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^a

	Vehicle Control	10 mg/kg	25 mg/kg	50 mg/kg
Disposition Summary				
Animals initially in study Early deaths	48	48	48	48
Moribund	3	4	2	2
Natural deaths Survivors	3	4	3	6
Terminal sacrifice	42	40	45	40
Animals examined microscopically	48	48	48	48
Alimentary System				
Esophagus	(45)	(7)	(2)	(46)
Lymphoma malignant	(42)	1 (14%)	(2)	(44)
Gallbladder Lymphoma malignant	(43)	(8) 2 (25%)	(3) 1 (33%)	(44)
Intestine large, cecum	(46)	(6)	(1)	(43)
Lymphoma malignant	2 (4%)	(3)	()	1 (2%)
Intestine small, duodenum	(45)	(7)	(1)	(41)
Lymphoma malignant	1 (2%)	1 (14%)	(1)	1 (2%)
Intestine small, ileum Lymphoma malignant	(42) 1 (2%)	(6)	(1)	(43) 2 (5%)
Intestine small, jejunum	(44)	(7)	(2)	(44)
Lymphoma malignant	,	1 (14%)	1 (50%)	` /
Liver	(48)	(48)	(48)	(48)
Hemangiosarcoma	2 (69)	2 (60/)	1 (2%)	2 (40/)
Hepatocellular adenoma Hepatocellular adenoma, multiple	3 (6%)	3 (6%)	1 (2%) 1 (2%)	2 (4%)
Hepatocellular carcinoma	3 (6%)		1 (270)	
Histiocytic sarcoma	1 (2%)	1 (2%)		
Lymphoma malignant	5 (10%)	10 (21%)	4 (8%)	9 (19%)
Mesentery	(2)	(4)	(1)	
Hemangiosarcoma Sarcoma		1 (250/)	1 (100%)	
Pancreas	(46)	1 (25%) (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 Squamous cell carcinoma	1 (2%)	2 (29%)		
Stomach, glandular	(47)	(7)	(2)	(44)
Lymphoma malignant	(47)	2 (29%)	1 (50%)	(44)
Cardiovascular System				
Heart	(48)	(8)	(3)	(48)
Lymphoma malignant		1 (13%)		
Endocrine System Adrenal gland	(46)	(0)	(2)	(46)
Fibrosarcoma, metastatic, skin	(40)	(9) 1 (11%)	(2)	(40)
Adrenal gland, cortex	(46)	(8)	(2)	(46)
Histiocytic sarcoma	, ,	1 (13%)		, ,
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	(46)	(7)	(3)	(45)
Adenoma Lymphoma malignant Pituitary gland	(40)	1 (14%) (4)	1 (33%) 1 (33%) (42)	
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	1 (2%)			1 (20()
Luteoma Lymphoma malignant Lymphoma malignant, periovarian tissue	1 (2%)	2 (7%)	1 (4%)	1 (2%) 1 (2%)
Sarcoma Yolk sac carcinoma		1 (4%)		1 (2%)
Uterus	(48)	(29)	(28)	(47)
Fibrosarcoma	1 (20/)		1 (4%)	
Histiocytic sarcoma Leiomyoma	1 (2%)	1 (3%)		
Lymphoma malignant		1 (3%)		
Polyp Vagina	1 (2%) (47)	(8)	(1)	(46)
Fibrosarcoma	, ,	(0)	(1)	1 (2%)
Histiocytic sarcoma Lymphoma malignant	1 (2%)	3 (38%)		
Hematopoietic System				
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 Lymphoma malignant, mediastinal	1 (2%)	1 (7%)	1 (17%)	
Lymphoma malignant, mediastinai Lymphoma malignant, renal		2 (13%)	1 (17%)	2 (4%)
Lymphoma malignant, thoracic	(40)			1 (2%)
Lymph node, mandibular Lymphoma malignant	(48) 2 (4%)	(9) 4 (44%)	(4) 2 (50%)	(47) 7 (15%)
Lymph node, mesenteric	(47)	(11)	(4)	(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%)	(2)(3)(3)	(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%)	(3)(3)(3)(3)	(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 Lymphoma malignant	(48) 1 (2%) (48)	(8) 1 (13%) (8) 1 (13%)	(3) (2)	(47) (48)
Special Senses System Harderian gland Adenoma Carcinoma Lymphoma malignant Lacrimal gland Lymphoma malignant Zymbal's gland Lymphoma malignant	(48) 1 (2%) 1 (2%) 1 (2%) (41) 1 (2%) (48)	(10) 2 (20%) 2 (20%) (5) 1 (20%) (6) 1 (17%)	(5) 1 (20%) (2) (1)	(47) 1 (2%) (43) 1 (2%) (45)
Urinary System Kidney Lymphoma malignant Ureter Lymphoma malignant Urinary bladder Histiocytic sarcoma Lymphoma malignant	(48) 2 (4%) (1) (47) 1 (2%) 1 (2%) 3	(9) 5 (56%) 1 (100%) (8) (38%)	(3) 1 (33%) (2) 1	(48) 2 (4%) (45) (2%)
Neoplasm Summary Total animals with primary neoplasms Total primary neoplasms Total animals with benign neoplasms Total benign neoplasms Total animals with malignant neoplasms Total malignant neoplasms Total animals with metastatic neoplasms Total metastatic neoplasms	23 64 9 10 15 54 1	25 119 7 7 7 22 112 3 4	14 42 4 4 12 38 1	28 83 12 13 21 70

