### APPENDIX C SUMMARY OF LESIONS IN REGIMEN C FEMALE MICE IN THE 2-YEAR GAVAGE STUDY OF CHLORAL HYDRATE

(Single Dose on Postnatal Day 28)

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C-2 Chloral Hydrate, NTP TR 502
TABLE C1
Summary of the Incidence of Neoplasms in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate<sup>a</sup>

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Disposition Summary				
Animals initially in study Early deaths	48	48	48	48
Moribund Natural deaths	3 3	4 4	3	2 6
Survivors Terminal sacrifice	42	40	45	40
Animals examined microscopically	48	48	48	48
Alimentary System				
Esophagus	(45)	(7)	(2)	(46)
Lymphoma malignant		1 (14%)		, ,
Gallbladder	(43)	(8)	(3)	(44)
Lymphoma malignant	440	2 (25%)	1 (33%)	(10)
Intestine large, cecum	(46)	(6)	(1)	(43)
Lymphoma malignant Intestine small, duodenum	2 (4%) (45)	(7)	(1)	1 (2%) (41)
Lymphoma malignant	1 (2%)	1 (14%)	(1)	1 (2%)
Intestine small, ileum	(42)	(6)	(1)	(43)
Lymphoma malignant	1 (2%)	(0)	(1)	2 (5%)
Intestine small, jejunum	(44)	(7)	(2)	(44)
Lymphoma malignant		1 (14%)	1 (50%)	
Liver	(48)	(48)	(48)	(48)
Hemangiosarcoma			1 (2%)	
Hepatocellular adenoma	3 (6%)	3 (6%)	1 (2%)	2 (4%)
Hepatocellular adenoma, multiple	2 (60/)		1 (2%)	
Hepatocellular carcinoma Histiocytic sarcoma	3 (6%) 1 (2%)	1 (2%)		
Lymphoma malignant	5 (10%)	10 (21%)	4 (8%)	9 (19%)
Mesentery	(2)	(4)	(1)	9 (1970)
Hemangiosarcoma	(2)	(4)	1 (100%)	
Sarcoma		1 (25%)	1 (10070)	
Pancreas	(46)	(8)	(2)	(46)
Lymphoma malignant	2 (4%)	2 (25%)	1 (50%)	2 (4%)
Salivary glands	(48)	(9)	(3)	(48)
Lymphoma malignant	1 (2%)	3 (33%)		2 (4%)
Stomach, forestomach	(47)	(7)	(2)	(44)
Lymphoma malignant	1 (20/)	2 (29%)		
Squamous cell carcinoma Stomach, glandular	1 (2%) (47)	(7)	(2)	(44)
Lymphoma malignant	(47)	(7) 2 (29%)	(2) 1 (50%)	(44)
Cardiovascular System				
Heart	(48)	(8)	(3)	(48)
Lymphoma malignant	(10)	1 (13%)	(5)	(10)
Endocrine System	(40)	(0)	(2)	(40)
Adrenal gland Fibrosarcoma, metastatic, skin	(46)	(9)	(2)	(46)
Adrenal gland, cortex	(46)	1 (11%) (8)	(2)	(46)
Histiocytic sarcoma	(40)	1 (13%)	(2)	(+0)
Lymphoma malignant	1 (2%)	3 (38%)		2 (4%)
	. /	. /		` '

