.902	0.2843	0.085	0.0127	0.0447	1.832	0.2738	0.9632
1612	484	9.268	1.9149	0.061	0.0126	0.0066	1.527	0.3155	0.1648

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Body weight g	Brain g	Brain/BWt %	Adrenal gl g	Adrenal gl/ BWt %	Adrenal gl/ BrWt ratio	Heart g	Heart/BWt %	Heart/BrWt ratio
500 mg/kg/day									
1613	570	1.922	0.3372	0.157	0.0275	0.0817	1.417	0.2486	0.7373
1618	477	1.845	0.3868	0.115	0.0241	0.0623	2.012	0.4218	1.0905
1621	425	2.003	0.4713	0.050	0.0118	0.0250	1.368	0.3219	0.6830
1623	510	2.000	0.3922	0.210	0.0412	0.1050	1.687	0.3308	0.8435
1628	418	2.051	0.4907	0.051	0.0122	0.0249	1.358	0.3249	0.6621
1631	412	1.873	0.4546	0.066	0.0160	0.0352	1.257	0.3051	0.6711
1632	364	2.110	0.5797	0.050	0.0137	0.0237	1.298	0.3566	0.6152
1633	388	2.009	0.5178	0.100	0.0258	0.0498	1.349	0.3477	0.6715

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio	Ovaries w/ oviducts g	Ovaries w/ oviducts/BWt %	Ovaries w/ oviducts/BrWt ratio
0 mg/kg/day									
1333	2.436	0.7589	1.3069	9.324	2.9047	5.0021	0.098	0.0305	0.0526
1335	2.807	0.6076	1.3508	17.755	3.8431	8.5443	0.107	0.0232	0.0515
1339	2.912	0.5403	1.5018	16.712	3.1006	8.6189	0.200	0.0371	0.1031
1347	3.466	0.7895	1.7201	14.753	3.3606	7.3216	0.115	0.0262	0.0571
1352	3.907	0.7262	1.7824	22.066	4.1015	10.0666	0.158	0.0294	0.0721
1353	3.229	0.7544	1.5930	15.168	3.5439	7.4830	0.129	0.0301	0.0636
1355	3.134	0.9084	1.6138	9.632	2.7919	4.9598	0.085	0.0246	0.0438
1357	3.144	0.7002	1.5022	14.981	3.3365	7.1577	0.143	0.0318	0.0683
1358	3.336	0.5812	1.5416	19.727	3.4368	9.1160	0.114	0.0199	0.0527
1365	3.422	0.7391	1.7050	17.955	3.8780	8.9462	0.162	0.0350	0.0807
1368	3.157	0.7325	1.6864	17.905	4.1543	9.5646	0.149	0.0346	0.0796
1370	2.673	0.7508	1.3459	11.548	3.2438	5.8147	0.101	0.0284	0.0509
1372	2.830	0.5538	1.5372	21.715	4.2495	11.7952	0.162	0.0317	0.0880
1374	3.152	0.5762	1.5368	19.068	3.4859	9.2969	0.128	0.0234	0.0624
1389	3.127	0.6131	1.6423	18.184	3.5655	9.5504	0.103	0.0202	0.0541
1392	2.923	0.6102	1.5304	15.568	3.2501	8.1508	0.032	0.0067	0.0168
1 mg/kg/day									
1416	3.119	0.5918	1.4902	17.875	3.3918	8.5404	0.196	0.0372	0.0936
1418	2.920	0.4974	1.4413	13.700	2.3339	6.7621	0.145	0.0247	0.0716
1419	3.420	0.6275	1.6056	19.790	3.6312	9.2911	0.120	0.0220	0.0563
1424	2.437	0.6185	1.1779	8.608	2.1848	4.1605	0.079	0.0201	0.0382
1425	3.565	0.7700	1.6992	14.178	3.0622	6.7579	0.133	0.0287	0.0634

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio	Ovaries w/ oviducts g	Ovaries w/ oviducts/BWt %	Ovaries w/ oviducts/BrWt ratio
1 mg/kg/day									
1429	2.874	0.6622	1.5079	18.428	4.2461	9.6684	0.136	0.0313	0.0714
1430	3.895	0.5653	1.9084	21.474	3.1167	10.5213	0.144	0.0209	0.0706
1431	3.780	0.7683	1.7355	17.446	3.5459	8.0101	0.167	0.0339	0.0767
1432	3.992	0.7782	1.9930	20.912	4.0764	10.4403	0.110	0.0214	0.0549
1434	2.980	0.7680	1.5361	13.176	3.3959	6.7918	0.098	0.0253	0.0505
1435	3.282	0.5243	1.7741	25.254	4.0342	13.6508	0.125	0.0200	0.0676
1437	3.257	0.8163	1.6797	12.858	3.2226	6.6313	0.090	0.0226	0.0464
1438	2.983	0.5243	1.4481	13.424	2.3592	6.5165	0.123	0.0216	0.0597
1440	2.991	0.5643	1.4569	22.315	4.2104	10.8695	0.156	0.0294	0.0760
1447	3.382	0.7090	1.7211	10.424	2.1853	5.3048	0.075	0.0157	0.0382
1450	3.027	0.5626	1.4125	15.419	2.8660	7.1951	0.666	0.1238	0.3108
1454	2.766	0.6258	1.4406	13.901	3.1450	7.2401	0.090	0.0204	0.0469
1460	3.547	0.6496	1.7227	16.535	3.0284	8.0306	0.155	0.0284	0.0753
1467	2.694	0.5487	1.2878	15.420	3.1405	7.3709	0.111	0.0226	0.0531
1469	5.557[e]	1.8401[e]	2.9732[e]	14.288	4.7311	7.6447	0.145	0.0480	0.0776
1471	3.124	0.9467	1.5550	11.837	3.5870	5.8920	0.080	0.0242	0.0398
1475	2.843	0.8748	1.2893	10.380	3.1938	4.7075	0.133	0.0409	0.0603
50 mg/kg/day									
1491	3.350	0.5309	1.6184	20.770	3.2916	10.0338	0.080	0.0127	0.0386
1496	2.916	0.5370	1.3171	20.636	3.8004	9.3207	0.159	0.0293	0.0718
1500	2.709	0.5691	1.3843	12.943	2.7191	6.6137	0.126	0.0265	0.0644
1516	3.267	0.7459	1.7277	15.510	3.5411	8.2020	0.091	0.0208	0.0481

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio	Ovaries w/ oviducts g	Ovaries w/ oviducts/BWt %	Ovaries w/ oviducts/BrWt ratio
50 mg/kg/day									
1520	2.612	0.4000	1.3983	16.307	2.4972	8.7297	0.139	0.0213	0.0744
1528	7.095[e]	1.3994[e]	3.4029[e]	23.354	4.6063	11.2010	0.093	0.0183	0.0446
1532	3.237	0.6991	1.6939	17.668	3.8160	9.2454	0.171	0.0369	0.0895
1538	3.693	0.6764	1.7453	18.982	3.4766	8.9707	0.120	0.0220	0.0567
1541	3.675	0.7206	1.9241	19.133	3.7516	10.0173	0.124	0.0243	0.0649
1543	3.123	0.6452	1.5415	16.478	3.4045	8.1333	0.141	0.0291	0.0696
1546	3.470	0.6379	1.7402	16.448	3.0235	8.2487	0.094	0.0173	0.0471
1547	3.112	0.6565	1.6345	16.501	3.4812	8.6665	0.082	0.0173	0.0431
1549	3.440	0.5831	1.9657	14.877	2.5215	8.5011	0.104	0.0176	0.0594
1553	3.765	0.7171	1.7585	16.996	3.2373	7.9383	0.107	0.0204	0.0500
1559	3.088	0.7739	1.5959	11.618	2.9118	6.0041	0.084	0.0211	0.0434
500 mg/kg/day									
1576	2.993	0.6423	1.5556	26.470	5.6803	13.7578	0.126	0.0270	0.0655
1578	3.761	0.9846	1.9407	18.315	4.7945	9.4505	0.094	0.0246	0.0485
1581	3.213	0.7668	1.5271	17.644	4.2110	8.3859	0.112	0.0267	0.0532
1585	3.273	0.7719	1.6308	21.075	4.9705	10.5007	0.127	0.0300	0.0633
1587	4.128	0.6869	1.8971	44.557	7.4138	20.4766	0.127	0.0211	0.0584
1593	4.687	0.9785	1.9869	27.766	5.7967	11.7702	0.136	0.0284	0.0577
1594	3.321	0.9000	1.9053	15.739	4.2653	9.0298	0.150	0.0407	0.0861
1595	3.009	0.8244	1.5274	14.012	3.8389	7.1127	0.121	0.0332	0.0614
1607	4.803	0.7179	2.5252	34.820	5.2048	18.3070	0.081	0.0121	0.0426
1612	3.312	0.6843	0.3574	26.926	5.5632	2.9053	0.126	0.0260	0.0136

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Kidneys g	Kidneys/BWt %	Kidneys/BrWt ratio	Liver g	Liver/BWt %	Liver/BrWt ratio	Ovaries w/ oviducts g	Ovaries w/ oviducts/BWt %	Ovaries w/ oviducts/BrWt ratio
500 mg/kg/day									
1613	3.590	0.6298	1.8678	35.592	6.2442	18.5182	0.165	0.0289	0.0858
1618	3.698	0.7753	2.0043	20.344	4.2650	11.0266	0.153	0.0321	0.0829
1621	3.004	0.7068	1.4998	19.179	4.5127	9.5751	0.166	0.0391	0.0829
1623	4.031	0.7904	2.0155	24.393	4.7829	12.1965	0.444	0.0871	0.2220
1628	3.128	0.7483	1.5251	16.618	3.9756	8.1024	0.261	0.0624	0.1273
1631	3.114	0.7558	1.6626	19.771	4.7988	10.5558	0.198	0.0481	0.1057
1632	2.835	0.7788	1.3436	16.494	4.5313	7.8171	0.156	0.0429	0.0739
1633	3.412	0.8794	1.6984	18.464	4.7588	9.1906	0.110	0.0284	0.0548

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio	Uterus w/ cervix g	Uterus w/ cervix/BWt %	Uterus w/ cervix/BrWt ratio
0 mg/kg/day									
1333	0.390	0.1215	0.2092	0.022	0.0069	0.0118	9.209	2.8688	4.9405
1335	0.955	0.2067	0.4596	0.032	0.0070	0.0155	0.974	0.2108	0.4687
1339	0.931	0.1727	0.4801	0.034	0.0064	0.0177	1.048	0.1944	0.5405
1347	0.854	0.1945	0.4238	0.033	0.0075	0.0163	1.774	0.4041	0.8804
1352	1.454	0.2703	0.6633	0.045	0.0084	0.0207	1.408	0.2617	0.6423
1353	0.584	0.1364	0.2881	0.038	0.0089	0.0188	1.405	0.3283	0.6931
1355	0.480	0.1391	0.2472	0.041	0.0119	0.0212	0.596	0.1728	0.3069
1357	0.791	0.1762	0.3779	0.042	0.0094	0.0203	1.689	0.3762	0.8070
1358	1.145	0.1995	0.5291	0.075	0.0131	0.0348	1.875	0.3267	0.8665
1365	1.461	0.3156	0.7280	0.053	0.0114	0.0264	0.937	0.2024	0.4669
1368	1.010	0.2343	0.5395	0.035	0.0080	0.0184	1.421	0.3297	0.7591
1370	0.744	0.2090	0.3746	0.027	0.0074	0.0133	1.435	0.4031	0.7226
1372	1.420	0.2779	0.7713	0.048	0.0094	0.0261	0.708	0.1386	0.3846
1374	0.697	0.1274	0.3398	0.034	0.0062	0.0165	1.704	0.3115	0.8308
1389	0.989	0.1939	0.5194	0.049	0.0096	0.0258	1.552	0.3043	0.8151
1392	0.668	0.1395	0.3497	0.054	0.0113	0.0284	1.073	0.2240	0.5618
1 mg/kg/day									
1416	0.666	0.1264	0.3182	0.036	0.0069	0.0174	1.818	0.3450	0.8686
1418	0.638	0.1087	0.3149	0.041	0.0070	0.0203	0.632	0.1077	0.3119
1419	0.750	0.1376	0.3521	0.035	0.0065	0.0166	1.260	0.2312	0.5915
1424	0.567	0.1439	0.2740	0.072	0.0183	0.0349	1.067	0.2708	0.5157
1425	0.844	0.1823	0.4023	0.043	0.0092	0.0203	0.929	0.2006	0.4428

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio	Uterus w/ cervix g	Uterus w/ cervix/BWt %	Uterus w/ cervix/BrWt ratio
1 mg/kg/day									
1429	0.681	0.1569	0.3573	0.045	0.0103	0.0236	1.410	0.3249	0.7398
1430	1.286	0.1866	0.6301	0.041	0.0059	0.0199	1.128	0.1637	0.5527
1431	1.014	0.2061	0.4656	0.043	0.0087	0.0196	1.196	0.2431	0.5491
1432	1.770	0.3450	0.8837	0.083	0.0161	0.0413	1.101	0.2146	0.5497
1434	0.555	0.1430	0.2861	0.027	0.0071	0.0141	0.983	0.2534	0.5067
1435	0.991	0.1583	0.5357	0.038	0.0061	0.0205	0.673	0.1075	0.3638
1437	0.499	0.1251	0.2573	0.045	0.0113	0.0233	0.832	0.2085	0.4291
1438	0.850	0.1494	0.4126	0.050	0.0088	0.0244	0.570	0.1002	0.2767
1440	0.881	0.1662	0.4291	0.029	0.0055	0.0142	0.680	0.1283	0.3312
1447	0.555	0.1164	0.2824	0.075	0.0158	0.0383	0.559	0.1172	0.2845
1450	0.780	0.1450	0.3640	0.043	0.0080	0.0201	0.789	0.1467	0.3682
1454	0.976	0.2208	0.5083	0.041	0.0093	0.0214	0.725	0.1640	0.3776
1460	0.530	0.0971	0.2574	0.050	0.0092	0.0244	1.093	0.2002	0.5308
1467	0.788	0.1605	0.3767	0.031	0.0063	0.0148	3.369	0.6862	1.6104
1469	0.610	0.2020	0.3264	0.041	0.0135	0.0218	2.978	0.9861	1.5934
1471	0.910	0.2758	0.4530	0.043	0.0130	0.0213	1.417	0.4294	0.7053
1475	0.711	0.2188	0.3224	0.046	0.0142	0.0209	0.854	0.2628	0.3873
50 mg/kg/day									
1491	0.890	0.1410	0.4300	0.042	0.0067	0.0205	0.450	0.0713	0.2174
1496	1.248	0.2298	0.5637	0.033	0.0060	0.0148	1.471	0.2709	0.6644
1500	0.504	0.1059	0.2575	0.037	0.0077	0.0188	0.894	0.1878	0.4568
1516	0.996	0.2274	0.5267	0.046	0.0104	0.0241	2.421	0.5527	1.2803

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio	Uterus w/ cervix g	Uterus w/ cervix/BWt %	Uterus w/ cervix/BrWt ratio
50 mg/kg/day									
1520	0.765	0.1172	0.4095	0.041	0.0063	0.0220	0.929	0.1423	0.4973
1528	3.547	0.6996	1.7012	0.037	0.0074	0.0179	2.908	0.5736	1.3947
1532	0.713	0.1540	0.3731	0.047	0.0102	0.0247	0.651	0.1406	0.3407
1538	1.186	0.2172	0.5605	0.038	0.0070	0.0181	1.254	0.2297	0.5926
1541	0.942	0.1847	0.4932	0.039	0.0077	0.0205	0.954	0.1871	0.4995
1543	0.781	0.1614	0.3855	0.055	0.0113	0.0269	0.947	0.1957	0.4674
1546	0.723	0.1329	0.3626	0.040	0.0074	0.0201	2.272	0.4176	1.1394
1547	0.670	0.1414	0.3519	0.040	0.0084	0.0209	0.963	0.2032	0.5058
1549	0.743	0.1259	0.4246	0.051	0.0086	0.0291	0.986	0.1671	0.5634
1553	0.863	0.1644	0.4031	0.044	0.0084	0.0206	1.422	0.2709	0.6642
1559	0.772	0.1935	0.3990	0.046	0.0115	0.0237	0.625	0.1566	0.3230
500 mg/kg/day									
1576	0.487	0.1045	0.2531	0.036	0.0077	0.0186	0.774	0.1661	0.4023
1578	0.555	0.1453	0.2864	0.034	0.0089	0.0176	1.795	0.4699	0.9262
1581	0.521	0.1243	0.2476	0.039	0.0092	0.0183	0.634	0.1513	0.3013
1585	0.600	0.1415	0.2990	0.044	0.0104	0.0220	1.022	0.2410	0.5092
1587	0.944	0.1571	0.4338	0.054	0.0090	0.0247	1.303	0.2168	0.5988
1593	0.817	0.1706	0.3463	0.046	0.0096	0.0195	1.667	0.3480	0.7067
1594	0.618	0.1675	0.3546	0.034	0.0092	0.0196	1.591	0.4312	0.9128
1595	0.505	0.1384	0.2563	0.042	0.0115	0.0214	0.571	0.1564	0.2898
1607	0.812	0.1214	0.4269	0.029	0.0043	0.0153	0.900	0.1345	0.4732
1612	7.924[e]	1.6372[e]	0.8550[e]	0.034	0.0071	0.0037	0.668	0.1380	0.0721