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 ^C	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
1019-5 test	1 =0.03261	1-0.117/14	1-0.11401	1-0.12441
Liver: Hepatocellular Adenoma or Carci				
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	8.7%	0.0% 0/0	0.0%	11.1%
Terminal rate First incidence (days)	4/42 (10%) 757 (T)	0/0	0/1 (0%)	4/40 (10%) 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
101, 2 103.	(1.1.1)			1 0007
All Organs: Hemangiosarcoma			****	
Overall rate	0/48 (0%)	1/48 (2%)	3/48 (6%)	2/48 (4%)
Adjusted rate	0.0% 0/42 (0%)	2.2% 0/40 (0%)	6.3%	4.5%
Terminal rate First incidence (days)	0/42 (0%)	738	2/45 (4%) 653	1/40 (3%) 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	oplasms			
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

b 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^a

	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 Terminal sacrifice	42	40	45	40
Terminal sacrifice	72	40	43	40
Animals examined microscopically	48	48	48	48
Alimentary System				
Esophagus	(45)	(7)	(2)	(46)
Hyperkeratosis	(12)	1 (14%)	(2)	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 (2%)
Intestine large, colon	(46)	(7)	(2)	(43)
Hyperplasia, goblet cell	1 (2%)			1 (2%)
Intestine large, rectum	(46)	(7)	(2)	(43)
Fibrosis Intestine small, ileum	1 (2%) (42)	(6)	(1)	(43)
Atrophy	1 (2%)	(0)	(1)	(43)
Hyperplasia, lymphoid	1 (270)	1 (17%)		4 (9%)
Intestine small, jejunum	(44)	(7)	(2)	(44)
Hyperplasia, lymphoid	1 (2%)	1 (14%)	. ,	, ,
Liver	(48)	(48)	(48)	(48)
Angiectasis			1 (2%)	
Basophilic focus	1 (2%)	1 (2%)	2 (4%)	1 (2%)
Cyst, bile duct Degeneration		1 (2%) 1 (2%)	1 (2%)	1 (2%)
Degeneration, fatty		1 (2%)	1 (2/0)	1 (270)
Eosinophilic focus		2 (4%)	1 (2%)	
Hematopoietic cell proliferation	5 (10%)	13 (27%)	13 (27%)	11 (23%)
Hyperplasia, Kupffer cell		2 (4%)		1 (2%)
Hyperplasia, oval cell			1 (2%)	
Infiltration cellular, lymphocytic	42 (88%)	35 (73%)	36 (75%)	33 (69%)
Infiltration cellular, plasma cell	1 (20()	1 (2%)	1 (2%)	1 (20()
Inflammation Necrosis	1 (2%)	22 (600/)	40 (920/)	1 (2%)
Necrosis Necrosis, coagulative	27 (56%) 2 (4%)	33 (69%) 1 (2%)	40 (83%) 4 (8%)	34 (71%) 3 (6%)
Regeneration	2 (470)	1 (2%)	1 (2%)	3 (070)
Tension lipoidosis	19 (40%)	14 (29%)	20 (42%)	16 (33%)
Thrombus	` '	,	1 (2%)	1 (2%)
Vacuolization cytoplasmic	31 (65%)	36 (75%)	42 (88%)	34 (71%)
Mesentery	(2)	(4)	(1)	
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%)	4 (420)		
Cyst, duct	1 (20)	1 (13%)		1 (20()
Degeneration	1 (2%)			1 (2%)