## Chloral Hydrate, NTP TR 502 C-3 TABLE C1 Summary of the Incidence of Neoplasms in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Endocrine System (continued) Islets, pancreatic Adenoma Lymphoma malignant Pituitary gland	(46) (40)	(7) 1 (14%) (4)	(3) 1 (33%) 1 (33%) (42)	(45)
Adenoma, pars distalis Thyroid gland Lymphoma malignant	1 (3%) (48)	(8) 1 (13%)	(2)	1 (2%) (48)
General Body System None				
Genital System Clitoral gland	(38)	(8)	(1)	(37)
Lymphoma malignant	(36)	1 (13%)	(1)	(37)
Ovary Cystadenoma Granulosa cell tumor benign Hemangiosarcoma, periovarian tissue	(47)	(28) 1 (4%)	(28)	(45) 1 (2%) 1 (2%) 1 (2%)
Histiocytic sarcoma Luteoma	1 (2%)			1 (2%)
Lymphoma malignant Lymphoma malignant, periovarian tissue Sarcoma	1 (2%)	2 (7%) 1 (4%)	1 (4%)	1 (2%)
Yolk sac carcinoma				1 (2%)
Uterus Fibrosarcoma	(48)	(29)	(28) 1 (4%)	(47)
Histiocytic sarcoma Leiomyoma Lymphoma malignant	1 (2%)	1 (3%) 1 (3%)	1 (470)	
Polyp	1 (2%)	1 (3%)		
Vagina	(47)	(8)	(1)	(46)
Fibrosarcoma Histiocytic sarcoma Lymphoma malignant	1 (2%)	3 (38%)		1 (2%)
Hematopoietic System	(40)	(0)	(1)	(40)
Bone marrow  Lymphoma malignant	(48) 3 (6%)	(8) 3 (38%)	(1) 1 (100%)	(46) 2 (4%)
Lymph node	(48)	(15)	(6)	(48)
Fibrosarcoma, metastatic, renal, uterus	1 (20/)		1 (17%)	1 (20/)
Lymphoma malignant Lymphoma malignant, axillary	1 (2%)	1 (7%)		1 (2%)
Lymphoma malignant, inguinal		2 (13%)	1 (17%)	
Lymphoma malignant, lumbar	1 (2%)	1 (70/)	1 (17%)	
Lymphoma malignant, mediastinal Lymphoma malignant, renal Lymphoma malignant, thoracic	440	1 (7%) 2 (13%)	1 (17%)	2 (4%) 1 (2%)
Lymph node, mandibular	(48)	(9)	(4) 2 (50%)	(47)
Lymphoma malignant Lymph node, mesenteric	2 (4%) (47)	4 (44%) (11)	(4)	7 (15%) (43)
Lymphoma malignant Sarcoma	4 (9%)	6 (55%) 1 (9%)	3 (75%)	6 (14%)

C-4 Chloral Hydrate, NTP TR 502
TABLE C1
Summary of the Incidence of Neoplasms in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Hematopoietic System (continued) Spleen Hemangiosarcoma Lymphoma malignant Thymus Lymphoma malignant Sarcoma, metastatic, skin	(47) 7 (15%) (38) 2 (5%)	(20) 1 (5%) 13 (65%) (6) 2 (33%) 1 (17%)	(15) 2 (13%) 5 (33%) (4) 3 (75%)	(46) 1 (2%) 14 (30%) (37) 2 (5%)
Integumentary System Mammary gland Adenocarcinoma Adenoma Fibrous histiocytoma Lymphoma malignant Skin Fibrosarcoma Hemangiosarcoma Hemangiosarcoma, metastatic, uncertain primary site Lymphoma malignant Sarcoma	(48) 1 (2%)	(6) 1 (17%) 1 (17%) 1 (17%) (8) 1 (13%) 1 (13%) 1 (13%)	(6) 1 (17%) 2 (33%)	(47) 1 (2%) 1 (2%) (48) 1 (2%)
Musculoskeletal System Bone, femur Lymphoma malignant Bone, sternum Lymphoma malignant Skeletal muscle Fibrosarcoma Lymphoma malignant	(48) (48) (48) 1 (2%)	(8) 1 (13%) (8) 1 (13%) (8) 2 (25%)	<ul><li>(2)</li><li>(3)</li><li>(3)</li></ul>	(47) (47) (48) 1 (2%)
Nervous System Brain, cerebellum Lymphoma malignant Brain, cerebrum Lymphoma malignant Peripheral nerve Lymphoma malignant Spinal cord, thoracic Lymphoma malignant	(48) (48) (48) (48)	(8) 1 (13%) (8) 2 (25%) (8) 1 (13%) (8) 1 (13%)	<ul><li>(3)</li><li>(3)</li><li>(3)</li><li>(3)</li></ul>	(48) (48) (48) (48)
Respiratory System Lung Alveolar/bronchiolar adenoma Alveolar/bronchiolar adenoma, multiple Alveolar/bronchiolar carcinoma Carcinoma, metastatic, harderian gland Fibrous histiocytoma Hemangiosarcoma Lymphoma malignant Sarcoma, metastatic, skin Yolk sac carcinoma, metastatic, ovary	(48) 3 (6%) 1 (2%) 1 (2%) 3 (6%)	(8) 1 (13%) 4 (50%) 1 (13%)	(4) 1 (25%) 1 (25%)	(48) 5 (10%)  1 (2%) 4 (8%) 1 (2%)