[e] Excluded from the mean

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

Individual Animal Final Body and Organ Weights - FEMALE

Terminal

Group, Animal Number	Spleen g	Spleen/BWt %	Spleen/BrWt ratio	Thyroid/ parathyroid gl g	Thyroid/ parathyroid gl/ BWt %	Thyroid/ parathyroid gl/ BrWt ratio	Uterus w/ cervix g	Uterus w/ cervix/BWt %	Uterus w/ cervix/BrWt ratio
500 mg/kg/day									
1613	1.136	0.1993	0.5911	0.047	0.0082	0.0245	1.173	0.2058	0.6103
1618	0.395	0.0828	0.2141	0.045	0.0094	0.0242	1.389	0.2912	0.7528
1621	0.666	0.1567	0.3325	0.041	0.0096	0.0204	0.698	0.1642	0.3485
1623	0.785	0.1539	0.3925	0.046	0.0090	0.0229	0.865	0.1696	0.4325
1628	0.588	0.1407	0.2867	0.030	0.0071	0.0145	1.650	0.3947	0.8045
1631	0.562	0.1364	0.3001	0.047	0.0115	0.0253	0.845	0.2051	0.4511
1632	0.702	0.1929	0.3327	0.033	0.0091	0.0157	0.915	0.2514	0.4336
1633	0.717	0.1848	0.3569	0.047	0.0121	0.0233	1.458	0.3758	0.7257

Table 10
Individual Animal Listing

MPI Research 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1001	S	**Macroscopic**	
		all tissues	- within normal limits
1001	S	**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
		coagulating glands	- within normal limits
		epididymides	- 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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1001	S	**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	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1001	S	**Microscopic**	
		pituitary gland	- within normal limits
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1001	S	**Microscopic**	
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
1002	S	**Macroscopic**	
		all tissues	- within normal limits
1002	S	**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
		coagulating glands	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1002	S	**Microscopic**	
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- degeneration/atrophy, retina, unilateral, minimal
		galt	- within normal limits
		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	- infiltration, mononuclear cell, 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1002	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
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, minimal
		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
		small intestine, ileum	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1002	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	- 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
		ureters	- within normal limits
		urinary bladder	- within normal limits
1003	S	**Macroscopic**	
		all tissues	- within normal limits
1003	S	**Microscopic**	
		adrenal glands	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1003	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
		coagulating glands	- within normal limits
		epididymides	- 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	- nephropathy, chronic progressive, bilateral, moderate
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1003	S	**Microscopic**	
		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
		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
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1003	S	**Microscopic**	
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1003	S	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
1004	S	**Macroscopic**	
		all tissues	- within normal limits
1004	S	**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	- astrocytoma, malignant, primary, incidental, not cause of death
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1004	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	- 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	- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1004	S	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1004	S	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		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
		ureters	- within normal limits
		urinary bladder	- within normal limits
1005	S	**Macroscopic**	
		spleen	- irregular surface, mild there is a constriction in the center of the spleen.
1005	S	**Microscopic**	
		adrenal glands	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1005	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
		coagulating glands	- within normal limits
		epididymides	- 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	- nephropathy, chronic progressive, bilateral, moderate
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1005	S	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- vacuolation, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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	- odontitis/periodontitis, mild
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1005	S	**Microscopic**	
		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
		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 abnormal shape, no lesion.
		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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1005	S	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		non-correlated macro observation	- spleen - irregular surface
1006	S	**Macroscopic**	
		all tissues	- within normal limits
1006	S	**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
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1006	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	- 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	- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
		lung	- hyperplasia, type II cell, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1006	S	**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	- fibrosis, minimal
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- cyst, mild
			- hyperplasia, focal, pars distalis, mild
		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
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1006	S	**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
		testes	- 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
1007	S	**Macroscopic**	
		all tissues	- within normal limits
1007	S	**Microscopic**	
		adrenal glands	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1007	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
		coagulating glands	- within normal limits
		epididymides	- 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	- inflammation, acute, unilateral, mild
			- nephropathy, chronic progressive, bilateral, mild
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1007	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	- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- hemangiosarcoma, malignant, primary, incidental, not cause of death
		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
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1007	S	**Microscopic**	
		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
		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
		testes	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1007	S	**Microscopic**	
		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
1008	S	**Macroscopic**	
		all tissues	- within normal limits
1008	S	**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

MPI Research 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1008	S	**Microscopic**	
		coagulating glands	- within normal limits
		epididymides	- 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	- 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	- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1008	S	**Microscopic**	
		lymph node, mesenteric	- 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
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1008	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	- 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
1009	S	**Macroscopic**	
		skin	- hair sparse, left axillary area, right axillary area, moderate corresponds to antemortem observation (hair sparse)

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1009	S	**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
		coagulating glands	- within normal limits
		epididymides	- 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	- nephropathy, chronic progressive, bilateral, mild
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1009	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	- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1009	S	**Microscopic**	
		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	- alopecia/hypotrichosis, moderate
			corresponds to macroscopic observation (skin - hair sparse)
			- hyperplasia, epidermal, 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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1009	S	**Microscopic**	
		testes	- hyperplasia, interstitial cell, unilateral, 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
1010	S	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate
1010	S	**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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1010	S	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), minimal
		coagulating glands	- within normal limits
		epididymides	- 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	- 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
			- vacuolation, centrilobular, 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1010	S	**Microscopic**	
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- fibrosis, minimal
		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)
		prostate gland	- within normal limits
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1010	S	**Microscopic**	
		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
		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	- within normal limits
		thymus	- within normal limits
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1010	S	**Microscopic**	
		urinary bladder	- within normal limits
0.1 mg/kg/day			
1081	S	**Macroscopic**	
		cavity, abdominal	- mass, yellow, mass a, present
			approximately 4.5 x 2.5 x 2.0 cm. located in the white adipose tissue near the left kidney.
		lymph node, iliac	- within normal limits
			draining node for mass a, bilateral.
1081	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		lymph node, iliac	- within normal limits
		mesentery/peritoneum	- necrosis, fat, moderate
			corresponds to macroscopic observation (cavity, abdominal - mass a)
		testes	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1082	S	**Macroscopic**	
		eyes	- small, left, moderate
			corresponds to antemortem observation (microphthalmia)
		eyes, retina	- small, left, moderate
		harderian glands	- enlarged, left, mild
1082	S	**Microscopic**	
		eyes	- phthisis bulbi, unilateral, severe
			corresponds to macroscopic observation (eyes - small)
		eyes, retina	- not examined
		harderian glands	- within normal limits
		liver	- focus of cellular alteration, clear, minimal
			- infiltration, mononuclear cell, minimal
		testes	- within normal limits
		non-correlated macro observation	- eyes, retina - small
			- harderian 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1083	S	**Macroscopic**	
		skin	- nodule, tan, lip, present corresponds to antemortem observation (nodule) approximately 0.3 cm in diameter.
1083	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		skin	- papilloma, squamous cell, benign, primary, mortality-independent corresponds to macroscopic observation (skin - nodule)
		testes	- within normal limits
1084	S	**Macroscopic**	
		all tissues	- within normal limits
1084	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		testes	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1085	S	**Macroscopic**	
		all tissues	- within normal limits
1085	S	**Microscopic**	
		liver	- focus of cellular alteration, clear, minimal
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, minimal
		testes	- within normal limits
1086	S	**Macroscopic**	
		all tissues	- within normal limits
1086	S	**Microscopic**	
		liver	- focus of cellular alteration, clear, minimal
			- infiltration, mononuclear cell, minimal
		testes	- within normal limits
1087	S	**Macroscopic**	
		seminal vesicles	- enlarged, left, 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1087	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		seminal vesicles	- dilatation, unilateral, mild
			corresponds to macroscopic observation (seminal vesicles - enlarged)
			- inflammation, unilateral, minimal
		testes	- within normal limits
1088	S	**Macroscopic**	
		all tissues	- within normal limits
1088	S	**Microscopic**	
		liver	- focus of cellular alteration, eosinophilic, minimal
		testes	- within normal limits
1089	S	**Macroscopic**	
		skin	- hair sparse, shoulder, bilateral, mild
			corresponds to antemortem observation (hair sparse)
1089	S	**Microscopic**	
		liver	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1089	S	**Microscopic**	
		skin	- alopecia/hypotrichosis, minimal
			corresponds to macroscopic observation (skin - hair sparse)
		testes	- within normal limits
1090	S	**Macroscopic**	
		all tissues	- within normal limits
1090	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		testes	- within normal limits
1 mg/kg/day			
1161	S	**Macroscopic**	
		all tissues	- within normal limits
1161	S	**Microscopic**	
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1161	S	**Microscopic**	
		testes	- within normal limits
1162	S	**Macroscopic**	
		all tissues	- within normal limits
1162	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		testes	- within normal limits
1163	S	**Macroscopic**	
		all tissues	- within normal limits
1163	S	**Microscopic**	
		liver	- within normal limits
		testes	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1164	S	**Macroscopic**	
		all tissues	- within normal limits
1164	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		testes	- within normal limits
1165	S	**Macroscopic**	
		all tissues	- within normal limits
1165	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
			- polyarteritis, minimal
		testes	- within normal limits
1166	S	**Macroscopic**	
		all tissues	- within normal limits
1166	S	**Microscopic**	
		liver	- infiltration, mononuclear 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1166	S	**Microscopic**	
		testes	- within normal limits
1167	S	**Macroscopic**	
		all tissues	- within normal limits
1167	S	**Microscopic**	
		liver	- within normal limits
		testes	- within normal limits
1168	S	**Macroscopic**	
		thyroid gland	- enlarged, left, moderate
1168	S	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
		testes	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1168	S	**Microscopic**	
		thyroid gland	- carcinoma, follicular cell, malignant, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (thyroid gland - enlarged)
1169	S	**Macroscopic**	
		liver	- focus/foci, red, multiple lobes, mild
1169	S	**Microscopic**	
		liver	- dilatation, sinusoidal, minimal corresponds to macroscopic observation (liver - focus/foci, red) - infiltration, mononuclear cell, minimal
		testes	- within normal limits
1170	S	**Macroscopic**	
		all tissues	- within normal limits
1170	S	**Microscopic**	
		liver	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1170	S	**Microscopic**	
		testes	- within normal limits
50 mg/kg/day			
1241	S	**Macroscopic**	
		all tissues	- within normal limits
1241	S	**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
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1241	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	- hydronephrosis, 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	- degeneration, cystic, focal, minimal
			- vacuolation, centrilobular, minimal
		lung	- histiocytosis, alveolar, minimal
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1241	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
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		small intestine, ileum	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1241	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	- 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
		ureters	- dilatation, unilateral, mild
		urinary bladder	- within normal limits
1242	S	**Macroscopic**	
		all tissues	- within normal limits
1242	S	**Microscopic**	
		adrenal glands	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1242	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
		coagulating glands	- within normal limits
		epididymides	- 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	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1242	S	**Microscopic**	
		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
		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
		pancreas	- atrophy, acinar, minimal
		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
		prostate 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1242	S	**Microscopic**	
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1242	S	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
1243	S	**Macroscopic**	
		all tissues	- within normal limits
1243	S	**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
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1243	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, mild
		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	- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1243	S	**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	- 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
		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
		small intestine, ileum	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1243	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	- 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
		ureters	- within normal limits
		urinary bladder	- within normal limits
1244	S	**Macroscopic**	
		all tissues	- within normal limits
1244	S	**Microscopic**	
		adrenal glands	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1244	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
		coagulating glands	- within normal limits
		epididymides	- 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	- nephropathy, chronic progressive, unilateral, 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1244	S	**Microscopic**	
		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, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1244	S	**Microscopic**	
		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
		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	- 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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1244	S	**Microscopic**	
		urinary bladder	- within normal limits
1245	S	**Macroscopic**	
		testes	- focus/foci, yellow, left, mild at junction with head of epididymis.
1245	S	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, mild
			- vacuolation, diffuse, bilateral, minimal
			- 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
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1245	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, mild
		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	- infiltration, mononuclear cell, minimal
			- necrosis, focal, minimal
			- vacuolation, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1245	S	**Microscopic**	
		lymph node, mesenteric	- 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
		pancreas	- atrophy, acinar, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, minimal
		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	- granuloma, foreign body, mild plant material.
		small intestine, duodenum	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1245	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	- degeneration/atrophy, seminiferous tubules, unilateral, mild
			- mineralization, tubular, unilateral, mild
			corresponds to macroscopic observation (testes - focus/foci, yellow)
		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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1246	S	**Macroscopic**	
		stomach, glandular	- swollen/thickened, mucosa, mild
		testes	- enlarged, right, mild
1246	S	**Microscopic**	
		adrenal glands	- 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
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- oligospermia/germ cell debris, unilateral, 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

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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1246	S	**Microscopic**	
		heart	- within normal limits
		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
			- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1246	S	**Microscopic**	
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, mild
		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
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1246	S	**Microscopic**	
		testes	- adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (testes - enlarged)
		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
		non-correlated macro observation	- stomach, glandular - swollen/thickened
1247	S	**Macroscopic**	
		all tissues	- within normal limits
1247	S	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1247	S	**Microscopic**	
		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	- 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	- hydronephrosis, unilateral, mild
			- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1247	S	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, mild
		prostate gland	- within normal limits
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1247	S	**Microscopic**	
		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
		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	- hyperplasia, interstitial cell, unilateral, minimal
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1247	S	**Microscopic**	
		urinary bladder	- within normal limits
1248	S	**Macroscopic**	
		liver	- focus/foci, tan, multiple lobes, mild
1248	S	**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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1248	S	**Microscopic**	
		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	- hyperplasia, bile duct, minimal
			- necrosis, focal, mild
			corresponds to macroscopic observation (liver - focus/foci, tan)
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1248	S	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, mild
		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
		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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1248	S	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		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
		ureters	- within normal limits one of pair present
		urinary bladder	- within normal limits
1249[r]	S	**Macroscopic**	
		all tissues	- within normal limits
1249[r]	S	**Microscopic**	
		adrenal glands	- within normal limits

S - Scheduled necropsy
[r] Replacement animal

MPI Research 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1249[r]	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
		coagulating glands	- within normal limits
		epididymides	- 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, mild
			- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits

S - Scheduled necropsy
[r] Replacement animal

MPI Research 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1249[r]	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	- degeneration, cystic, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- within normal limits

S - Scheduled necropsy
[r] Replacement animal

MPI Research 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1249[r]	S	**Microscopic**	
		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
		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	- hyperplasia, interstitial cell, bilateral, minimal
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits

S - Scheduled necropsy
[r] Replacement animal

MPI Research 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1249[r]	S	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
1250	S	**Macroscopic**	
		all tissues	- within normal limits
1250	S	**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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits

S - Scheduled necropsy
[r] Replacement animal

MPI Research 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1250	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	- 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	- focus of cellular alteration, clear, minimal
			- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1250	S	**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	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- 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 - MALE
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1250	S	**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
		testes	- hyperplasia, interstitial cell, unilateral, minimal
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1322	S	**Macroscopic**	
		all tissues	- within normal limits
1322	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
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1322	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- mineralization, tubular, 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
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, mild
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1322	S	**Microscopic**	
		ovaries	- within normal limits
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		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	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1322	S	**Microscopic**	
		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	- metaplasia, squamous, minimal
		vagina	- within normal limits
1324	S	**Macroscopic**	
		all tissues	- within normal limits
1324	S	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1324	S	**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
			- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1324	S	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, 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, 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	- within normal limits
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1324	S	**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
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1324	S	**Microscopic**	
		vagina	- within normal limits
1325	S	**Macroscopic**	
		all tissues	- within normal limits
1325	S	**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
		galt	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1325	S	**Microscopic**	
		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
		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	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1325	S	**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	- 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1325	S	**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
1326	S	**Macroscopic**	
		all tissues	- within normal limits
1326	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1326	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, unilateral, minimal
			- mineralization, tubular, unilateral, minimal
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1326	S	**Microscopic**	
		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
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1326	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	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1326	S	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
1327	S	**Macroscopic**	
		pituitary gland	- enlarged, mild
1327	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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1327	S	**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	- hyperplasia, bile duct, 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1327	S	**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
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1327	S	**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
		non-correlated macro observation	- pituitary gland - enlarged
1328	S	**Macroscopic**	
		pituitary gland	- enlarged, mild
1328	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1328	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	- within normal limits
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1328	S	**Microscopic**	
		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
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1328	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	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1328	S	**Microscopic**	
		uterus with cervix	- within normal limits
		vagina	- within normal limits
1329	S	**Macroscopic**	
		all tissues	- within normal limits
1329	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
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1329	S	**Microscopic**	
		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
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1329	S	**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
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1329	S	**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	- metaplasia, squamous, minimal
		vagina	- within normal limits
1330	S	**Macroscopic**	
		skin	- hair sparse, dorsal cervical region, dorsal thoracic region, moderate corresponds to antemortem observation (hair sparse)
1330	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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1330	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	- within normal limits
		joint, tibiofemoral	- within normal limits
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1330	S	**Microscopic**	
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
		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	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		salivary gland, mandibular	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1330	S	**Microscopic**	
		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
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1330	S	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- metaplasia, squamous, minimal
		vagina	- within normal limits
1331	S	**Macroscopic**	
		all tissues	- within normal limits
1331	S	**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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1331	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	- 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	- focus of cellular alteration, clear, 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1331	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	- not examined
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1331	S	**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
		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
1332	S	**Macroscopic**	
		all tissues	- within normal limits
1332	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1332	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	- within normal limits
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1332	S	**Microscopic**	
		larynx	- within normal limits
		liver	- vacuolation, median cleft, 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	- 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1332	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	- 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1332	S	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- within normal limits
		vagina	- within normal limits
1 mg/kg/day			
1401	S	**Macroscopic**	
		all tissues	- within normal limits
1401	S	**Microscopic**	
		kidneys	- within normal limits
		liver	- within normal limits
1402	S	**Macroscopic**	
		pituitary gland	- enlarged, red, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1402	S	**Macroscopic**	
		skin	- hair sparse, dorsal lumbar region, abdominal, mild corresponds to antemortem observation (hair sparse)
1402	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
		liver	- hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal
		pituitary gland	- within normal limits
		skin	- alopecia/hypotrichosis, moderate corresponds to macroscopic observation (skin - hair sparse)
		non-correlated macro observation	- pituitary gland - enlarged
1403	S	**Macroscopic**	
		mammary gland	- swollen/thickened, generalized, mild
		pituitary gland	- enlarged, minimal
		skin	- hair sparse, ventral thorax, dorsal cervical region, mild corresponds to antemortem observation (hair sparse)
1403	S	**Microscopic**	
		kidneys	- mineralization, pelvic, unilateral, minimal - mineralization, tubular, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1403	S	**Microscopic**	
		liver	- within normal limits
		mammary gland	- hyperplasia, lobular, mild
			corresponds to macroscopic observation (mammary gland - swollen/thickened)
		pituitary gland	- hyperplasia, focal, pars distalis, mild
		skin	- alopecia/hypotrichosis, mild
			corresponds to macroscopic observation (skin - hair sparse)
		non-correlated macro observation	- pituitary gland - enlarged
1404	S	**Macroscopic**	
		all tissues	- within normal limits
1404	S	**Microscopic**	
		kidneys	- within normal limits
		liver	- focus of cellular alteration, basophilic, minimal
1405	S	**Macroscopic**	
		lung with bronchi	- focus/foci, white, multiple lobes, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1405	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, left.
		lymph node, inguinal	- enlarged, right, moderate
		pituitary gland	- enlarged, mild
		skin, subcutis	- mass, ulcerated, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 2.0 cm in diameter, tan.
1405	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal - hyperplasia, bile duct, minimal - infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal corresponds to macroscopic observation (lung with bronchi - focus/foci, white)
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1405	S	**Microscopic**	
		mammary gland	- adenocarcinoma, malignant, multiple, primary, mortality-independent
			corresponds to macroscopic observation (lymph node, inguinal - enlarged; skin, subcutis - mass a)
		pituitary gland	- hyperplasia, diffuse, pars distalis, mild
			corresponds to macroscopic observation (pituitary gland - enlarged)
1406	S	**Macroscopic**	
		all tissues	- within normal limits
1406	S	**Microscopic**	
		kidneys	- mineralization, tubular, unilateral, minimal
		liver	- infiltration, mononuclear cell, minimal
1407	S	**Macroscopic**	
		pituitary gland	- enlarged, red, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1407	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		liver	- infiltration, mononuclear cell, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
1408	S	**Macroscopic**	
		all tissues	- within normal limits
1408	S	**Microscopic**	
		kidneys	- nephropathy, chronic progressive, unilateral, minimal
			- pyelitis, unilateral, minimal
		liver	- within normal limits
1409	S	**Macroscopic**	
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
1 mg/kg/day			
1409	S	**Microscopic**	
		kidneys	- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		liver	- infiltration, mononuclear cell, minimal
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
1410	S	**Macroscopic**	
		pituitary gland	- enlarged, mild
1410	S	**Microscopic**	
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		liver	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1481	S	**Macroscopic**	
		adipose tissue	- focus/foci, yellow, mild located in white adipose tissue near right uterine horn.
		pituitary gland	- enlarged, red, mild
		spleen	- small, mild
1481	S	**Microscopic**	
		kidneys	- nephropathy, chronic progressive, bilateral, mild
		liver	- within normal limits
		mesentery/peritoneum	- necrosis, fat, mild corresponds to macroscopic observation (adipose tissue - focus/foci, yellow)
		pituitary gland	- within normal limits
		spleen	- within normal limits
		non-correlated macro observation	- pituitary gland - enlarged - spleen - small
1482	S	**Macroscopic**	
		pituitary gland	- enlarged, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1482	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- degeneration, cystic, focal, minimal
		pituitary gland	- within normal limits
		non-correlated macro observation	- pituitary gland - enlarged
1483	S	**Macroscopic**	
		all tissues	- within normal limits
1483	S	**Microscopic**	
		kidneys	- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		liver	- focus of cellular alteration, basophilic, minimal
			- infiltration, mononuclear 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1484	S	**Macroscopic**	
		all tissues	- within normal limits
1484	S	**Microscopic**	
		kidneys	- mineralization, pelvic, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
		liver	- focus of cellular alteration, eosinophilic, mild
1485	S	**Macroscopic**	
		all tissues	- within normal limits
1485	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
		liver	- infiltration, mononuclear cell, minimal
1486	S	**Macroscopic**	
		all tissues	- within normal limits
1486	S	**Microscopic**	
		kidneys	- mineralization, pelvic, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1486	S	**Microscopic**	
		liver	- within normal limits
1487	S	**Macroscopic**	
		skin	- hair sparse, dorsal thoracic region, minimal corresponds to antemortem observation (hair sparse)
1487	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
		liver	- within normal limits
		skin	- alopecia/hypotrichosis, mild corresponds to macroscopic observation (skin - hair sparse)
1488	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, left.
		lymph node, inguinal	- within normal limits draining node for mass a, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1488	S	**Macroscopic**	
		ovaries	- cyst, clear, left, mild
		pituitary gland	- enlarged, red, severe
		skin	- abrasion/scab, right inguinal area, mild corresponds to antemortem observation (scabbed area)
			- hair sparse, neck, shoulder, mild corresponds to antemortem observation (hair sparse)
		skin, subcutis	- mass, tan, mass a, right inguinal area, present corresponds to antemortem observation (mass 1) approximately 1.0 x 0.5 x 0.5 cm.
			- mass, tan, mass b, left axillary area, present corresponds to antemortem observation (swelling) approximately 1.0 cm in diameter.
1488	S	**Microscopic**	
		kidneys	- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, unilateral, minimal
		liver	- focus of cellular alteration, eosinophilic, minimal
		lymph node, axillary	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1488	S	**Microscopic**	
		mammary gland	- adenoma, benign, 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
		ovaries	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		skin	- alopecia/hypotrichosis, mild
			corresponds to macroscopic observation (skin - hair sparse)
		non-correlated macro observation	- ovaries - cyst
			- skin - abrasion/scab
1489	S	**Macroscopic**	
		liver	- focus/foci, red, multiple lobes, mild
		pituitary gland	- enlarged, red, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1489	S	**Macroscopic**	
		thyroid gland	- absent, left, no grade
1489	S	**Microscopic**	
		kidneys	- mineralization, pelvic, unilateral, minimal
		liver	- dilatation, sinusoidal, minimal corresponds to macroscopic observation (liver - focus/foci, red)
			- hyperplasia, bile duct, minimal
		pituitary gland	- within normal limits
		non-correlated macro observation	- pituitary gland - enlarged
1490	S	**Macroscopic**	
		lymph node, axillary	- not identified, right, no grade draining node for mass a.
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 3.0 x 3.0 x 2.0 cm.
1490	S	**Microscopic**	
		kidneys	- nephropathy, chronic progressive, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
50 mg/kg/day			
1490	S	**Microscopic**	
		liver	- within normal limits
		mammary gland	- fibroadenoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
500 mg/kg/day			
1561	S	**Macroscopic**	
		kidneys	- irregular surface, bilateral, minimal
		pituitary gland	- enlarged, red, mild
1561	S	**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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1561	S	**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
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
			corresponds to macroscopic observation (kidneys - irregular surface)
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1561	S	**Microscopic**	
		liver	- hypertrophy, hepatocyte, centrilobular, mild
		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
		pituitary gland	- within normal limits
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1561	S	**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
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1561	S	**Microscopic**	
		vagina	- within normal limits
		non-correlated macro observation	- pituitary gland - enlarged
1562	S	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1562	S	**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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1562	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
			- 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	- hypertrophy, hepatocyte, centrilobular, 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1562	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 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1562	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
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1563	S	**Macroscopic**	
		all tissues	- within normal limits
1563	S	**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	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1563	S	**Microscopic**	
		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
		liver	- hypertrophy, hepatocyte, centrilobular, minimal
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1563	S	**Microscopic**	
		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
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1563	S	**Microscopic**	
		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
1564	S	**Macroscopic**	
		all tissues	- within normal limits
1564	S	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1564	S	**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
		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
			- hypertrophy, hepatocyte, centrilobular, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1564	S	**Microscopic**	
		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 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1564	S	**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	- 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	- cyst, mild
		vagina	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1565	S	**Macroscopic**	
		skin	- hair sparse, left hindleg/limb, left foreleg/limb, mild corresponds to antemortem observation (hair sparse)
1565	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
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1565	S	**Microscopic**	
		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
		liver	- hypertrophy, hepatocyte, centrilobular, 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1565	S	**Microscopic**	
		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	- 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1565	S	**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
1568	S	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, right.
		skin	- hair sparse, left foreleg/limb, right foreleg/limb, mild corresponds to antemortem observation (hair sparse)
		skin, subcutis	- mass, tan, mass a, right anogenital region, present corresponds to antemortem observation (mass 1) approximately 2.5 cm in diameter.

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1568	S	**Microscopic**	
		adrenal glands	- 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
		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, mild
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1568	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	- hyperplasia, bile duct, minimal
			- hypertrophy, hepatocyte, centrilobular, mild
		lung	- histiocytosis, alveolar, minimal
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1568	S	**Microscopic**	
		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	- 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1568	S	**Microscopic**	
		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
1569	S	**Macroscopic**	
		lymph node, inguinal	- within normal limits draining node for mass a, right.
		skin, subcutis	- mass, tan, mass a, right anogenital region, present corresponds to antemortem observation (mass 1) approximately 4.5 x 6.5 x 2.5 cm.
1569	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1569	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	- 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1569	S	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- hypertrophy, hepatocyte, centrilobular, minimal
		lung	- 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, 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1569	S	**Microscopic**	
		parathyroid glands	- not examined
		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	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1569	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
1570	S	**Macroscopic**	
		all tissues	- within normal limits
1570	S	**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

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

Individual Animal Listing - FEMALE
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1570	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	- within normal limits
		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
		larynx	- within normal limits
		liver	- hypertrophy, hepatocyte, centrilobular, mild
			- infiltration, mononuclear cell, 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1570	S	**Microscopic**	
		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	- not examined
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1570	S	**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	- cyst, keratin, mild
		thymus	- depletion, lymphoid, generalized, moderate
		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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1571	S	**Macroscopic**	
		all tissues	- within normal limits
1571	S	**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
		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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1571	S	**Microscopic**	
		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	- hypertrophy, hepatocyte, centrilobular, 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1571	S	**Microscopic**	
		oviducts	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- not examined
		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	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1571	S	**Microscopic**	
		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
1572	S	**Macroscopic**	
		uterus with cervix	- enlarged, body, horn, mild
1572	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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1572	S	**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	- 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1572	S	**Microscopic**	
		liver	- hyperplasia, bile duct, minimal
			- hypertrophy, hepatocyte, centrilobular, mild
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, minimal
		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 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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1572	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	- 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

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
Interim

Group, Animal Number	Fate	Tissue	Observations
500 mg/kg/day			
1572	S	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		uterus with cervix	- dilatation, gland/lumen, mild
			- hyperplasia, cervical fibromuscular, moderate
			corresponds to macroscopic observation (uterus with cervix - enlarged)
		vagina	- within normal limits

S - Scheduled necropsy

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 7 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

SERVICE CODE NUMBER: 1238

MPI RESEARCH STUDY NUMBER: 125-141

Unpublished Work
Copyright ©2013 E.I. du Pont de Nemours and Company

MPI Research 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
0 mg/kg/day			
1011	S	**Macroscopic**	
		all tissues	- within normal limits
1011	S	**Microscopic**	
		adrenal glands	- 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	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1011	S	**Microscopic**	
		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	- degeneration, cystic, focal, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		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	- exudate, nasal passage, minimal
		nose, level c	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1011	S	**Microscopic**	
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- hyperplasia, focal, bilateral, minimal
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1011	S	**Microscopic**	
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- degeneration/atrophy, seminiferous tubules, unilateral, 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
1012	D	**Macroscopic**	
		kidneys	- dilatation, pelvic, bilateral, mild
		testes	- small, left, mild
		tongue	- absent portion/cannibalized, no grade
1012	D	**Microscopic**	
		adrenal glands	- infarct, unilateral, severe

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1012	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
		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
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, moderate corresponds to macroscopic observation (kidneys - dilatation, pelvic) - nephropathy, chronic progressive, bilateral, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1012	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	- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, mild
		parathyroid glands	- adenoma, benign, unilateral, primary, incidental, not cause of death
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1012	D	**Microscopic**	
		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	- atrophy, mild
			- degeneration/regeneration, 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	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1012	D	**Microscopic**	
		testes	- degeneration/atrophy, seminiferous tubules, unilateral, severe corresponds to macroscopic observation (testes - small)
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, unilateral, moderate
		urinary bladder	- within normal limits
		Cause of Death	- adrenal gland angiectasis/cystic degeneration/necrosis
1013	D	**Macroscopic**	
		pituitary gland	- enlarged, moderate
1013	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1013	D	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), moderate
			- hemorrhage, mild
		coagulating glands	- within normal limits
		epididymides	- oligospermia/germ cell debris, bilateral, 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	- hyperplasia, focal, unilateral, minimal
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1013	D	**Microscopic**	
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, 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
		nose, level c	- within normal limits
		nose, level d	- 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)
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1013	D	**Microscopic**	
		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
		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
		testes	- degeneration/atrophy, seminiferous tubules, bilateral, severe
			- edema, bilateral, moderate
		thymus	- depletion, lymphoid, generalized, moderate
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1013	D	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1014	S	**Macroscopic**	
		kidneys	- dilatation, pelvic, left, mild
		pituitary gland	- enlarged, red, moderate
		tail	- nodule, tan, present
			corresponds to antemortem observation (nodule)
			approximately 0.4 cm in diameter, located near base on dorsal surface.
1014	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, mild
			- vacuolation, focal, unilateral, minimal
		aorta	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1014	S	**Microscopic**	
		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
		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, moderate
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, mild
			corresponds to macroscopic observation (kidneys - dilatation, pelvic)
			both affected.
			- nephropathy, chronic progressive, bilateral, severe