Focal cellular change	24 (520/)	F (620/)	1 (500/)	2 (4%)
Infiltration cellular, lymphocytic Inflammation	24 (52%) 1 (2%)	5 (63%)	1 (50%)	21 (46%)
Necrosis	1 (270)			1 (2%)
Salivary glands	(48)	(9)	(3)	(48)
Atrophy	(48)	(9)	(3)	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	- (=,-,		- (= 0,0)	1 (2%)
Inflammation				2 (5%)
Stomach, glandular	(47)	(7)	(2)	(44)
Cyst	5 (11%)	1 (14%)	. ,	` /
Hyperplasia	2 (4%)			
Infiltration cellular, lymphocytic				1 (2%)
Inflammation				1 (2%)
Mineralization	1 (2%)			2 (5%)
Tongue	(48)	(8)	(3)	(48)
Infiltration cellular, mast cell	1 (2%)			
Mineralization		1 (13%)		4 (20)
Polyarteritis				1 (2%)
Cardiovascular System				
Heart	(48)	(8)	(3)	(48)
Cardiomyopathy	1 (2%)	(0)	(5)	(10)
Degeneration, valve				4 (8%)
Hyperplasia, epicardium		1 (13%)		` '
Infiltration cellular, lymphocytic	1 (2%)			1 (2%)
Necrosis			1 (33%)	1 (2%)
Polyarteritis				1 (2%)
Thrombus	1 (2%)			
Endocrine System				
	(46)	(0)	(2)	(46)
Adrenal gland Accessory adrenal cortical nodule	1 (2%)	(9)	(2)	(40)
Accessory adienal cortical nodule Adrenal gland, cortex	(46)	(8)	(2)	(46)
Hematopoietic cell proliferation	1 (2%)	(0)	(2)	(40)
Hyperplasia	1 (2/0)			1 (2%)
Hyperplasia, spindle cell	44 (96%)	4 (50%)	1 (50%)	38 (83%)
Infiltration cellular, lymphocytic	1 (2%)	. (5070)	1 (50/0)	20 (0270)
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%)	(1)		(44)
Ectopic thymus	2 (5%)			1 (2%)
Infiltration cellular, lymphocytic	1 (3%)	(4)		1 (2%)
Pituitary gland Angiectasis	(40)	(4)		(42) 1 (2%)
Cytomegaly	1 (3%)			1 (270)
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%)	(-)	· /	. ,
Degeneration	4 (20())			1 (2%)
Ectopic thymus Hyperplasia, follicular cell	1 (2%) 1 (2%)			
Infiltration cellular, lymphocytic	2 (4%)			2 (4%)
Inflammation	1 (2%)			_ (.,,,
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%)			
Ovary	1 (3%) (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%)	<i>y</i> (0=70)	1 (4%)	3 (7%)
Infiltration cellular, lymphocytic	2 (4%)			
Mineralization Uterus	(48)	(29)	(28)	1 (2%) (47)
Angiectasis	1 (2%)	(29)	(26)	(47)
Atrophy	2 (4%)	5 (17%)	2 (7%)	4 (9%)
Dilatation	4 (8%)	2 (7%)	8 (29%)	3 (6%)
Fibrosis Hemorrhage				2 (4%)
Hyperplasia, cystic, endometrium	40 (83%)	19 (66%)	17 (61%)	1 (2%) 38 (81%)
Inflammation	1 (2%)	-> (00/0)	1 (4%)	1 (2%)
Vagina	(47)	(8)	(1)	(46)
Atrophy Infiltration callular lymphocytic	2 (4%)	5 (63%)	1 (100%)	2 (4%)
Infiltration cellular, lymphocytic Polyarteritis	1 (2%)			2 (4%) 1 (2%)
				1 (270)