### Chloral Hydrate, NTP TR 502 C-5 TABLE C1 Summary of the Incidence of Neoplasms in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Respiratory System (continued) Nose Carcinoma, metastatic, harderian gland Lymphoma malignant Trachea	(48) 1 (2%) (48)	(8) 1 (13%) (8)	(3)	(47)
Lymphoma malignant	(48)	1 (13%)	(2)	(48)
Special Senses System Harderian gland Adenoma	(48) 1 (2%)	(10) 2 (20%)	(5) 1 (20%)	(47) 1 (2%)
Carcinoma Lymphoma malignant Lacrimal gland Lymphoma malignant Zymbal's gland	1 (2%) 1 (2%) (41) 1 (2%) (48)	2 (20%) (5) 1 (20%) (6)	(2) (1)	(43) 1 (2%) (45)
Lymphoma malignant		1 (17%)		
Urinary System	(49)	(0)	(2)	(40)
Kidney Lymphoma malignant	(48) 2 (4%)	(9) 5 (56%)	(3) 1 (33%)	(48) 2 (4%)
Ureter	(1)		, ,	` ,
Lymphoma malignant Urinary bladder	(47)	1 (100%) (8)	(2)	(45)
Histiocytic sarcoma	1 (2%)	(6)	(2)	(43)
Lymphoma malignant	1 (2%) 3	(38%)	1	(2%)
Neoplasm Summary				
Total animals with primary neoplasms b	23	25	14	28
Total primary neoplasms  Total animals with benign neoplasms	64 9	119 7	42 4	83 12
Total benign neoplasms  Total benign neoplasms	10	7	4	13
Total animals with malignant neoplasms	15	22	12	21
Total malignant neoplasms	54	112	38	70
Total animals with metastatic neoplasms  Total metastatic neoplasms	1 2	3 4	1 1	1
1				

Number of animals examined microscopically at the site and the number of animals with neoplasm