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1014	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	- degeneration, cystic, focal, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- dilatation, sinus, 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
		pancreas	- atrophy, acinar, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1014	S	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not 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	- degeneration/necrosis, myofiber, minimal
		skin	- hyperkeratosis, mild
			corresponds to macroscopic observation (tail - nodule)
			- hyperplasia, epidermal, mild
			corresponds to macroscopic observation (tail - 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1014	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
		testes	- 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
1015	S	**Macroscopic**	
		all tissues	- within normal limits
1015	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1015	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
		coagulating glands	- within normal limits
		epididymides	- 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	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, moderate
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1015	S	**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, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, focal, minimal
		lung	- histiocytosis, alveolar, minimal
		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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, mild
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1015	S	**Microscopic**	
		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	- 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	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1015	S	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
1016	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, left.
		lymph node, mesenteric	- within normal limits draining node for mass b.
		pituitary gland	- enlarged, severe
		skin, subcutis	- mass, tan, mass a, left ventral thorax, present corresponds to antemortem observation (mass 1) approximately 7.0 x 5.0 x 3.0 cm.
		stomach, nonglandular	- mass, red, mass b, present approximately 1.5 cm in diameter.
1016	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal - vacuolation, focal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1016	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
		coagulating glands	- within normal limits
		epididymides	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1016	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, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- erythrocytosis/erythrophagocytosis, sinus, 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1016	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, fatal, positive cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- inflammation, chronic-active, minimal
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1016	E	**Microscopic**	
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- erosion/ulcer, severe
			corresponds to macroscopic observation (stomach, nonglandular - mass b)
			- hyperplasia, epithelial, nonglandular, moderate
			- inflammation, moderate
			corresponds to macroscopic observation (stomach, nonglandular - mass b)
		testes	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1017	E	**Macroscopic**	
		kidneys	- dilatation, pelvic, left, mild
		urinary bladder	- distended with urine, moderate
1017	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
		coagulating glands	- inflammation, unilateral, mild
		epididymides	- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1017	E	**Microscopic**	
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, bilateral, mild
			- hydronephrosis, bilateral, mild
			corresponds to macroscopic observation (kidneys - dilatation, pelvic)
			both affected.
			- 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	- infiltration, mononuclear cell, minimal
			- vacuolation, diffuse, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- erythrocytosis/erythrophagocytosis, sinus, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1017	E	**Microscopic**	
		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
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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	- inflammation, unilateral, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1017	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
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, bilateral, mild
		urinary bladder	- dilatation, moderate
			corresponds to macroscopic observation (urinary bladder - distended with urine)
			- hyperplasia, simple transitional cell, mild
			- inflammation, severe
		Cause of Death	- urogenital inflammation/obstruction/calculi

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1018	E	**Macroscopic**	
		foot/feet	- ulcer, plantar/palmar, severe corresponds to antemortem observation (swelling ulcer plantar/palmar)
		mesentery/peritoneum	- abscess, yellow, moderate present near colon.
1018	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1018	E	**Microscopic**	
		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
			- 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	- degeneration, cystic, focal, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1018	E	**Microscopic**	
		lymph node, mesenteric	- within normal limits
		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
		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
		prostate gland	- inflammation, subacute/chronic, mild
		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	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1018	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- diverticulum, mild
			corresponds to macroscopic observation (mesentery/peritoneum - abscess)
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- within normal limits
		spinal cord, lumbar	- astrocytoma, malignant, primary, fatal, positive cause of death
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		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
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- spinal cord 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1019	E	**Macroscopic**	
		epididymides	- small, bilateral, mild
		liver	- focus/foci, tan, multiple lobes, mild
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, red, mild
		seminal vesicles	- small, bilateral, mild
		skin, subcutis	- mass, tan, mass a, right lateral abdomen, present corresponds to antemortem observation (mass 1) approximately 4.0 x 4.0 x 2.5 cm.
		stomach, nonglandular	- focus/foci, yellow, mild glandular portion has some brown foci.
		testes	- small, bilateral, moderate
1019	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal medullary, bilateral, mild - vacuolation, focal, unilateral, 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
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
0 mg/kg/day			
1019	E	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- depletion, secretory, bilateral, severe
		epididymides	- oligospermia/germ cell debris, bilateral, severe corresponds to macroscopic observation (epididymides - small)
		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	- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1019	E	**Microscopic**	
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, mild
			- hyperplasia, bile duct, moderate
			corresponds to macroscopic observation (liver - focus/foci, tan)
			- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
			- vacuolation, focal, minimal
			- vacuolation, periportal, minimal
		lung	- thrombus, moderate
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- erythrocytosis/erythrophagocytosis, sinus, 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
		pancreas	- fibrosis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1019	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)
		prostate gland	- inflammation, acute, minimal
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, severe
			corresponds to macroscopic observation (seminal vesicles - small)
		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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1019	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	- erosion/ulcer, minimal
			corresponds to macroscopic observation (stomach, nonglandular - focus/foci, yellow)
			- hyperplasia, epithelial, nonglandular, moderate
			corresponds to macroscopic observation (stomach, nonglandular - focus/foci, yellow)
			- inflammation, mild
		testes	- degeneration/atrophy, seminiferous tubules, bilateral, severe
			corresponds to macroscopic observation (testes - small)
		thymus	- not examined
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1019	E	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- lung; thrombus; moderate
1020	D	**Macroscopic**	
		lung with bronchi	- fluid, white, multiple lobes, mild
		pituitary gland	- enlarged, red, moderate
		trachea	- fluid, white, mild
1020	D	**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
		coagulating 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1020	D	**Microscopic**	
		epididymides	- 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	- 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
			- vacuolation, periportal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1020	D	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- erythrocytosis/erythrophagocytosis, sinus, 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
		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)
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1020	D	**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	- hematopoiesis, extramedullary, increased, minimal
		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
		ureters	- within normal limits
		urinary bladder	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1021	E	**Macroscopic**	
		foot/feet	- ulcer, plantar/palmar, mild
			corresponds to antemortem observation (swelling)
		liver	- cyst, clear, median lobe, mild
		pituitary gland	- enlarged, red, mild
		skin	- abrasion/scab, anogenital region, mild
			- hair sparse, dorsal thoracic region, mild
1021	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1021	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	- 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, minimal
			- infiltration, mononuclear cell, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1021	E	**Microscopic**	
		nerve, sciatic	- degeneration, axonal/myelin, mild
		nose, level a	- within normal limits
		nose, level b	- exudate, nasal passage, mild
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- adenoma, islet cell, benign, multiple, primary, incidental, not cause of death
			- hyperplasia, acinar cell, focal, moderate
		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)
		prostate gland	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1021	E	**Microscopic**	
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- alopecia/hypotrichosis, mild
			corresponds to macroscopic observation (skin - hair sparse)
			- 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	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1021	E	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		non-correlated macro observation	- liver - cyst
		Cause of Death	- osteoarthritis/pododermatitis
1022	D	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate
1022	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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1022	D	**Microscopic**	
		coagulating glands	- within normal limits
		epididymides	- 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	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1022	D	**Microscopic**	
		liver	- angiectasis, minimal
			- degeneration, cystic, focal, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		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)
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1022	D	**Microscopic**	
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1022	D	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1023	D	**Macroscopic**	
		eyes	- absent/cannibalized, left, no grade
		eyes, retina	- absent/cannibalized, left, no grade
		harderian glands	- absent, portion, left, no grade
1023	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1023	D	**Microscopic**	
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits one of pair present
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits one of pair present
		galt	- within normal limits
		harderian glands	- within normal limits one of pair present
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, minimal - mineralization, pelvic, unilateral, minimal
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits
		large intestine, colon	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1023	D	**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
		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
		pancreas	- atrophy, acinar, minimal
		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
		prostate gland	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1023	D	**Microscopic**	
		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
		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
		testes	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1023	D	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- undetermined
1024	E	**Macroscopic**	
		foot/feet	- swollen/thickened, right hindleg/limb, moderate corresponds to antemortem observation (swelling)
		kidneys	- irregular surface, tan, bilateral, moderate
		stomach, nonglandular	- nodule, tan, present approximately 0.4 cm in diameter.
1024	E	**Microscopic**	
		adrenal glands	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1024	E	**Microscopic**	
		bone, sternum	- within normal limits
		brain	- within normal limits
		cavity, thoracic	- inflammation, subacute/chronic, mild
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		foot/feet	- osteoarthritis/pododermatitis, unilateral, moderate
			corresponds to macroscopic observation (foot/feet - swollen/thickened)
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- cyst, unilateral, mild
			- nephropathy, chronic progressive, bilateral, severe
			corresponds to macroscopic observation (kidneys - irregular surface)
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1024	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, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
		lung	- within normal limits
		lymph node, mandibular	- hyperplasia, lymphocyte/plasmacyte, medulla, mild
		lymph node, mesenteric	- within normal limits
		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
		pancreas	- atrophy, acinar, minimal
			- hyperplasia, acinar cell, focal, minimal
		parathyroid 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1024	E	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, chronic-active, minimal
		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	- degeneration/regeneration, 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1024	E	**Microscopic**	
		stomach, nonglandular	- papilloma, squamous cell, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (stomach, nonglandular - nodule)
		testes	- polyarteritis, bilateral, minimal
		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
		Cause of Death	- osteoarthritis/pododermatitis
1025	S	**Macroscopic**	
		thyroid gland	- enlarged, tan, right, moderate
1025	S	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1025	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- melanoma, amelanotic, malignant, unilateral, primary, incidental, not cause of death
			- metaplasia, squamous, unilateral, mild
			- neovascularization, corneal, unilateral, mild
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1025	S	**Microscopic**	
		kidneys	- nephropathy, chronic progressive, bilateral, moderate
		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	- degeneration, cystic, focal, mild
			- focus of cellular alteration, eosinophilic, minimal
			- vacuolation, focal, minimal
		lung	- carcinoma, c-cell, malignant, secondary
			- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- dilatation, sinus, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1025	S	**Microscopic**	
		nose, level c	- exudate, nasal passage, mild
			- foreign material, minimal plant.
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, minimal
			- polyarteritis, moderate
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, minimal
		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
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1025	S	**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
		testes	- polyarteritis, bilateral, minimal
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- carcinoma, c-cell, malignant, unilateral, primary, incidental, not cause of death corresponds to macroscopic observation (thyroid gland - enlarged)
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1026	S	**Macroscopic**	
		all tissues	- within normal limits
1026	S	**Microscopic**	
		adrenal glands	- vacuolation, focal, 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
		coagulating glands	- within normal limits
		epididymides	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1026	S	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		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	- hematopoiesis, extramedullary, 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
		nerve, sciatic	- degeneration, axonal/myelin, moderate
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1026	S	**Microscopic**	
		pancreas	- atrophy, acinar, minimal
			- hyperplasia, islet cell, 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	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1026	S	**Microscopic**	
		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
		ureters	- within normal limits
		urinary bladder	- within normal limits
1027	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		tooth/teeth	- absent/broken/malocclusion/overgrown, no grade corresponds to antemortem observation (malocclusion)
1027	E	**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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1027	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
		coagulating glands	- within normal limits
		epididymides	- 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
		kidneys	- nephropathy, chronic progressive, unilateral, minimal
			- pyelitis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1027	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	- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		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)
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1027	E	**Microscopic**	
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1027	E	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1028	D	**Macroscopic**	
		kidneys	- cyst, clear, right, moderate
1028	D	**Microscopic**	
		adrenal glands	- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1028	D	**Microscopic**	
		epididymides	- 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, moderate
			corresponds to macroscopic observation (kidneys - cyst)
			- hydronephrosis, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, severe
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1028	D	**Microscopic**	
		liver	- degeneration, cystic, focal, minimal
			- focus of cellular alteration, clear, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, focal, 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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- atrophy, acinar, mild
			- fibrosis, minimal
		parathyroid glands	- within normal limits
			one of pair present
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1028	D	**Microscopic**	
		pituitary gland	- cyst, mild
		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
		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	- polyarteritis, bilateral, minimal
		thymus	- depletion, lymphoid, generalized, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1028	D	**Microscopic**	
		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	- chronic progressive nephropathy/uremia
1029	S	**Macroscopic**	
		skin	- abrasion/scab, red, left anogenital region, mild corresponds to antemortem observation (abrasion(s))
1029	S	**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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1029	S	**Microscopic**	
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1029	S	**Microscopic**	
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- 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
		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
		pancreas	- within normal limits
		parathyroid glands	- hyperplasia, focal, unilateral, mild
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1029	S	**Microscopic**	
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, minimal
		skin	- abscess, 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	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- hyperplasia, interstitial cell, unilateral, minimal
		thymus	- depletion, lymphoid, generalized, severe

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1029	S	**Microscopic**	
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
			- hyperplasia, c-cell, focal, unilateral, minimal
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
1030	D	**Macroscopic**	
		bone with bone marrow, femur	- mass, tan, mass d, left, present approximately 5.0 x 4.5 x 3.5 cm.
		cavity, thoracic	- mass, white, multiple, mass c, pericardium, present ranging from approximately 0.1 to 0.5 cm in diameter.
		liver	- mass, white, mass a, median lobe, present approximately 0.5 x 0.5 x 0.3 cm.
		lung with bronchi	- mass, white, multiple, mass b, multiple lobes, present ranging from approximately 0.1 to 0.9 cm in diameter.

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1030	D	**Macroscopic**	
		lymph node, hepatic	- within normal limits draining node for mass a.
		lymph node, inguinal	- within normal limits draining node for mass d, left.
		lymph node, mediastinal	- within normal limits draining node for mass b and mass c.
		thymus	- nodule, white, multiple, present ranging from approximately 0.1 to 0.3 cm in diameter.
1030	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal medullary, unilateral, mild - pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- osteosarcoma, malignant, primary, fatal, positive cause of death corresponds to macroscopic observation (bone with bone marrow, femur - mass d)
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1030	D	**Microscopic**	
		brain	- within normal limits
		cavity, thoracic	- osteosarcoma, malignant, secondary
			corresponds to macroscopic observation (cavity, thoracic - mass c; thymus - nodule)
		coagulating glands	- within normal limits
		epididymides	- 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, mild
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1030	D	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- osteosarcoma, malignant, secondary
			corresponds to macroscopic observation (liver - mass a)
			- vacuolation, periportal, mild
		lung	- osteosarcoma, malignant, secondary
			corresponds to macroscopic observation (lung with bronchi - mass b)
		lymph node, hepatic	- within normal limits
		lymph node, inguinal	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mediastinal	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1030	D	**Microscopic**	
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
			- atrophy, acinar, minimal
			- fibrosis, minimal
		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
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1030	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
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- hyperplasia, follicular cell, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- bone tumor
1031	S	**Macroscopic**	
		pituitary gland	- enlarged, red, severe