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

	Vehicle	Control	10	mg/kg	25 1	ng/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		(2%)		(13%)				
Lymph node	(48)		(15)		(6)		(48)	
Hyperplasia, lymphoid, bronchial	1	(2%)		(50)				
Hyperplasia, lymphoid, inguinal	(40)			(7%)			(45)	
Lymph node, mandibular	(48)		(9)		(4)		(47)	
Hematopoietic cell proliferation	1	(20/)	1	(11%)				
Hemorrhage	1	(2%)					1	(20/)
Hyperplasia	0	(170/)						(2%) (6%)
Hyperplasia, lymphoid Lymph node, mesenteric	(47)	(17%)	(11)		(4)		(43)	` /
Atrophy	, ,	(2%)		(18%)	(4)		, ,	(2%)
Hematopoietic cell proliferation		(2%)		(9%)			1	(270)
Hemorrhage		(4%)		(9%)			1	(2%)
Hyperplasia, lymphoid		(4%)		(270)				(2%)
Hyperplasia, reticulum cell		(2%)					1	(270)
Infiltration cellular, lymphocytic		(2%)						
Spleen	(47)	(=/0)	(20)		(15)		(46)	
Atrophy		(2%)		(10%)		(7%)	, ,	(2%)
Congestion		(6%)		(10%)		(7%)		(=,-,
Hematopoietic cell proliferation		(9%)		(20%)		(13%)	9	(20%)
Hyperplasia, lymphoid	21	(45%)		(10%)	4	(27%)	12	(26%)
Infarct		` /		,		` '		(2%)
Infiltration cellular, lymphocytic	1	(2%)						` /
Thymus	(38)		(6)		(4)		(37)	
Atrophy, cortex	27	(71%)	1	(17%)	1	(25%)	15	(41%)
Congestion							1	(3%)
Cyst		(3%)						
Ectopic parathyroid gland		(3%)						
Hyperplasia, lymphoid, medulla	16	(42%)					22	(59%)
Integumentary System			,					
Mammary gland	(46)	(20)	(6)		(2)		(47)	
Hyperplasia		(2%)	1	(17%)			1	(2%)
Infiltration cellular, lymphocytic		(2%)					-	(110/)
Lactation		(2%)	(0)		(0)			(11%)
Skin Infiltration cellular, lymphocytic	(48)	(2%)	(8)		(6)		(48)	
Musculoskeletal System								
Bone	(48)		(8)		(3)		(47)	
Fibrous osteodystrophy, turbinate	,							(21%)
Bone, femur	(48)	(250)	(8)		(2)		(47)	
Fibrous osteodystrophy		(27%)			,			(19%)
Bone, sternum	(48)	(750/)	(8)		(3)	(220/)	(47)	
Fibrous osteodystrophy, multifocal		(75%)		(25%)		(33%)		(70%)
Skeletal muscle Infiltration cellular, lymphocytic	(48)	(404)	(8)		(3)		(48)	(4%)
minuation centual, lymphocytic	2	(4%)					2	(470)

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 Brain, cerebrum Developmental malformation Gliosis Infiltration cellular, lymphocytic Mineralization, multifocal, thalamus Necrosis	(48) 1 (2%) (48) 1 (2%) 1 (2%) 31 (65%) 1 (2%)	(8) (8) 4 (50%)	(3) (3)	(48) (48) 2 (4%) 24 (50%)
Spinal cord, thoracic Infiltration cellular, lymphocytic	(48) 1 (2%)	(8)	(3)	(48) 1 (2%)
Respiratory System Larynx Infiltration cellular, lymphocytic Lung Congestion Hyperplasia, alveolar epithelium Infiltration cellular, histiocytic Infiltration cellular, lymphocytic Inflammation Nose Focal cellular change	(44) 1 (2%) (48) 1 (2%) 2 (4%) 2 (4%) 40 (83%)	(4) (8) 2 (25%) (8)	(2) (4) 2 (50%) (3)	(42) (48) 1 (2%) 1 (2%) 2 (4%) 38 (79%) 1 (2%) (47) 1 (2%)
Special Senses System Eye Inflammation, cornea Harderian gland Hyperplasia Infiltration cellular, lymphocytic Lacrimal gland Atrophy Infiltration cellular, lymphocytic Zymbal's gland Atrophy Hyperplasia, squamous Inflammation	(45) (48) 14 (29%) (41) 1 (2%) 25 (61%) (48) 1 (2%) 1 (2%)	(5) (10) 1 (10%) 2 (20%) (5) 3 (60%) (6)	(5) 1 (20%) 2 (40%) (2)	(46) 1 (2%) (47) 1 (2%) 16 (34%) (43) 26 (60%) (45)
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%)

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%)