b Primary neoplasms: all neoplasms except metastatic neoplasms

C-6 Chloral Hydrate, NTP TR 502

TABLE C2
Statistical Analysis of Primary Neoplasms at 2 Years in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Liver: Hepatocellular Adenoma				
Overall rate a	3/48 (6%)	3/48 (6%)	2/48 (4%)	2/48 (4%)
Adjusted rate b	6.5%	6.5%	4.2%	4.5%
Terminal rate <sup>C</sup>	3/42 (7%)	3/40 (8%)	2/45 (4%)	2/40 (5%)
First incidence (days)	757 (T)	757 (T)	757 (T)	757 (T)
Poly-3 test	P=0.3727N	P=0.6619N	P=0.4849N	P=0.5115N
Liver: Hepatocellular Carcinoma				
Overall rate	3/48 (6%)	0/48 (0%)	0/48 (0%)	0/48 (0%)
Adjusted rate Terminal rate	6.5%	0.0%	0.0%	0.0%
	2/42 (5%)	0/40 (0%) e	0/45 (0%)	0/40 (0%)
First incidence (days) Poly-3 test	682 P=0.0528N	— P=0.1197N	— P=0.1140N	— P=0.1244N
1 ory-3 test	1 -0.032619	1 =0.119/1	1 -0.11401	1 =0.12441
Liver: Hepatocellular Adenoma or Car				
Overall rate	6/48 (13%)	3/48 (6%)	2/48 (4%)	2/48 (4%)
Adjusted rate	13.0%	6.5%	4.2%	4.5%
Terminal rate First incidence (days)	5/42 (12%) 682	3/40 (8%) 757 (T)	2/45 (4%) 757 (T)	2/40 (5%) 757 (T)
Poly-3 test	P=0.1037N	P=0.2447N	P=0.1246N	P=0.1432N
·				
Lung: Alveolar/bronchiolar Adenoma				
Overall rate	4/48 (8%)	0/8 (0%)	0/4 (0%)	5/48 (10%)
Adjusted rate Terminal rate	8.7% 4/42 (10%)	0.0% 0/0	0.0% 0/1 (0%)	11.1% 4/40 (10%)
First incidence (days)	757 (T)	0/0	0/1 (0%) —	707
• •		f		
Poly-3 test	(NA)	_	_	P=0.4867
Lung: Alveolar/bronchiolar Adenoma	or Carcinoma			
Overall rate	4/48 (8%)	0/8 (0%)	1/4 (25%)	5/48 (10%)
Adjusted rate	8.7%	0.0%	29.6%	11.1%
Terminal rate	4/42 (10%)	0/0	1/1 (100%)	4/40 (10%) 707
First incidence (days) Poly-3 test	757 (T) (NA)	_	757 (T)	P=0.4867
Toty o test	(1112)			1 0007
All Organs: Hemangiosarcoma	0.440.4004	1/10/00/	2/10/(50/)	2/10//10/
Overall rate	0/48 (0%)	1/48 (2%)	3/48 (6%)	2/48 (4%)
Adjusted rate Terminal rate	0.0% 0/42 (0%)	2.2% 0/40 (0%)	6.3% 2/45 (4%)	4.5% 1/40 (3%)
First incidence (days)	0/42 (0/0)	738	653	741
Poly-3 test	P=0.1518	P=0.5004	P=0.1264	P=0.2319
All Organs: Malignant Lymphoma				
Overall rate	8/48 (17%)	16/48 (33%)	6/48 (13%)	16/48 (33%)
Adjusted rate	17.2%	34.1%	12.6%	35.1%
Terminal rate	6/42 (14%)	12/40 (30%)	5/45 (11%)	13/40 (33%)
First incidence (days)	562	604	718	543
Poly-3 test	P=0.1250	P=0.0488	P=0.3714N	P=0.0404

#### Chloral Hydrate, NTP TR 502 C-7

TABLE C2 Statistical Analysis of Primary Neoplasms at 2 Years in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
All Organs: Benign Neoplasms				
Overall rate	9/48 (19%)	7/48 (15%)	4/48 (8%)	<u>13</u> /48 (27%)
Adjusted rate	19.6%	15.3%	8.4%	28.4%
Terminal rate	9/42 (21%)	7/40 (18%)	4/45 (9%)	11/40 (28%)
First incidence (days)	757 (T)	757 (T)	757 (T)	349
Poly-3 test	P=0.1399	P=0.3917N	P=0.1029N	P=0.2308
All Organs: Malignant Neoplasms				
Overall rate	15/48 (31%)	22/48 (46%)	12/48 (25%)	21/48 (44%)
Adjusted rate	31.5%	45.8%	25.1%	45.6%
Terminal rate	10/42 (24%)	14/40 (35%)	10/45 (22%)	16/40 (40%)
First incidence (days)	562	583	653	543
Poly-3 test	P=0.2432	P=0.1087	P=0.3209N	P=0.1151
All Organs: Benign or Malignant Neo	plasms			
Overall rate	23/48 (48%)	25/48 (52%)	14/48 (29%)	28/48 (58%)
Adjusted rate	48.3%	52.1%	29.2%	59.7%
Terminal rate	18/42 (43%)	17/40 (43%)	12/45 (27%)	22/40 (55%)
First incidence (days)	562	583	653	349
Poly-3 test	P=0.2537	P=0.4331	P=0.0432N	P=0.1817

#### (T)Terminal sacrifice

(NA)Not applicable

a Number of neoplasm-bearing animals/number of animals with tissue examined microscopically

Poly-3 estimated neoplasm incidence after adjustment for intercurrent mortality

Observed incidence at terminal kill

Beneath the vehicle control incidence are the P values associated with the trend test. Beneath the dosed group incidence are the P values corresponding to pairwise comparisons between the vehicle controls and that dosed group. The Poly-3 test accounts for the differential mortality in animals that do not reach terminal sacrifice. A negative trend or a lower incidence in a dose group is indicated by **N**.