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1031	S	**Microscopic**	
		adrenal glands	- adenoma, cortical, benign, unilateral, primary, incidental, not cause of death
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
		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
		coagulating glands	- inflammation, bilateral, severe
		epididymides	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1031	S	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- hyperplasia, transitional cell, bilateral, minimal
			- mineralization, pelvic, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, mild
			- 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	- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1031	S	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- 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, incidental, not cause of death
			corresponds to macroscopic observation (pituitary gland - enlarged)
		prostate gland	- inflammation, chronic-active, severe
		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	- degeneration/necrosis, myofiber, mild
		skin	- within normal limits
		small intestine, duodenum	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1031	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	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- hyperplasia, c-cell, focal, bilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- hyperplasia, papillary/nodular transitional cell, moderate
			- inflammation, moderate
1032	E	**Macroscopic**	
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1032	E	**Macroscopic**	
		prostate gland	- enlarged, mild
		seminal vesicles	- enlarged, bilateral, moderate
		stomach, nonglandular	- focus/foci, red, moderate
1032	E	**Microscopic**	
		adrenal glands	- 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	- compression, ventral (pituitary tumor), moderate
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1032	E	**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	- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1032	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)
		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	- dilatation, bilateral, mild
			corresponds to macroscopic observation (seminal vesicles - enlarged)
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1032	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	- erosion/ulcer, moderate
			corresponds to macroscopic observation (stomach, nonglandular - focus/foci, red)
			- hyperplasia, epithelial, nonglandular, moderate
			- inflammation, moderate
		testes	- within normal limits
		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
		non-correlated macro observation	- prostate gland - 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1032	E	**Microscopic**	
		Cause of Death	- pituitary tumor
1033	D	**Macroscopic**	
		eyes	- absent/cannibalized, bilateral, no grade
		eyes, retina	- absent/cannibalized, bilateral, no grade
		harderian glands	- absent/cannibalized, bilateral, no grade
		lacrimal glands, exorbital	- absent/cannibalized, bilateral, no grade
		lung with bronchi	- discoloration, red, multiple lobes, mild
		lymph node, mandibular	- absent/cannibalized, right, no grade
		salivary gland, parotid	- absent, portion, bilateral, no grade partially cannibalized.
		thyroid gland	- enlarged, bilateral, mild
1033	D	**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*
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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1033	D	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- not examined
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined
		galt	- within normal limits
		harderian glands	- not examined cannibalized
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- not examined cannibalized
		large intestine, cecum	- within normal limits
		large intestine, colon	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1033	D	**Microscopic**	
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- within normal limits
		lung	- bacterial colonies, minimal
			there are extensive areas with lysis of red blood cells indicative of dosing injury.
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		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
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1033	D	**Microscopic**	
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, mild
		thyroid gland	- within normal limits
		tongue	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1033	D	**Microscopic**	
		trachea	- inflammation, acute, minimal
		ureters	- within normal limits
		urinary bladder	- within normal limits
		non-correlated macro observation	- lung with bronchi - discoloration, red
			- thyroid gland - enlarged
		Cause of Death	- dosing injury
1034	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1034	E	**Microscopic**	
		adrenal glands	- atrophy, 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1034	E	**Microscopic**	
		coagulating glands	- inflammation, bilateral, severe
		epididymides	- oligospermia/germ cell debris, bilateral, 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	- 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
			- vacuolation, median cleft, mild
			- vacuolation, periportal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1034	E	**Microscopic**	
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- atrophy, acinar, minimal
			- fibrosis, 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	- inflammation, chronic-active, severe
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1034	E	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, severe
			- inflammation, unilateral, moderate
		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, minimal
		testes	- degeneration/atrophy, seminiferous tubules, bilateral, severe
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1034	E	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1035	S	**Macroscopic**	
		liver	- cyst, clear, right lateral lobe, mild
		skin	- nodule, tan, dorsal thoracic region, present corresponds to antemortem observation (nodule) approximately 0.3 cm in diameter.
1035	S	**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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1035	S	**Microscopic**	
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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
		kidneys	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1035	S	**Microscopic**	
		liver	- angiectasis, minimal
			- degeneration, cystic, focal, moderate
			corresponds to macroscopic observation (liver - cyst)
			- focus of cellular alteration, eosinophilic, mild
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		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
		pancreas	- atrophy, acinar, minimal
			- hyperplasia, acinar cell, focal, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1035	S	**Microscopic**	
		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	- degeneration/necrosis, myofiber, minimal
		skin	- keratoacanthoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin - 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	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1035	S	**Microscopic**	
		testes	- adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death
			- hyperplasia, interstitial cell, unilateral, 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
1036	S	**Macroscopic**	
		eyes	- discoloration, white, bilateral, mild corresponds to antemortem observation (eye discolored)
		spleen	- cyst, clear, mild
1036	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
			- hypertrophy, focal cortical, unilateral, minimal
			- vacuolation, focal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1036	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- cataract, bilateral, moderate
			corresponds to macroscopic observation (eyes - discoloration, white)
			- inflammation, acute, unilateral, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1036	S	**Microscopic**	
		kidneys	- hyperplasia, transitional cell, bilateral, mild
			- nephropathy, chronic progressive, bilateral, mild
			- pyelitis, 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, clear, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- dilatation, sinus, minimal
			- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1036	S	**Microscopic**	
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, minimal
		prostate gland	- inflammation, chronic-active, severe
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, bilateral, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1036	S	**Microscopic**	
		spleen	- cyst, capsule, mild
			corresponds to macroscopic observation (spleen - cyst)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- 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	- hyperplasia, simple transitional cell, minimal
			- inflammation, minimal
1037	D	**Macroscopic**	
		eyes	- cloudy, bilateral, mild
			corresponds to antemortem observation (eye discolored)
		lung with bronchi	- mass, tan, mass a, multiple lobes, present
			ranging in size from approximately 0.5 to 1.0 cm in diameter.

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1037	D	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass b, right.
		lymph node, mediastinal	- within normal limits draining node for mass a.
		skin, subcutis	- mass, tan, mass b, right ventral thorax, present approximately 1.0 cm in diameter.
1037	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal
		aorta	- within normal limits
		bone marrow, femur	- hyperplasia, granulocytic, minimal
		bone marrow, sternum	- hyperplasia, granulocytic, mild
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		cavity, thoracic	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death attached to lung, slide 2.
		coagulating 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1037	D	**Microscopic**	
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- cataract, bilateral, severe
			corresponds to macroscopic observation (eyes - cloudy)
		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, 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1037	D	**Microscopic**	
		lung	- sarcoma, histiocytic, malignant, multicentric, fatal, positive cause of death
			corresponds to macroscopic observation (lung with bronchi - mass a)
		lymph node, axillary	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mediastinal	- within normal limits
		lymph node, mesenteric	- within normal limits
		multicentric neoplasm	- sarcoma, histiocytic, malignant, multicentric, fatal, positive 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
		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
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
0 mg/kg/day			
1037	D	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, chronic-active, severe
		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, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass b)
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1037	D	**Microscopic**	
		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
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- histiocytic sarcoma
1038	D	**Macroscopic**	
		eyes	- absent/cannibalized, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		eyes, optic nerves	- 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)

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1038	D	**Macroscopic**	
		harderian glands	- 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, left, 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, left, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
1038	D	**Microscopic**	
		adrenal 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1038	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits one of pair present
		eyes, optic nerves	- within normal limits one of pair present
		eyes, retina	- not examined one too autolytic to examine, one cannibalized.
		galt	- within normal limits
		harderian glands	- within normal limits one of pair present
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1038	D	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- 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	- within normal limits
		lung	- bacterial colonies, mild - macrophages, alveolar, mild hemolysis of red blood cells indicative of dosing accident.
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1038	D	**Microscopic**	
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1038	D	**Microscopic**	
		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
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- dosing injury
1039	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		testes	- small, bilateral, moderate
1039	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- vacuolation, focal, bilateral, minimal

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1039	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
		coagulating glands	- depletion, secretory, bilateral, severe
		epididymides	- oligospermia/germ cell debris, bilateral, 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	- hyperplasia, focal, unilateral, minimal
		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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1039	E	**Microscopic**	
		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	- 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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		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)
		prostate gland	- inflammation, chronic-active, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1039	E	**Microscopic**	
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, severe
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, mild
		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
		testes	- degeneration/atrophy, seminiferous tubules, bilateral, severe corresponds to macroscopic observation (testes - small)
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1039	E	**Microscopic**	
		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
		Cause of Death	- pituitary tumor
1040	D	**Macroscopic**	
		pituitary gland	- enlarged, red, mild
1040	D	**Microscopic**	
		adrenal glands	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1040	D	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), moderate
		coagulating glands	- within normal limits
		epididymides	- 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	- hyperplasia, focal, unilateral, minimal
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1040	D	**Microscopic**	
		liver	- hyperplasia, bile duct, mild
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, 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
		nose, level c	- within normal limits
		nose, level d	- 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)
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1040	D	**Microscopic**	
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1040	D	**Microscopic**	
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1041	S	**Macroscopic**	
		all tissues	- within normal limits
1041	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, minimal
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
		aorta	- within normal limits
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1041	S	**Microscopic**	
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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
		kidneys	- hydronephrosis, 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1041	S	**Microscopic**	
		liver	- degeneration, cystic, focal, minimal
			- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- exudate, nasal passage, mild
			- inflammation, minimal
			- metaplasia, squamous, minimal
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- fibrosis, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1041	S	**Microscopic**	
		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	- 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
		testes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1041	S	**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
1042	E	**Macroscopic**	
		foot/feet	- swollen/thickened, left, mild corresponds to antemortem observation (swelling)
		kidneys	- dilatation, pelvic, bilateral, mild
		liver	- focus/foci, tan, multiple lobes, mild
			- mass, red, mass a, median lobe, present approximately 4.0 x 3.0 x 1.5 cm.
		lymph node, hepatic	- within normal limits draining node for mass a.
1042	E	**Microscopic**	
		adrenal glands	- vacuolation, focal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1042	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
		coagulating glands	- within normal limits
		epididymides	- 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	- thrombus, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, mild
			corresponds to macroscopic observation (kidneys - dilatation, pelvic)
			- nephropathy, chronic progressive, bilateral, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1042	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	- carcinoma, hepatocellular, malignant, primary, fatal, positive cause of death
			corresponds to macroscopic observation (liver - mass a)
			- degeneration, cystic, focal, minimal
			- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, focal, moderate
			corresponds to macroscopic observation (liver - focus/foci, tan)
		lung	- edema, mild
		lymph node, hepatic	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1042	E	**Microscopic**	
		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
		pancreas	- fibrosis, minimal
			- polyarteritis, mild
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1042	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
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, bilateral, mild
		urinary bladder	- within normal limits
		Cause of Death	- liver 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1043	D	**Macroscopic**	
		all tissues	- within normal limits
1043	D	**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
		coagulating glands	- within normal limits
		epididymides	- 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
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
0 mg/kg/day			
1043	D	**Microscopic**	
		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	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- atrophy, acinar, minimal
			- fibrosis, minimal
			- hyperplasia, acinar cell, focal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1043	D	**Microscopic**	
		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
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1043	D	**Microscopic**	
		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
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- undetermined
1044	D	**Macroscopic**	
		all tissues	- within normal limits
1044	D	**Microscopic**	
		adrenal glands	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1044	D	**Microscopic**	
		bone, femur	- within normal limits
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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	- nephropathy, chronic progressive, bilateral, mild
			- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1044	D	**Microscopic**	
		larynx	- within normal limits
		liver	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, subacute/chronic, severe
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1044	D	**Microscopic**	
		seminal vesicles	- 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
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, mild
		thyroid gland	- within normal limits
		tongue	- inflammation, subacute/chronic, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1044	D	**Microscopic**	
		Cause of Death	- undetermined
1045	S	**Macroscopic**	
		all tissues	- within normal limits
1045	S	**Microscopic**	
		adrenal glands	- within normal limits
		aorta	- mineralization, severe
		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	- within normal limits
		esophagus	- within normal limits
		eyes	- metaplasia, squamous, unilateral, mild
			- neovascularization, corneal, unilateral, minimal

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1045	S	**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	- hydronephrosis, bilateral, mild
			- mineralization, tubular, 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	- hematopoiesis, extramedullary, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1045	S	**Microscopic**	
		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
		pancreas	- within normal limits
		parathyroid glands	- hyperplasia, focal, bilateral, mild
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, chronic-active, mild
		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	- degeneration/necrosis, myofiber, minimal
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1045	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	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- 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	- hyperplasia, simple transitional cell, minimal
			- inflammation, minimal
1046	D	**Macroscopic**	
		eyes	- absent/cannibalized, bilateral, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1046	D	**Macroscopic**	
		eyes, retina	- absent/cannibalized, bilateral, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
		harderian glands	- absent/cannibalized, bilateral, no grade corresponds to antemortem observation (cannibalized/partially cannibalized)
1046	D	**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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1046	D	**Microscopic**	
		eyes	- not examined cannibalized
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined cannibalized
		galt	- within normal limits
		harderian glands	- not examined cannibalized
		heart	- within normal limits
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1046	D	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1046	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	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- 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
		Cause of Death	- undetermined

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1047	E	**Macroscopic**	
		lymph node, mediastinal	- within normal limits draining node for mass a.
		lymph node, mesenteric	- enlarged, mild
		pituitary gland	- enlarged, minimal
		thymus	- mass, mass a, present approximately 1.5 cm in diameter.
1047	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal - 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
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1047	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, 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	- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mediastinal	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1047	E	**Microscopic**	
		nerve, sciatic	- within normal limits
		nose, level a	- exudate, nasal passage, minimal
			- foreign material, minimal
			plant material.
		nose, level b	- exudate, nasal passage, minimal
			- fungus/yeast, mild
			- inflammation, minimal
			- metaplasia, squamous, minimal
		nose, level c	- exudate, nasal passage, minimal
			- fungus/yeast, moderate
			- inflammation, mild
			- metaplasia, squamous, mild
		nose, level d	- exudate, nasal passage, mild
			- inflammation, minimal
			- metaplasia, squamous, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1047	E	**Microscopic**	
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1047	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- thymoma, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (thymus - mass a)
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		non-correlated macro observation	- lymph node, mesenteric - enlarged
		Cause of Death	- nose/oral inflammation/ulceration
1048	E	**Macroscopic**	
		seminal vesicles	- small, bilateral, mild
		stomach	- distended with gas, mild
		thymus	- small, severe
1048	E	**Microscopic**	
		adrenal 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1048	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
		coagulating glands	- within normal limits
		epididymides	- 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	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1048	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- necrosis, focal, minimal
		lung	- inflammation, acute, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- exudate, nasal passage, moderate
			- fungus/yeast, moderate
			- inflammation, mild
			- metaplasia, squamous, minimal
		nose, level c	- exudate, nasal passage, mild
			- inflammation, mild
			- metaplasia, squamous, mild
		nose, level d	- exudate, nasal passage, minimal
			- inflammation, minimal
		pancreas	- fibrosis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1048	E	**Microscopic**	
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- cyst, minimal
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1048	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		testes	- hyperplasia, interstitial cell, unilateral, minimal
		thymus	- depletion, lymphoid, generalized, severe
			corresponds to macroscopic observation (thymus - small)
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		non-correlated macro observation	- seminal vesicles - small
			- stomach - distended with gas
		Cause of Death	- nose/oral inflammation/ulceration
1049	E	**Macroscopic**	
		lymph node, axillary	- within normal limits
			draining node for mass a, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1049	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 4.0 x 4.0 x 3.0 cm.
1049	E	**Microscopic**	
		adrenal glands	- 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
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1049	E	**Microscopic**	
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		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	- degeneration, cystic, focal, minimal
			- hyperplasia, bile duct, mild
		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	- adenocarcinoma, malignant, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- dilatation, gland/lumen, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1049	E	**Microscopic**	
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- inflammation, minimal
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
			- 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)
		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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1049	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	- within normal limits
		testes	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1050	D	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- enlarged, red, severe
		skin, subcutis	- mass, tan, mass a, dorsal thoracic region, present corresponds to antemortem observation (nodule) approximately 1.5 cm in diameter.
1050	D	**Microscopic**	
		adrenal glands	- 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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1050	D	**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	- 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, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- within normal limits
		lymph node, axillary	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1050	D	**Microscopic**	
		lymph node, mesenteric	- erythrocytosis/erythrophagocytosis, sinus, minimal
		mammary gland	- dilatation, gland/lumen, 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
		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)
		prostate gland	- adenoma, 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1050	D	**Microscopic**	
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- keratoacanthoma, 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
		testes	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1050	D	**Microscopic**	
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1051	E	**Macroscopic**	
		lymph node, mesenteric	- within normal limits draining node for mass a.
		pancreas	- mass, tan, mass a, present approximately 0.5 cm in diameter.
		pituitary gland	- enlarged, red, severe
		thymus	- small, severe
1051	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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1051	E	**Microscopic**	
		brain	- compression, ventral (pituitary tumor), mild
		coagulating glands	- within normal limits
		epididymides	- 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	- cyst, unilateral, mild
			- 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
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
0 mg/kg/day			
1051	E	**Microscopic**	
		liver	- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- inflammation, acute, minimal
			- necrosis, focal, minimal
			- vacuolation, periportal, mild
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- dilatation, sinus, minimal
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- exudate, nasal passage, mild
			- inflammation, minimal
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (pancreas - mass a)
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1051	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)
		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	- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1051	E	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe corresponds to macroscopic observation (thymus - small)
		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
1052	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- cyst, clear, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1052	E	**Macroscopic**	
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (mass 1) approximately 14.0 x 12.0 x 9.0 cm.
1052	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, 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	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1052	E	**Microscopic**	
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, mild
		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
		lung	- histiocytosis, alveolar, minimal
			- inflammation, subacute/chronic, minimal
		lymph node, axillary	- 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)
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1052	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	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- cyst, moderate corresponds to macroscopic observation (pituitary gland - cyst)
		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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1052	E	**Microscopic**	
		skin, subcutis	- fibrosarcoma, malignant, primary, incidental, not cause of death this is a small portion of the large mass (collision tumor). slide 26-1.
		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
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1052	E	**Microscopic**	
		Cause of Death	- mammary tumor
1053	D	**Macroscopic**	
		kidneys	- irregular surface, left, moderate
1053	D	**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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1053	D	**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	- nephropathy, chronic progressive, bilateral, mild
			corresponds to macroscopic observation (kidneys - irregular surface)
		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
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1053	D	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1053	D	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- hyperplasia, interstitial cell, unilateral, 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	- undetermined
1054	E	**Macroscopic**	
		small intestine, ileum	- distended with gas, moderate
		small intestine, jejunum	- distended with gas, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1054	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, bilateral, mild
			- hyperplasia, focal medullary, unilateral, minimal
			- pheochromocytoma, benign, bilateral, primary, incidental, not cause of death
		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	- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1054	E	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- nephropathy, chronic progressive, bilateral, severe
		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
			- 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, mild
		nose, level a	- exudate, nasal passage, moderate
			- fungus/yeast, mild
			- inflammation, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1054	E	**Microscopic**	
		nose, level b	- exudate, nasal passage, mild
			- fungus/yeast, moderate
			- inflammation, mild
		nose, level c	- exudate, nasal passage, moderate
			- fungus/yeast, moderate
			- inflammation, mild
			- metaplasia, squamous, mild
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, moderate
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, mild
		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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1054	E	**Microscopic**	
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (small intestine, ileum - distended with gas)
		small intestine, jejunum	- dilatation, gland/lumen, mild
			corresponds to macroscopic observation (small intestine, jejunum - distended with gas)
		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, mild
			- inflammation, mild
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1054	E	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- nose/oral inflammation/ulceration
1055	E	**Macroscopic**	
		bone	- mass, tan, mandible, mass b, right, present approximately 0.6 x 2.2 x 1.0 cm.
		kidneys	- irregular surface, bilateral, moderate
		lymph node, axillary	- not identified, left, no grade draining node for mass a.
		lymph node, mandibular	- enlarged, red, right, moderate draining node for mass b.
		pituitary gland	- discoloration, red, severe
		skin, subcutis	- mass, tan, mass a, left axillary area, present corresponds to antemortem observation (swelling) approximately 4.0 x 3.0 x 1.0 cm.
		testes	- focus/foci, tan, left, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1055	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal medullary, unilateral, minimal
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
		aorta	- mineralization, mild
		bone	- osteosarcoma, malignant, primary, incidental, not cause of death corresponds to macroscopic observation (bone - mass b)
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- fibrous osteodystrophy, minimal
		bone, sternum	- fibrous osteodystrophy, minimal
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1055	E	**Microscopic**	
		heart	- cardiomyopathy, mild
			- mineralization, myofiber, moderate
			- mineralization, vascular, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, moderate
			- mineralization, vascular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, severe
			corresponds to macroscopic observation (kidneys - irregular surface)
		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	- pneumonitis, uremic, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1055	E	**Microscopic**	
		lymph node, mandibular	- hemorrhage, moderate
			corresponds to macroscopic observation (lymph node, mandibular - enlarged)
			- osteosarcoma, malignant, secondary
			corresponds to macroscopic observation (lymph node, mandibular - enlarged)
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- within normal limits
		nose, level b	- within normal limits
		nose, level c	- fibrous osteodystrophy, mild
		nose, level d	- fibrous osteodystrophy, mild
		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
			only a very small tumor present.
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1055	E	**Microscopic**	
		salivary gland, mandibular	- depletion, secretory, severe
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- depletion, secretory, severe
		seminal vesicles	- within normal limits
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- lipoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin, subcutis - mass a)
			- osteosarcoma, malignant, secondary slide 27-b.
		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	- gastropathy, uremic, moderate
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1055	E	**Microscopic**	
		testes	- adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death
			corresponds to macroscopic observation (testes - focus/foci, tan)
			- hyperplasia, interstitial cell, unilateral, minimal
		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
		non-correlated macro observation	- pituitary gland - discoloration, red
		Cause of Death	- chronic progressive nephropathy/uremia
1056	E	**Macroscopic**	
		prostate gland	- enlarged, moderate
		ureters	- distended with urine, bilateral, mild
		urinary bladder	- distended with urine, red, moderate
1056	E	**Microscopic**	
		adrenal 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1056	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
		coagulating glands	- within normal limits
		epididymides	- 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	- dilatation, tubular, bilateral, mild
			- hydronephrosis, bilateral, mild
			- nephropathy, chronic progressive, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1056	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	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- necrosis, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1056	E	**Microscopic**	
		parathyroid glands	- not examined
		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
		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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1056	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- hyperplasia, c-cell, focal, unilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- crystals, hemoglobin, unilateral, mild
			- dilatation, bilateral, mild
			corresponds to macroscopic observation (ureters - distended with urine)
		urinary bladder	- erosion/ulcer, moderate
			- hemorrhage, severe
			corresponds to macroscopic observation (urinary bladder - distended with urine)
			- inflammation, mild
		non-correlated macro observation	- prostate gland - enlarged
		Cause of Death	- urogenital inflammation/obstruction/calculi