Not applicable; no neoplasms in animal group

Tissue was examined microscopically only when it was observed to be abnormal at necropsy; thus, statistical comparisons with the vehicle controls are not appropriate.

C-8 Chloral Hydrate, NTP TR 502
TABLE C3
Summary of the Incidence of Nonneoplastic Lesions in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate<sup>a</sup>

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Disposition Summary				
Animals initially in study	48	48	48	48
Early deaths				
Moribund	3	4		2
Natural deaths	3	4	3	6
Survivors	42	40	45	40
Terminal sacrifice	42	40	45	40
Animals examined microscopically	48	48	48	48
Alimentary System				
Esophagus	(45)	(7)	(2)	(46)
Hyperkeratosis	(40)	1 (14%)	(0)	1 (2%)
Gallbladder	(43)	(8)	(3)	(44)
Accumulation hyaline droplet Infiltration cellular, lymphocytic	3 (7%)			1 (2%) 2 (5%)
Intestine large, cecum	(46)	(6)	(1)	(43)
Hyperplasia, lymphoid	6 (13%)	1 (17%)	(1)	1 (2%)
Intestine large, colon	(46)	(7)	(2)	(43)
Hyperplasia, goblet cell	1 (2%)			1 (2%)
Intestine large, rectum	(46)	(7)	(2)	(43)
Fibrosis	1 (2%)	4.00	445	
Intestine small, ileum	(42)	(6)	(1)	(43)
Atrophy Hyperplasia, lymphoid	1 (2%)	1 (17%)		4 (9%)
Intestine small, jejunum	(44)	(7)	(2)	(44)
Hyperplasia, lymphoid	1 (2%)	1 (14%)	(2)	(++)
Liver	(48)	(48)	(48)	(48)
Angiectasis	` '	, ,	1 (2%)	, ,
Basophilic focus	1 (2%)	1 (2%)	2 (4%)	1 (2%)
Cyst, bile duct		1 (2%)		
Degeneration		1 (2%)	1 (2%)	1 (2%)
Degeneration, fatty		1 (2%)	1 (20/)	
Eosinophilic focus Hematopoietic cell proliferation	5 (10%)	2 (4%) 13 (27%)	1 (2%) 13 (27%)	11 (23%)
Hyperplasia, Kupffer cell	3 (10/0)	2 (4%)	13 (2770)	1 (2%)
Hyperplasia, oval cell		2 (170)	1 (2%)	1 (270)
Infiltration cellular, lymphocytic	42 (88%)	35 (73%)	36 (75%)	33 (69%)
Infiltration cellular, plasma cell		1 (2%)	1 (2%)	
Inflammation	1 (2%)			1 (2%)
Necrosis	27 (56%)	33 (69%)	40 (83%)	34 (71%)
Necrosis, coagulative	2 (4%)	1 (2%)	4 (8%)	3 (6%)
Regeneration Tension lipoidosis	10 (4004)	1 (2%)	1 (2%)	16 (220/)
Thrombus	19 (40%)	14 (29%)	20 (42%) 1 (2%)	16 (33%) 1 (2%)
Vacuolization cytoplasmic	31 (65%)	36 (75%)	42 (88%)	34 (71%)
Mesentery	(2)	(4)	(1)	2. (11/0)
Necrosis, fat	2 (100%)	3 (75%)		

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

#### Chloral Hydrate, NTP TR 502 C-9 TABLE C3 Summary of the Incidence of Nonneoplastic Lesions in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Alimentary System (continued)				
Pancreas	(46)	(8)	(2)	(46)
Accumulation hyaline droplet, duct				1 (2%)
Atrophy	2 (4%)			
Cyst, duct		1 (13%)		
Degeneration	1 (2%)			1 (2%)
Focal cellular change				2 (4%)
Infiltration cellular, lymphocytic	24 (52%)	5 (63%)	1 (50%)	21 (46%)
Inflammation	1 (2%)			
Necrosis				1 (2%)
Salivary glands	(48)	(9)	(3)	(48)
Atrophy	44 (9 = 1)			2 (4%)
Infiltration cellular, lymphocytic	41 (85%)	5 (56%)	3 (100%)	41 (85%)
Stomach, forestomach	(47)	(7)	(2)	(44)
Hyperkeratosis	1 (2%)		1 (50%)	1 (2%)
Infiltration cellular, lymphocytic				1 (2%)
Inflammation	(45)	(F)	(0)	2 (5%)
Stomach, glandular	(47)	(7)	(2)	(44)
Cyst	5 (11%)	1 (14%)		
Hyperplasia	2 (4%)			1 (20()
Infiltration cellular, lymphocytic				1 (2%)
Inflammation	1 (20()			1 (2%)
Mineralization	1 (2%)	(0)	(3)	2 (5%)
Tongue	(48)	(8)	(3)	(48)
Infiltration cellular, mast cell	1 (2%)	1 (120/)		
Mineralization Polyarteritis		1 (13%)		1 (2%)
10,540				1 (2/0)
Cardiovascular System	(40)	(0)	(2)	(40)
Heart	(48)	(8)	(3)	(48)
Cardiomyopathy	1 (2%)			4 (90/)
Degeneration, valve		1 (120/)		4 (8%)
Hyperplasia, epicardium	1 (20/)	1 (13%)		1 (20/)
Infiltration cellular, lymphocytic	1 (2%)		1 (220/)	1 (2%)
Necrosis Polyarteritis			1 (33%)	1 (2%)
Thrombus	1 (2%)			1 (2%)
Tinomous	1 (270)			
Endocrine System				
Adrenal gland	(46)	(9)	(2)	(46)
Accessory adrenal cortical nodule	1 (2%)			
Adrenal gland, cortex	(46)	(8)	(2)	(46)
Hematopoietic cell proliferation	1 (2%)			
Hyperplasia				1 (2%)
Hyperplasia, spindle cell	44 (96%)	4 (50%)	1 (50%)	38 (83%)
Infiltration cellular, lymphocytic	1 (2%)			
Vacuolization cytoplasmic	1 (2%)			2 (4%)
Adrenal gland, medulla	(46)	(8)	(2)	(44)
Inflammation	1 (2%)			
Vacuolization cytoplasmic	1 (2%)			

C-10 Chloral Hydrate, NTP TR 502

TABLE C3

Summary of the Incidence of Nonneoplastic Lesions in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Endocrine System (continued)				
Islets, pancreatic	(46)	(7)	(3)	(45)
Hyperplasia Parathyroid gland	(38)	(7)		2 (4%) (44)
Cyst	1 (3%)	(7)		(44)
Ectopic thymus	2 (5%)			1 (2%)
Infiltration cellular, lymphocytic	1 (3%)	<b>(1)</b>		1 (2%)
Pituitary gland Angiectasis	(40)	(4)		(42) 1 (2%)
Cytomegaly	1 (3%)			1 (2/0)
Degeneration, cystic, pars distalis	1 (3%)			
Hyperplasia, pars distalis	3 (8%)			8 (19%)
Hypertrophy, pars distalis Polyarteritis	2 (5%)			1 (2%)
Thyroid gland	(48)	(8)	(2)	(48)
Cyst, follicle	1 (2%)	(0)	(-)	(.0)
Degeneration				1 (2%)
Ectopic thymus	1 (2%)			
Hyperplasia, follicular cell Infiltration cellular, lymphocytic	1 (2%) 2 (4%)			2 (4%)
Inflammation	1 (2%)			2 (1/0)
Polyarteritis				1 (2%)
Ultimobranchial cyst	19 (40%)	2 (13%)		20 (42%)
General Body System None				
Genital System				
Clitoral gland	(38)	(8)	(1)	(37)
Atrophy	37 (97%)	8 (100%)	1 (100%)	29 (78%)
Infiltration cellular, lymphocytic Inflammation	1 (3%) 1 (3%)			
Ovary	(47)	(28)	(28)	(45)
Angiectasis	1 (2%)			1 (2%)
Atrophy	37 (79%)	6 (21%)	1 (4%)	33 (73%)
Congestion Cyst	1 (2%) 9 (19%)	11 (39%)	17 (61%)	13 (29%)
Cyst, periovarian tissue	10 (21%)	9 (32%)	7 (25%)	3 (7%)
Hematocyst	4 (9%)		1 (4%)	3 (7%)
Infiltration cellular, lymphocytic	2 (4%)			1 (20/)
Mineralization Uterus	(48)	(29)	(28)	1 (2%) (47)
Angiectasis	1 (2%)	(2))	(20)	(17)
Atrophy	2 (4%)	5 (17%)	2 (7%)	4 (9%)
Dilatation	4 (8%)	2 (7%)	8 (29%)	3 (6%)
Fibrosis Hemorrhage				2 (4%) 1 (2%)
Hyperplasia, cystic, endometrium	40 (83%)	19 (66%)	17 (61%)	38 (81%)
Inflammation	1 (2%)		1 (4%)	1 (2%)
Vagina	(47)	(8)	(1)	(46)
Atrophy Infiltration cellular, lymphocytic	2 (4%) 1 (2%)	5 (63%)	1 (100%)	2 (4%) 2 (4%)
Polyarteritis	1 (2/0)			1 (2%)
•				