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1057	D	**Macroscopic**	
		adrenal glands	- enlarged, left, mild
1057	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal medullary, unilateral, mild
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
			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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1057	D	**Microscopic**	
		eyes, retina	- not examined
			autolysis too severe for diagnosis
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, mild
			- 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	- macrophages, pigmented alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1057	D	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- atrophy, acinar, mild
			- fibrosis, minimal
		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
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1057	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	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- adenoma, follicular 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
		Cause of Death	- undetermined

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1058	E	**Macroscopic**	
		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 (mass 1) approximately 6.0 x 6.5 x 4.0 cm.
		stomach, nonglandular	- focus/foci, tan, mild
1058	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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1058	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	- hyperplasia, transitional cell, bilateral, minimal
			- nephropathy, chronic progressive, 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	- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1058	E	**Microscopic**	
		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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- fibrosis, 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1058	E	**Microscopic**	
		skeletal muscle, biceps femoris	- within normal limits
		skin	- within normal limits
		skin, subcutis	- lipoma, 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	- erosion/ulcer, mild
			corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan)
			- hyperplasia, epithelial, nonglandular, moderate
			corresponds to macroscopic observation (stomach, nonglandular - focus/foci, tan)
			- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1058	E	**Microscopic**	
		testes	- 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
		Cause of Death	- pituitary tumor
1059	D	**Macroscopic**	
		all tissues	- within normal limits
1059	D	**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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1059	D	**Microscopic**	
		bone, sternum	- within normal limits
		brain	- within normal limits
		coagulating glands	- within normal limits
		epididymides	- 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	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1059	D	**Microscopic**	
		liver	- within normal limits
		lung	- bacterial colonies, minimal
			- hemorrhage, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
			one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1059	D	**Microscopic**	
		seminal vesicles	- 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
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1059	D	**Microscopic**	
		Cause of Death	- undetermined
1060	E	**Macroscopic**	
		all tissues	- within normal limits
1060	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, unilateral, minimal
			- 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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1060	E	**Microscopic**	
		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	- hyperplasia, transitional cell, bilateral, mild
			- nephropathy, chronic progressive, bilateral, moderate
			- pyelitis, 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, mild
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, mild
		lung	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1060	E	**Microscopic**	
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, moderate
		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	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, chronic-active, moderate
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, unilateral, mild
		skeletal muscle, biceps femoris	- atrophy, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1060	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
		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	- nerve, sciatic; degeneration, axonal/myelin; moderate
1061	E	**Macroscopic**	
		kidneys	- focus/foci, yellow, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1061	E	**Macroscopic**	
		liver	- focus/foci, yellow, left lateral lobe, mild
		lymph node, axillary	- enlarged, bilateral, mild
		lymph node, generalized	- enlarged, mild
		lymph node, hepatic	- enlarged, moderate
		spleen	- enlarged, moderate
1061	E	**Microscopic**	
		adrenal glands	- leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death
		aorta	- within normal limits
		bone marrow, femur	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
			- necrosis, severe
		bone marrow, sternum	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		bone marrow, tibia	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		bone, femur	- within normal limits
		bone, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1061	E	**Microscopic**	
		brain	- within normal limits
		cavity, abdominal	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		cavity, thoracic	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		coagulating glands	- leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- leukemia, granulocytic, malignant, unilateral, multicentric, fatal, positive cause of death
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- leukemia, granulocytic, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1061	E	**Microscopic**	
		kidneys	- hyaline, droplets, increased, bilateral, moderate
			- leukemia, granulocytic, malignant, bilateral, multicentric, fatal, positive cause of death
			corresponds to macroscopic observation (kidneys - focus/foci, yellow)
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- leukemia, granulocytic, malignant, unilateral, multicentric, fatal, positive cause of death
		large intestine, cecum	- within normal limits
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		liver	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
			corresponds to macroscopic observation (liver - focus/foci, yellow)
		lung	- leukemia, granulocytic, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1061	E	**Microscopic**	
		lymph node, axillary	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
			corresponds to macroscopic observation (lymph node, axillary - enlarged)
		lymph node, hepatic	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
			corresponds to macroscopic observation (lymph node, hepatic - enlarged)
		lymph node, mandibular	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		lymph node, mesenteric	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		multicentric neoplasm	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		nerve, sciatic	- within normal limits
		nose, level a	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		nose, level b	- leukemia, granulocytic, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1061	E	**Microscopic**	
		nose, level c	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		nose, level d	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		pancreas	- fibrosis, minimal
			- hyperplasia, acinar cell, focal, minimal
			- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, moderate
		prostate gland	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death
		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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1061	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	- leukemia, granulocytic, malignant, multicentric, fatal, positive cause of death corresponds to macroscopic observation (spleen - enlarged)
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- 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	- leukemia, granulocytic, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1061	E	**Microscopic**	
		Cause of Death	- leukemia
1062	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, bilateral.
		skin	- mass, ulcerated, mass a, dorsal thoracic region, present corresponds to antemortem observation (nodule) approximately 1.0 cm in diameter, tan.
1062	S	**Microscopic**	
		adrenal glands	- 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
		coagulating glands	- inflammation, unilateral, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1062	S	**Microscopic**	
		epididymides	- 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	- hydronephrosis, unilateral, minimal
			- hyperplasia, transitional cell, unilateral, minimal
			- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1062	S	**Microscopic**	
		liver	- adenoma, hepatocellular, benign, primary, incidental, not cause of death
			- focus of cellular alteration, eosinophilic, mild
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, focal, minimal
		lung	- within normal limits
		lymph node, axillary	- 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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- fibrosis, minimal
			- hyperplasia, acinar cell, focal, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1062	S	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, subacute/chronic, moderate
		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	- keratoacanthoma, benign, primary, mortality-independent corresponds to macroscopic observation (skin - 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, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1062	S	**Microscopic**	
		stomach, nonglandular	- within normal limits
		testes	- 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
1063[r]	E	**Macroscopic**	
		foot/feet	- ulcer, plantar/palmar, moderate
			corresponds to antemortem observation (ulcer plantar/palmar swelling scabbed area)
1063[r]	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, moderate
			- vacuolation, focal, unilateral, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*
[r] Replacement animal

MPI Research 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
0 mg/kg/day			
1063[r]	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
		coagulating glands	- within normal limits
		epididymides	- 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	- nephropathy, chronic progressive, bilateral, mild
		lacrimal glands, exorbital	- within normal limits
		large intestine, cecum	- within normal limits

E - Euthanized *in extremis*
[r] Replacement animal

MPI Research 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
0 mg/kg/day			
1063[r]	E	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- degeneration, cystic, focal, minimal
			- hyperplasia, bile duct, minimal
		lung	- within normal limits
		lymph node, mandibular	- dilatation, sinus, minimal
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- exudate, nasal passage, mild
			- fungus/yeast, mild
			- inflammation, mild
		nose, level b	- exudate, nasal passage, mild
			- fungus/yeast, moderate
			- inflammation, mild
			- metaplasia, squamous, minimal
		nose, level c	- within normal limits
		nose, level d	- within normal limits

E - Euthanized *in extremis*
[r] Replacement animal

MPI Research 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
0 mg/kg/day			
1063[r]	E	**Microscopic**	
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
		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
		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
		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*
[r] Replacement animal

MPI Research 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
0 mg/kg/day			
1063[r]	E	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- hematopoiesis, extramedullary, increased, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		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
		Cause of Death	- osteoarthritis/pododermatitis
1064	D	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
1064	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
			- vacuolation, focal, unilateral, minimal

E - Euthanized *in extremis*
D - Died on Study
[r] Replacement animal

MPI Research 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
0 mg/kg/day			
1064	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	- compression, ventral (pituitary tumor), moderate
		coagulating glands	- within normal limits
		epididymides	- 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	- nephropathy, chronic progressive, bilateral, moderate
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1064	D	**Microscopic**	
		large intestine, colon	- within normal limits
		large intestine, rectum	- within normal limits
		larynx	- within normal limits
		liver	- infiltration, mononuclear cell, minimal
			- vacuolation, focal, 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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- fibrosis, minimal
			- hyperplasia, acinar cell, focal, moderate
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1064	D	**Microscopic**	
		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
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1064	D	**Microscopic**	
		stomach, nonglandular	- within normal limits
		testes	- 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
		Cause of Death	- pituitary tumor
1065	E	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		stomach, nonglandular	- irregular surface, mild
1065	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
			- vacuolation, focal, bilateral, minimal

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1065	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
		coagulating glands	- within normal limits
		epididymides	- 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
			- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1065	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	- degeneration, cystic, focal, 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
		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
		pancreas	- fibrosis, minimal
		parathyroid 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1065	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)
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1065	E	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			corresponds to macroscopic observation (stomach, nonglandular - irregular surface)
			- inflammation, mild
			corresponds to macroscopic observation (stomach, nonglandular - irregular surface)
		testes	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1066	D	**Macroscopic**	
		all tissues	- within normal limits
1066	D	**Microscopic**	
		adrenal glands	- pheochromocytoma, benign, bilateral, primary, incidental, not cause of death
		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	- 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	- hyperplasia, focal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1066	D	**Microscopic**	
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, mild
			- nephropathy, chronic progressive, bilateral, severe
		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, moderate
		lung	- within normal limits
		lymph node, mandibular	- dilatation, sinus, mild
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- exudate, nasal passage, moderate
			- fungus/yeast, moderate
			- inflammation, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1066	D	**Microscopic**	
		nose, level b	- erosion/ulcer, moderate
			- exudate, nasal passage, moderate
			- fungus/yeast, severe
			- inflammation, mild
		nose, level c	- erosion/ulcer, moderate
			- exudate, nasal passage, mild
			- fungus/yeast, severe
			- inflammation, mild
			- metaplasia, squamous, moderate
		nose, level d	- erosion/ulcer, moderate
			- exudate, nasal passage, moderate
			- fungus/yeast, severe
			- metaplasia, squamous, moderate
		pancreas	- within normal limits
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1066	D	**Microscopic**	
		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
		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	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1066	D	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- nose/oral inflammation/ulceration
1067	S	**Macroscopic**	
		eyes	- cloudy, bilateral, moderate
			corresponds to antemortem observation (cataract - mature eye discolored)
			left mild.
		seminal vesicles	- discoloration, green, left, mild
1067	S	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, mild
			- hyperplasia, focal cortical, unilateral, minimal
			- hyperplasia, focal medullary, unilateral, mild
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
			- vacuolation, focal, unilateral, minimal

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1067	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- cataract, unilateral, moderate corresponds to macroscopic observation (eyes - cloudy) only one eye affected.
		eyes, optic nerves	- within normal limits
		eyes, retina	- fold/rosette, retinal, unilateral, mild
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1067	S	**Microscopic**	
		kidneys	- hydronephrosis, bilateral, mild
			- 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, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, mild
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1067	S	**Microscopic**	
		pancreas	- adenoma, islet 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	- inflammation, chronic-active, mild
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, unilateral, moderate
			corresponds to macroscopic observation (seminal vesicles - discoloration, green)
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, mild
		skin	- within normal limits
		small intestine, duodenum	- within normal limits
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1067	S	**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
		testes	- 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
1068	S	**Macroscopic**	
		adipose tissue	- focus/foci, yellow, mild white adipose tissue located near right epididymis.

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1068	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		pituitary gland	- cyst, clear, minimal
		skin, subcutis	- mass, tan, mass a, right axillary area, present corresponds to antemortem observation (swelling) approximately 1.5 cm in diameter.
1068	S	**Microscopic**	
		adrenal glands	- necrosis, unilateral, mild - pheochromocytoma, benign, bilateral, primary, incidental, not cause of death
		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, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1068	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	- hydronephrosis, 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1068	S	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, mild
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, focal, 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	- fibroadenoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		mesentery/peritoneum	- necrosis, fat, mild
			corresponds to macroscopic observation (adipose tissue - focus/foci, yellow)
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1068	S	**Microscopic**	
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
			- 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 - cyst)
		prostate gland	- inflammation, acute, moderate
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, bilateral, mild
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1068	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
		testes	- degeneration/atrophy, seminiferous tubules, unilateral, moderate
		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
1069	D	**Macroscopic**	
		nose	- focus/foci, white, mild
		urinary bladder	- distended with urine, red, severe

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1069	D	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, unilateral, minimal
			- hyperplasia, focal cortical, unilateral, mild
			- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death
		aorta	- mineralization, moderate
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- fibrous osteodystrophy, minimal
		bone, sternum	- fibrous osteodystrophy, minimal
		brain	- within normal limits
		coagulating glands	- inflammation, unilateral, mild
		epididymides	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1069	D	**Microscopic**	
		heart	- cardiomyopathy, moderate
			- mineralization, myofiber, minimal
			- mineralization, vascular, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- dilatation, tubular, bilateral, mild
			- hydronephrosis, bilateral, mild
			- nephropathy, chronic progressive, bilateral, mild there is artifactual mineralization present.
		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	- pneumonitis, uremic, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1069	D	**Microscopic**	
		nose, level a	- within normal limits
		nose, level b	- odontodysplasia, moderate
			corresponds to macroscopic observation (nose - focus/foci, white)
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- atrophy, acinar, minimal
			- fibrosis, minimal
			- hyperplasia, islet cell, minimal
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, acute, moderate
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, bilateral, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1069	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	- gastropathy, uremic, mild
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- dilatation, bilateral, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1069	D	**Microscopic**	
		urinary bladder	- dilatation, moderate
			corresponds to macroscopic observation (urinary bladder - distended with urine)
			- hemorrhage, severe
			corresponds to macroscopic observation (urinary bladder - distended with urine)
			- inflammation, severe
		Cause of Death	- urogenital inflammation/obstruction/calculi
1070	E	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate
1070	E	**Microscopic**	
		adrenal glands	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1070	E	**Microscopic**	
		bone, sternum	- within normal limits
		brain	- compression, ventral (pituitary tumor), mild
		coagulating glands	- within normal limits
		epididymides	- 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
		kidneys	- cyst, unilateral, mild
			- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1070	E	**Microscopic**	
		liver	- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, mild
		lung	- inflammation, subacute/chronic, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- exudate, nasal passage, minimal
			- inflammation, mild
		nose, level b	- exudate, nasal passage, mild
			- fungus/yeast, moderate
			- inflammation, mild
		nose, level c	- exudate, nasal passage, moderate
			- metaplasia, squamous, moderate
		nose, level d	- exudate, nasal passage, mild
			- metaplasia, squamous, moderate
		pancreas	- fibrosis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1070	E	**Microscopic**	
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1070	E	**Microscopic**	
		stomach, nonglandular	- within normal limits
		testes	- 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
		Cause of Death	- pituitary tumor
1071	E	**Macroscopic**	
		bile duct, extrahepatic	- dilatation, moderate
		foot/feet	- swollen/thickened, right hindleg/limb, severe corresponds to antemortem observation (swelling)
1071	E	**Microscopic**	
		adrenal glands	- angiectasis/cystic degeneration, focal cortical, bilateral, moderate - hyperplasia, focal medullary, unilateral, mild - vacuolation, focal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1071	E	**Microscopic**	
		aorta	- within normal limits
		bile duct, extrahepatic	- dilatation, mild corresponds to macroscopic observation (bile duct, extrahepatic - dilatation)
		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	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1071	E	**Microscopic**	
		kidneys	- adenoma, tubular cell, benign, unilateral, primary, incidental, not cause of death
			- cyst, unilateral, mild
			- hydronephrosis, unilateral, mild
			- hyperplasia, transitional cell, bilateral, mild
			- nephropathy, chronic progressive, bilateral, severe
		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, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mesentery/peritoneum	- polyarteritis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1071	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	- atrophy, acinar, 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	- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1071	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
		testes	- polyarteritis, bilateral, 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
		Cause of Death	- osteoarthritis/pododermatitis
1072	D	**Macroscopic**	
		adrenal glands	- enlarged, right, severe
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1072	D	**Macroscopic**	
		prostate gland	- edema, moderate
1072	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal medullary, unilateral, mild
			- pheochromocytoma, malignant, unilateral, primary, incidental, not cause of death
			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
		coagulating glands	- within normal limits
		epididymides	- inflammation, peritoneal, unilateral, minimal
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1072	D	**Microscopic**	
		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, 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, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1072	D	**Microscopic**	
		nose, level a	- exudate, nasal passage, minimal
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- 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)
		prostate gland	- inflammation, acute, moderate
			corresponds to macroscopic observation (prostate gland - edema)
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- atrophy, minimal
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1072	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
		testes	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1073	E	**Macroscopic**	
		kidneys	- enlarged, tan, bilateral, mild
		pituitary gland	- enlarged, mild
		skin, subcutis	- abscess, green, left lateral head, mild corresponds to antemortem observation (nodule)
1073	E	**Microscopic**	
		adrenal glands	- hyperplasia, focal cortical, bilateral, minimal
			- hyperplasia, focal medullary, bilateral, mild
			- vacuolation, focal, unilateral, minimal
		aorta	- mineralization, mild
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- fibrous osteodystrophy, minimal
		bone, sternum	- fibrous osteodystrophy, minimal
		brain	- compression, ventral (pituitary tumor), mild
		coagulating glands	- within normal limits
		epididymides	- oligospermia/germ cell debris, bilateral, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1073	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, moderate
		joint, tibiofemoral	- within normal limits
		kidneys	- adenoma, tubular cell, benign, unilateral, primary, incidental, not cause of death
			- nephropathy, chronic progressive, bilateral, severe corresponds to macroscopic observation (kidneys - enlarged)
			- thrombus, unilateral, mild renal vein.
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1073	E	**Microscopic**	
		liver	- hematopoiesis, extramedullary, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, minimal
		lung	- pneumonitis, uremic, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		mesentery/peritoneum	- polyarteritis, mild
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- within normal limits
		nose, level b	- fibrous osteodystrophy, minimal
		nose, level c	- fibrous osteodystrophy, minimal
		nose, level d	- fibrous osteodystrophy, minimal
		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)
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1073	E	**Microscopic**	
		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	- abscess, severe
			corresponds to macroscopic observation (skin, subcutis - abscess)
		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	- gastropathy, uremic, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1073	E	**Microscopic**	
		testes	- adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death
			- degeneration/atrophy, seminiferous tubules, bilateral, moderate
			- polyarteritis, bilateral, 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
		Cause of Death	- skin inflammation/necrosis
1074	E	**Macroscopic**	
		liver	- discoloration, tan, multiple lobes, mild
		testes	- small, bilateral, mild
1074	E	**Microscopic**	
		adrenal 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1074	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
		coagulating glands	- within normal limits
		epididymides	- 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, moderate
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, bilateral, minimal
			- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1074	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	- degeneration, cystic, focal, minimal
			- necrosis, focal, mild
			corresponds to macroscopic observation (liver - discoloration, tan)
			- vacuolation, diffuse, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- within normal limits
		nose, level a	- exudate, nasal passage, mild
			- fungus/yeast, moderate
			- inflammation, minimal
			- metaplasia, squamous, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1074	E	**Microscopic**	
		nose, level b	- exudate, nasal passage, moderate
			- fungus/yeast, moderate
			- inflammation, minimal
			- metaplasia, squamous, minimal
		nose, level c	- erosion/ulcer, mild
			- exudate, nasal passage, mild
			- fungus/yeast, severe
			- metaplasia, squamous, mild
		nose, level d	- 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
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- not examined
		seminal vesicles	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1074	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	- hematopoiesis, extramedullary, increased, mild
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- degeneration/atrophy, seminiferous tubules, 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
		non-correlated macro observation	- testes - small

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1074	E	**Microscopic**	
		Cause of Death	- nose/oral inflammation/ulceration
1075	D	**Macroscopic**	
		all tissues	- within normal limits
1075	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1075	D	**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	- hydronephrosis, 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	- focus of cellular alteration, basophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
			- vacuolation, focal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1075	D	**Microscopic**	
		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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, 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
		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	- degeneration/necrosis, myofiber, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1075	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	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, severe
		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
		Cause of Death	- undetermined

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1076	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, right.
		skin, subcutis	- mass, tan, right axillary area, mass a, present corresponds to antemortem observation (swelling) approximately 3.0 cm in diameter.
1076	S	**Microscopic**	
		adrenal glands	- vacuolation, focal, 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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1076	S	**Microscopic**	
		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, bilateral, mild
			- 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	- degeneration, cystic, focal, mild
			- focus of cellular alteration, eosinophilic, mild
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, midzonal, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1076	S	**Microscopic**	
		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
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- atrophy, acinar, minimal
			- fibrosis, minimal
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, mild
		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	- degeneration/necrosis, myofiber, minimal
		skin	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1076	S	**Microscopic**	
		skin, subcutis	- lipoma, 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, minimal
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- adenoma, interstitial cell, benign, unilateral, primary, incidental, not cause of death
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- adenoma, c-cell, benign, unilateral, primary, incidental, not cause of death
			- adenoma, follicular cell, benign, unilateral, primary, incidental, not cause of death
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1076	S	**Microscopic**	
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
1077	E	**Macroscopic**	
		animal/whole body	- body fat depleted, moderate corresponds to antemortem observation (thin)
		coagulating glands	- small, bilateral, moderate
		kidneys	- cyst, clear, bilateral, moderate
		seminal vesicles	- small, bilateral, moderate
		testes	- small, bilateral, moderate
1077	E	**Microscopic**	
		adrenal glands	- adenoma, cortical, benign, unilateral, primary, incidental, not cause of death - angiectasis/cystic degeneration, focal cortical, unilateral, mild - hyperplasia, focal cortical, unilateral, mild - hyperplasia, focal medullary, unilateral, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1077	E	**Microscopic**	
		aorta	- mineralization, moderate
		bone marrow, femur	- within normal limits
		bone marrow, sternum	- within normal limits
		bone, femur	- fibrous osteodystrophy, mild
			- hyperostosis, moderate
		bone, sternum	- hyperostosis, moderate
		brain	- within normal limits
		cavity, thoracic	- polyarteritis, moderate
		coagulating glands	- depletion, secretory, bilateral, severe
			corresponds to macroscopic observation (coagulating glands - small)
		epididymides	- oligospermia/germ cell debris, bilateral, severe
		esophagus	- inflammation, mild
			slide 10.
		eyes	- metaplasia, squamous, unilateral, mild
			- neovascularization, corneal, unilateral, moderate
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1077	E	**Microscopic**	
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, minimal
			- hyperplasia, tubular, unilateral, mild
			- mineralization, tubular, bilateral, minimal
			- nephropathy, chronic progressive, bilateral, severe
			corresponds to macroscopic observation (kidneys - cyst)
			- polyarteritis, bilateral, mild
			- thrombus, bilateral, mild
			renal vein.
		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, mild
			- hyperplasia, bile duct, mild
			- vacuolation, diffuse, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1077	E	**Microscopic**	
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- dilatation, sinus, mild
		lymph node, mesenteric	- within normal limits
		mesentery/peritoneum	- polyarteritis, moderate
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- fibrous osteodystrophy, mild
		nose, level b	- exudate, nasal passage, mild
			- fibrous osteodystrophy, mild
			- inflammation, mild
		nose, level c	- fibrous osteodystrophy, mild
			- inflammation, minimal
			- metaplasia, squamous, mild
		nose, level d	- exudate, nasal passage, minimal
			- fibrous osteodystrophy, mild
		pancreas	- hyperplasia, acinar cell, focal, mild
		parathyroid glands	- hyperplasia, diffuse, unilateral, mild
		pharynx	- within normal limits
		pituitary gland	- cyst, moderate
		prostate 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1077	E	**Microscopic**	
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, severe corresponds to macroscopic observation (seminal vesicles - small)
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, mild
		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	- gastropathy, uremic, mild
		stomach, nonglandular	- within normal limits
		testes	- degeneration/atrophy, seminiferous tubules, bilateral, severe corresponds to macroscopic observation (testes - small) - polyarteritis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1077	E	**Microscopic**	
		thymus	- depletion, lymphoid, generalized, severe
		thyroid gland	- adenoma, follicular cell, benign, unilateral, primary, incidental, not cause of death
			- hyperplasia, c-cell, focal, bilateral, moderate
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- chronic progressive nephropathy/uremia
1078	E	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, left.
		pituitary gland	- enlarged, minimal
		skin, subcutis	- mass, ulcerated, mass a, left axillary area, present corresponds to antemortem observation (mass 1) approximately 19.0 x 15.0 x 6.0 cm, tan.

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1078	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	- astrocytoma, malignant, primary, incidental, not cause of death
		coagulating glands	- within normal limits
		epididymides	- 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

E - Euthanized *in extremis*

MPI Research 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
0 mg/kg/day			
1078	E	**Microscopic**	
		kidneys	- hyperplasia, transitional cell, bilateral, mild
			- nephropathy, chronic progressive, bilateral, minimal
			- pyelitis, 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
			- hyperplasia, bile duct, minimal
			- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, axillary	- 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	- exudate, nasal passage, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1078	E	**Microscopic**	
		nose, level c	- erosion/ulcer, mild
			- exudate, nasal passage, minimal
			- fungus/yeast, mild
			- inflammation, mild
		nose, level d	- within normal limits
		pancreas	- atrophy, acinar, minimal
			- 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)
		prostate gland	- inflammation, chronic-active, moderate
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, unilateral, mild
		skeletal muscle, biceps femoris	- degeneration/necrosis, myofiber, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1078	E	**Microscopic**	
		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	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1078	E	**Microscopic**	
		Cause of Death	- fibrosarcoma/fibroma
1079	E	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate
1079	E	**Microscopic**	
		adrenal glands	- hypertrophy, focal cortical, unilateral, minimal
			- infarct, unilateral, severe
			- 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	- compression, ventral (pituitary tumor), mild
		coagulating glands	- depletion, secretory, unilateral, severe one of pair present
		epididymides	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1079	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	- 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	- hematopoiesis, extramedullary, minimal
			- infiltration, mononuclear cell, minimal
			- necrosis, focal, minimal
			- vacuolation, periportal, mild
		lung	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1079	E	**Microscopic**	
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		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
		pancreas	- atrophy, acinar, mild
			- fibrosis, minimal
		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)
		prostate gland	- inflammation, chronic-active, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1079	E	**Microscopic**	
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- depletion, secretory, bilateral, severe
		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
		testes	- hyperplasia, interstitial cell, unilateral, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1079	E	**Microscopic**	
		urinary bladder	- within normal limits
		Cause of Death	- pituitary tumor
1080	D	**Macroscopic**	
		pituitary gland	- enlarged, red, moderate
1080	D	**Microscopic**	
		adrenal glands	- vacuolation, focal, 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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1080	D	**Microscopic**	
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		galt	- within normal limits
		harderian glands	- hyperplasia, focal, unilateral, minimal
		heart	- cardiomyopathy, mild
		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	- infiltration, mononuclear cell, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- hemangiosarcoma, malignant, primary, incidental, not cause of death
		nerve, sciatic	- degeneration, axonal/myelin, minimal
		nose, level a	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1080	D	**Microscopic**	
		nose, level b	- foreign material, minimal
			plant.
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- carcinoma, islet cell, malignant, primary, incidental, not cause of death
			- fibrosis, minimal
			- hyperplasia, acinar cell, focal, moderate
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0 mg/kg/day			
1080	D	**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	- within normal limits
		testes	- 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1091	S	**Macroscopic**	
		lymph node, axillary	- within normal limits draining node for mass a, left.
		lymph node, inguinal	- within normal limits draining node for mass b, left.
		skin	- mass, ulcerated, mass a, left lateral thorax, present corresponds to antemortem observation (scabbed area nodule) approximately 2.5 x 1.5 x 0.5 cm, tan. - mass, ulcerated, mass b, left anogenital region, present corresponds to antemortem observation (nodule) approximately 0.6 cm in diameter, tan.
1091	S	**Microscopic**	
		liver	- focus of cellular alteration, basophilic, minimal - focus of cellular alteration, eosinophilic, minimal - hematopoiesis, extramedullary, minimal - hyperplasia, bile duct, minimal - vacuolation, centrilobular, minimal
		lymph node, axillary	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1091	S	**Microscopic**	
		pancreas	- within normal limits
		skin	- keratoacanthoma, benign, multiple, primary, mortality-independent
			corresponds to macroscopic observation (skin - mass a; skin - mass b)
		testes	- polyarteritis, unilateral, minimal
		tongue	- within normal limits
1092	D	**Macroscopic**	
		eyes	- absent/cannibalized, right, no grade
			corresponds to antemortem observation (cannibalized/partially cannibalized)
		eyes, retina	- absent/cannibalized, right, no grade
			corresponds to antemortem observation (cannibalized/partially cannibalized)
		urinary bladder	- distended with urine, mild
1092	D	**Microscopic**	
		adrenal glands	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1092	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
		coagulating glands	- inflammation, bilateral, severe
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits one of pair present one cannibalized.
		eyes, optic nerves	- within normal limits
		eyes, retina	- not examined autolysis too severe for diagnosis one cannibalized.
		galt	- within normal limits
		harderian glands	- within normal limits
		heart	- cardiomyopathy, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1092	D	**Microscopic**	
		joint, tibiofemoral	- within normal limits
		kidneys	- pyelitis, 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	- infiltration, mononuclear cell, minimal
			- vacuolation, midzonal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- fibrosis, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1092	D	**Microscopic**	
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- cyst, mild
		prostate gland	- inflammation, subacute/chronic, moderate
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, unilateral, moderate
		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