# Chloral Hydrate, NTP TR 502 C-11 TABLE C3 Summary of the Incidence of Nonneoplastic Lesions in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	<b>Vehicle Control</b>	10 mg/kg	25 mg/kg	50 mg/kg
Hematopoietic System				
Bone marrow	(48)	(8)	(1)	(46)
Depletion		1 (13%)		
Hyperplasia	3 (6%)	1 (13%)		2 (4%)
Infarct				1 (2%)
Myelofibrosis	1 (2%)	1 (13%)		
Lymph node	(48)	(15)	(6)	(48)
Hyperplasia, lymphoid, bronchial	1 (2%)	4 (50)		
Hyperplasia, lymphoid, inguinal	(10)	1 (7%)	40	(45)
Lymph node, mandibular	(48)	(9)	(4)	(47)
Hematopoietic cell proliferation	1 (20/)	1 (11%)		
Hemorrhage	1 (2%)			1 (20/)
Hyperplasia Hyperplasia, lymphoid	8 (17%)			1 (2%) 3 (6%)
Lymph node, mesenteric	(47)	(11)	(4)	(43)
Atrophy	1 (2%)	2 (18%)	(4)	1 (2%)
Hematopoietic cell proliferation	1 (2%)	1 (9%)		1 (270)
Hemorrhage	2 (4%)	1 (9%)		1 (2%)
Hyperplasia, lymphoid	2 (4%)	1 (2/0)		1 (2%)
Hyperplasia, reticulum cell	1 (2%)			- (=/+/
Infiltration cellular, lymphocytic	1 (2%)			
Spleen	(47)	(20)	(15)	(46)
Atrophy	1 (2%)	2 (10%)	1 (7%)	1 (2%)
Congestion	3 (6%)	2 (10%)	1 (7%)	
Hematopoietic cell proliferation	4 (9%)	4 (20%)	2 (13%)	9 (20%)
Hyperplasia, lymphoid	21 (45%)	2 (10%)	4 (27%)	12 (26%)
Infarct				1 (2%)
Infiltration cellular, lymphocytic	1 (2%)			
Thymus	(38)	(6)	(4)	(37)
Atrophy, cortex	27 (71%)	1 (17%)	1 (25%)	15 (41%)
Congestion	1 (20/)			1 (3%)
Cyst	1 (3%)			
Ectopic parathyroid gland	1 (3%)			22 (500/)
Hyperplasia, lymphoid, medulla	16 (42%)			22 (59%)
Integumentary System				
Mammary gland	(46)	(6)	(2)	(47)
Hyperplasia	1 (2%)	1 (17%)	,	1 (2%)
Infiltration cellular, lymphocytic	1 (2%)			
Lactation	1 (2%)			5 (11%)
Skin	(48)	(8)	(6)	(48)
Infiltration cellular, lymphocytic	1 (2%)			
Musculoskeletal System				
Bone	(48)	(8)	(3)	(47)
Fibrous osteodystrophy, turbinate	(40)	(0)	(3)	10 (21%)
Bone, femur	(48)	(8)	(2)	(47)
Fibrous osteodystrophy	13 (27%)	(~)	\ <del>-</del> /	9 (19%)
Bone, sternum	(48)	(8)	(3)	(47)
Fibrous osteodystrophy, multifocal	36 (75%)	2 (25%)	1 (33%)	33 (70%)
Skeletal muscle	(48)	(8)	(3)	(48)
Infiltration cellular, lymphocytic	2 (4%)			2 (4%)