MPI Research 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
0.1 mg/kg/day			
1092	D	**Microscopic**	
		stomach, nonglandular	- within normal limits
		testes	- 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	- dilatation, moderate corresponds to macroscopic observation (urinary bladder - distended with urine)
		Cause of Death	- urogenital inflammation/obstruction/calculi
1093	S	**Macroscopic**	
		liver	- mass, tan, mass a, left lateral lobe, present approximately 1.5 cm in diameter.
		lymph node, hepatic	- not identified, no grade draining node for mass a.
		parathyroid glands	- enlarged, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1093	S	**Macroscopic**	
		skin	- abrasion/scab, multiple, dorsal thoracic region, mild
1093	S	**Microscopic**	
		liver	- adenoma, hepatocellular, benign, primary, incidental, not cause of death
			corresponds to macroscopic observation (liver - mass a)
			- degeneration, cystic, focal, minimal
			- hematopoiesis, extramedullary, minimal
		pancreas	- adenoma, islet cell, benign, primary, incidental, not cause of death
		parathyroid glands	- not examined
		skin	- crust, serocellular, mild
			corresponds to macroscopic observation (skin - abrasion/scab)
			- hyperplasia, epidermal, mild
			corresponds to macroscopic observation (skin - abrasion/scab)
			- inflammation, mild
			corresponds to macroscopic observation (skin - abrasion/scab)
		testes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1093	S	**Microscopic**	
		thyroid gland	- carcinoma, c-cell, malignant, unilateral, primary, incidental, not cause of death
			corresponds to macroscopic observation (parathyroid glands - enlarged)
		tongue	- within normal limits
1094	S	**Macroscopic**	
		all tissues	- within normal limits
1094	S	**Microscopic**	
		liver	- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		pancreas	- atrophy, acinar, minimal
		testes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1095	D	**Macroscopic**	
		all tissues	- within normal limits
1095	D	**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
		coagulating glands	- within normal limits
		epididymides	- 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
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
0.1 mg/kg/day			
1095	D	**Microscopic**	
		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
			- infiltration, mononuclear cell, minimal
			- vacuolation, focal, minimal
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1095	D	**Microscopic**	
		pancreas	- atrophy, acinar, minimal
			- fibrosis, minimal
		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
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1095	D	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		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
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- undetermined
1096	S	**Macroscopic**	
		all tissues	- within normal limits
1096	S	**Microscopic**	
		liver	- degeneration, cystic, focal, mild
			- hematopoiesis, extramedullary, minimal

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1096	S	**Microscopic**	
		pancreas	- atrophy, acinar, minimal
		testes	- within normal limits
		tongue	- within normal limits
1097	S	**Macroscopic**	
		foot/feet	- ulcer, plantar/palmar, moderate corresponds to antemortem observation (ulcer plantar/palmar)
		joint, tibiofemoral	- enlarged, left, mild
		kidneys	- enlarged, bilateral, mild
		liver	- enlarged, multiple lobes, mild
		lymph node, inguinal	- enlarged, right, mild draining node for mass a.
		skin, subcutis	- mass, tan, mass a, lumbar, right, present corresponds to antemortem observation (nodule) approximately 3.0 x 2.5 x 1.0 cm.
		thyroid gland	- enlarged, tan, left, moderate
1097	S	**Microscopic**	
		joint, tibiofemoral	- osteoarthritis/pododermatitis, moderate corresponds to macroscopic observation (joint, tibiofemoral - 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1097	S	**Microscopic**	
		kidneys	- nephropathy, chronic progressive, bilateral, severe
			corresponds to macroscopic observation (kidneys - enlarged)
		liver	- degeneration, cystic, focal, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, periportal, minimal
		lymph node, inguinal	- hyperplasia, lymphocyte/plasmacyte, medulla, mild
			corresponds to macroscopic observation (lymph node, inguinal - enlarged)
		pancreas	- fibrosis, minimal
			- hyperplasia, acinar cell, focal, mild
		skin	- keratoacanthoma, benign, primary, mortality-independent
			corresponds to macroscopic observation (skin, subcutis - mass a)
		testes	- polyarteritis, bilateral, minimal
		thyroid gland	- carcinoma, c-cell, malignant, unilateral, primary, incidental, not cause of death
			corresponds to macroscopic observation (thyroid gland - enlarged)
		tongue	- within normal limits
		non-correlated macro observation	- liver - 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1098	D	**Macroscopic**	
		liver	- cyst, clear, right lateral lobe, mild
		pituitary gland	- enlarged, red, moderate
1098	D	**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
		coagulating glands	- within normal limits
		epididymides	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1098	D	**Microscopic**	
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- 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	- cyst, biliary, multiloculated, mild
			corresponds to macroscopic observation (liver - cyst)
			- infiltration, mononuclear cell, 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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1098	D	**Microscopic**	
		nose, level d	- within normal limits
		pancreas	- atrophy, acinar, minimal
			- fibrosis, 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	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1098	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
		testes	- 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
		Cause of Death	- pituitary tumor
1099	S	**Macroscopic**	
		adrenal glands	- not identified, right, no grade weight reflects left only.

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1099	S	**Macroscopic**	
		skin	- abrasion/scab, ulcerated, anogenital region, mild corresponds to antemortem observation (swelling scabbed area abrasion(s))
1099	S	**Microscopic**	
		liver	- degeneration, cystic, focal, mild
			- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, focal, minimal
			- vacuolation, periportal, minimal
		pancreas	- within normal limits
		skin	- carcinoma, squamous cell, malignant, primary, mortality-independent corresponds to macroscopic observation (skin - abrasion/scab)
		testes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1100	D	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		stomach, nonglandular	- irregular surface, mild
1100	D	**Microscopic**	
		adrenal glands	- hyperplasia, focal medullary, unilateral, minimal
			- 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	- compression, ventral (pituitary tumor), mild
		coagulating glands	- within normal limits
		epididymides	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1100	D	**Microscopic**	
		harderian glands	- within normal limits
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, mild
			- 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
			- vacuolation, periportal, mild
		lung	- histiocytosis, alveolar, minimal
		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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1100	D	**Microscopic**	
		nose, level c	- within normal limits
		nose, level d	- within normal limits
		pancreas	- hyperplasia, acinar cell, focal, mild
		parathyroid glands	- adenoma, benign, unilateral, primary, incidental, not cause of death
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1100	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	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- hyperplasia, epithelial, nonglandular, moderate
			corresponds to macroscopic observation (stomach, nonglandular - irregular surface)
			- inflammation, mild
		testes	- within normal limits
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1101	D	**Macroscopic**	
		pituitary gland	- enlarged, red, severe
		urinary bladder	- cyst, clear, mild
1101	D	**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
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1101	D	**Microscopic**	
		heart	- cardiomyopathy, minimal
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, mild
			- 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	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1101	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, 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
		small intestine, ileum	- within normal limits
		small intestine, jejunum	- within normal limits
		spinal cord, cervical	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1101	D	**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
		testes	- degeneration/atrophy, seminiferous tubules, unilateral, severe
		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
		non-correlated macro observation	- urinary bladder - cyst
		Cause of Death	- pituitary tumor
1102	D	**Macroscopic**	
		adrenal glands	- enlarged, left, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1102	D	**Macroscopic**	
		kidneys	- mass, red, mass a, right, present approximately 1.0 cm in diameter.
		lymph node, renal	- discoloration, red, right, moderate draining node for mass a.
		skin	- abrasion/scab, dorsal lumbar region, moderate corresponds to antemortem observation (scabbed area)
1102	D	**Microscopic**	
		adrenal glands	- pheochromocytoma, benign, unilateral, primary, incidental, not cause of death - pheochromocytoma, malignant, unilateral, primary, incidental, not cause of death 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1102	D	**Microscopic**	
		brain	- within normal limits
		coagulating glands	- inflammation, bilateral, moderate
		epididymides	- 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
		kidneys	- carcinoma, tubular cell, malignant, unilateral, primary, fatal, positive cause of death corresponds to macroscopic observation (kidneys - mass a)
			- hyperplasia, transitional cell, unilateral, mild
			- nephropathy, chronic progressive, bilateral, moderate
			- pyelitis, unilateral, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1102	D	**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, minimal
			- hyperplasia, bile duct, mild
			- leukocytosis, sinusoidal, minimal
			- macrophages, pigmented, minimal
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- within normal limits
		lymph node, renal	- erythrocytosis/erythrophagocytosis, sinus, mild
			corresponds to macroscopic observation (lymph node, renal - 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1102	D	**Microscopic**	
		pancreas	- atrophy, acinar, minimal
			- fibrosis, minimal
		parathyroid glands	- within normal limits
		pharynx	- within normal limits
		pituitary gland	- adenoma, pars distalis, benign, primary, incidental, not cause of death
		prostate gland	- inflammation, acute, severe
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- within normal limits
		salivary gland, sublingual	- within normal limits
		seminal vesicles	- inflammation, bilateral, mild
		skeletal muscle, biceps femoris	- within normal limits
		skin	- adenoma, sebaceous 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1102	D	**Microscopic**	
		spinal cord, thoracic	- within normal limits
		spleen	- within normal limits
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, mild
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- hyperplasia, simple transitional cell, mild
			- inflammation, mild
			- inflammation, peritoneal, mild
		Cause of Death	- kidney tumor
1103	D	**Macroscopic**	
		all tissues	- within normal limits
1103	D	**Microscopic**	
		adrenal 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1103	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
		coagulating glands	- within normal limits
		epididymides	- 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	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1103	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	- within normal limits
		lung	- histiocytosis, alveolar, minimal
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- within normal limits
		parathyroid glands	- not examined
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		prostate gland	- within normal limits
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1103	D	**Microscopic**	
		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
		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	- within normal limits
		thymus	- within normal limits
		thyroid gland	- within normal limits
		tongue	- within normal limits
		trachea	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1103	D	**Microscopic**	
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- undetermined
1104	D	**Macroscopic**	
		all tissues	- within normal limits
1104	D	**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	- astrocytoma, malignant, primary, fatal, positive cause of death
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1104	D	**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, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, bilateral, minimal
			- nephropathy, chronic progressive, 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	- infiltration, mononuclear cell, minimal
			- vacuolation, centrilobular, mild
		lung	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1104	D	**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
		pancreas	- within normal limits
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1104	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	- 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
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- brain tumor
1105	E	**Macroscopic**	
		pituitary gland	- enlarged, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1105	E	**Macroscopic**	
		seminal vesicles	- small, bilateral, mild
		testes	- small, bilateral, mild
1105	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
		coagulating glands	- depletion, secretory, bilateral, moderate
		epididymides	- oligospermia/germ cell debris, bilateral, 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	- hyperplasia, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1105	E	**Microscopic**	
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- hydronephrosis, unilateral, mild
			- 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	- degeneration, cystic, focal, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, mild
			- infiltration, mononuclear cell, minimal
			- vacuolation, periportal, severe
		lung	- within normal limits
		lymph node, mandibular	- erythrocytosis/erythrophagocytosis, sinus, minimal
		lymph node, mesenteric	- within normal limits
		nerve, sciatic	- degeneration, axonal/myelin, mild
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1105	E	**Microscopic**	
		nose, level b	- within normal limits
		nose, level c	- within normal limits
		nose, level d	- 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)
		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	- depletion, secretory, bilateral, moderate
			corresponds to macroscopic observation (seminal vesicles - small)
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1105	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
		testes	- degeneration/atrophy, seminiferous tubules, bilateral, moderate corresponds to macroscopic observation (testes - small)
		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

E - Euthanized *in extremis*

MPI Research 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
0.1 mg/kg/day			
1106	D	**Macroscopic**	
		all tissues	- within normal limits
1106	D	**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
		coagulating glands	- within normal limits
		epididymides	- 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

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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1106	D	**Microscopic**	
		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	- within normal limits
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- 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
		pancreas	- fibrosis, minimal
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1106	D	**Microscopic**	
		pharynx	- within normal limits
		pituitary gland	- within normal limits
		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
		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	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1106	D	**Microscopic**	
		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
		Cause of Death	- undetermined
1107	S	**Macroscopic**	
		lymph node, inguinal	- not identified, left, no grade draining node for mass a.
		lymph node, mesenteric	- within normal limits draining node for mass b.
		mesentery/peritoneum	- mass, tan, mass b, present approximately 2.0 x 1.5 x 1.0 cm.
		skin, subcutis	- mass, tan, mass a, left inguinal area, present approximately 6.0 x 4.0 x 2.0 cm.
		small intestine, ileum	- swollen/thickened, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1107	S	**Microscopic**	
		galt	- lymphoma, malignant, multicentric, incidental, not cause of death corresponds to macroscopic observation (small intestine, ileum - swollen/thickened)
		liver	- focus of cellular alteration, basophilic, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hematopoiesis, extramedullary, minimal
			- hyperplasia, bile duct, minimal
		lymph node, mesenteric	- lymphoma, malignant, multicentric, incidental, not cause of death corresponds to macroscopic observation (mesentery/peritoneum - mass b)
		mammary gland	- fibroadenoma, benign, primary, incidental, not cause of death corresponds to macroscopic observation (skin, subcutis - mass a)
		multicentric neoplasm	- lymphoma, malignant, multicentric, incidental, not cause of death
		pancreas	- hyperplasia, acinar cell, focal, moderate
		small intestine, ileum	- lymphoma, malignant, multicentric, incidental, not cause of death corresponds to macroscopic observation (small intestine, ileum - swollen/thickened)
		testes	- 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1108	E	**Macroscopic**	
		all tissues	- within normal limits
1108	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
		coagulating glands	- within normal limits
		epididymides	- within normal limits
		esophagus	- within normal limits
		eyes	- within normal limits
		eyes, optic nerves	- within normal limits
		eyes, retina	- within normal limits
		foot/feet	- inflammation, unilateral, moderate
		galt	- within normal limits
		harderian glands	- hyperplasia, 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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1108	E	**Microscopic**	
		heart	- cardiomyopathy, mild
		joint, tibiofemoral	- within normal limits
		kidneys	- mineralization, tubular, unilateral, minimal
			- nephropathy, chronic progressive, bilateral, minimal
		lacrimal glands, exorbital	- atrophy, unilateral, minimal
		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, centrilobular, moderate
		lung	- within normal limits
		lymph node, mandibular	- within normal limits
		lymph node, mesenteric	- inflammation, granulomatous, 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

E - Euthanized *in extremis*

MPI Research 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
0.1 mg/kg/day			
1108	E	**Microscopic**	
		pancreas	- fibrosis, minimal
		parathyroid glands	- within normal limits one of pair present
		pharynx	- within normal limits
		pituitary gland	- hyperplasia, focal, pars distalis, minimal
		prostate gland	- within normal limits
		salivary gland, mandibular	- within normal limits
		salivary gland, parotid	- atrophy, minimal
		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
		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 - MALE
Terminal

Group, Animal Number	Fate	Tissue	Observations
0.1 mg/kg/day			
1108	E	**Microscopic**	
		stomach, glandular	- within normal limits
		stomach, nonglandular	- within normal limits
		testes	- within normal limits
		thymus	- depletion, lymphoid, generalized, moderate
		thyroid gland	- cyst, follicular, bilateral, mild
		tongue	- within normal limits
		trachea	- within normal limits
		ureters	- within normal limits
		urinary bladder	- within normal limits
		Cause of Death	- foot/feet; inflammation; unilateral, moderate
1109	S	**Macroscopic**	
		all tissues	- within normal limits
1109	S	**Microscopic**	
		liver	- degeneration, cystic, focal, minimal
			- focus of cellular alteration, eosinophilic, minimal
			- hyperplasia, bile duct, minimal
			- vacuolation, centrilobular, minimal

S - Scheduled necropsy
E - Euthanized *in extremis*