C-12 Chloral Hydrate, NTP TR 502
TABLE C3
Summary of the Incidence of Nonneoplastic Lesions in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Nervous System Brain, cerebellum Mineralization, thalamus	(48) 1 (2%)	(8)	(3)	(48)
Brain, cerebrum Developmental malformation Gliosis Infiltration cellular, lymphocytic Mineralization, multifocal, thalamus	(48) 1 (2%) 1 (2%)	(8)	(3)	(48)
Necrosis Spinal cord, thoracic Infiltration cellular, lymphocytic	31 (65%) 1 (2%) (48) 1 (2%)	4 (50%)	(3)	24 (50%) (48) 1 (2%)
Respiratory System Larynx	(44)	(4)	(2)	(42)
Infiltration cellular, lymphocytic Lung Congestion Hyperplasia, alveolar epithelium Infiltration cellular, histiocytic Infiltration cellular, lymphocytic	1 (2%) (48) 1 (2%) 2 (4%) 2 (4%) 40 (83%)	(8) 2 (25%)	(4) 2 (50%)	(48) 1 (2%) 1 (2%) 2 (4%) 38 (79%)
Inflammation Nose Focal cellular change	(48)	(8)	(3)	1 (2%) (47) 1 (2%)
Special Senses System Eye Inflammation, cornea	(45)	(5)		(46) 1 (2%)
Harderian gland Hyperplasia Infiltration cellular, lymphocytic Lacrimal gland	(48) 14 (29%) (41)	(10) 1 (10%) 2 (20%) (5)	(5) 1 (20%) 2 (40%) (2)	(47) 1 (2%) 16 (34%) (43)
Atrophy Infiltration cellular, lymphocytic Zymbal's gland Atrophy Hyperplasia, squamous	1 (2%) 25 (61%) (48) 1 (2%) 1 (2%)	3 (60%) (6)	(1)	26 (60%) (45)
Inflammation				1 (2%)
Urinary System Kidney Accumulation hyaline droplet Amyloid deposition, glomerulus Cyst, renal tubule Glomerulosclerosis Hydronephrosis Hyperplasia, renal tubule	(48)  2 (4%) 10 (21%) 2 (4%) 2 (4%) 1 (2%)	(9) 1 (11%) 1 (11%) 2 (22%)	(3)	(48) 1 (2%) 2 (4%) 1 (2%) 1 (2%)
11) perpiusia, tenar tubure	1 (2/0)			

# Chloral Hydrate, NTP TR 502 C-13 TABLE C3 Summary of the Incidence of Nonneoplastic Lesions in Regimen C Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Urinary System (continued)				
Kidney (continued)	(48)	(9)	(3)	(48)
Infiltration cellular, lymphocytic	42 (88%)	4 (23%)	2 (67%)	39 (81%)
Mineralization	1 (2%)			1 (2%)
Necrosis, renal tubule	1 (2%)			
Nephropathy	7 (15%)			2 (4%)
Pigmentation, renal tubule				1 (2%)
Vacuolization cytoplasmic, renal tubule	1 (2%)			
Urinary bladder	(47)	(8)	(2)	(45)
Fibrosis, adventitia	1 (2%)			
Infiltration cellular, lymphocytic	41 (87%)		1 (50%)	37 (82%)