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

TABLE A1	Summary of the Incidence of Neoplasms in Regimen A Female Mice	
	in the 2-Year Gavage Study of Chloral Hydrate	A-2
TABLE A2	Statistical Analysis of Primary Neoplasms in Regimen A Female Mice	
	in the 2-Year Gavage Study of Chloral Hydrate	A-6
TABLE A3a	Historical Incidence of Pituitary Gland Pars Distalis Neoplasms	
	in Control Female B6C3F ₁ /Nctr BR Mice	A-8
TABLE A3b	Historical Incidence of Malignant Lymphoma	
	in Control Female B6C3F ₁ /Nctr BR Mice	A-8
TABLE A3c	Historical Incidence of Alveolar/bronchiolar Neoplasms	
	in Control Female B6C3F ₁ /Nctr BR Mice	A-9
TABLE A3d	Historical Incidence of Hepatocellular Neoplasms	
	in Control Female B6C3F ₁ /Nctr BR Mice	A-9
TABLE A4	Summary of the Incidence of Nonneoplastic Lesions in Regimen A Female Mice	
	in the 2-Year Gavage Study of Chloral Hydrate	A-10

A-2 Chloral Hydrate, NTP TR 502

TABLE A1

Summary of the Incidence of Neoplasms in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate^a

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
Disposition Summary				
Animals initially in study	48	48	48	48
Early deaths	40	40	40	40
Accidental deaths			1	1
Moribund	2	4	3	2
Natural deaths	9	5	1	9
Survivors				
Died last week of study		1		
Terminal sacrifice	37	38	43	36
Animals examined microscopically	48	48	48	48
Alimentary System				
Gallbladder	(46)	(8)	(4)	(47)
Lymphoma malignant	(19)	(=)		1 (2%)
Intestine large, cecum	(42)	(6)	(3)	(41)
Lymphoma malignant	1 (2%)	. ,	,	` /
Intestine large, colon	(46)	(9)	(3)	(43)
Lymphoma malignant	2 (4%)			
Intestine large, rectum	(44)	(8)	(3)	(43)
Lymphoma malignant	(44)	(-)	(5)	1 (2%)
Intestine small	(41)	(7)	(6)	(42)
Lymphoma malignant Intestine small, duodenum	(40)	(7)	1 (17%)	(42)
Polyp adenomatous	(40)	(7)	(4)	(42) 1 (2%)
Intestine small, ileum	(40)	(6)	(3)	(39)
Lymphoma malignant	(40)	(0)	(3)	1 (3%)
Intestine small, jejunum	(41)	(6)	(5)	(41)
Hemangioma	(1-)	(4)	1 (20%)	(1-)
Lymphoma malignant	2 (5%)			1 (2%)
Liver	(48)	(48)	(48)	(48)
Hepatocellular adenoma	1 (2%)	2 (4%)	3 (6%)	2 (4%)
Hepatocellular carcinoma	1 (2%)			1 (2%)
Histiocytic sarcoma	1 (2%)	1 (2%)		3 (6%)
Lymphoma malignant	6 (13%)	5 (10%)	1 (2%)	6 (13%)
Mesentery Lymphoma malignant	(1) 1 (100%)	(1)	(1)	(1)
Pancreas	(48)	(8)	(5)	(46)
Fibrosarcoma	1 (2%)	(0)	(3)	(40)
Lymphoma malignant	2 (4%)	1 (13%)		3 (7%)
Salivary glands	(48)	(10)	(5)	(48)
Lymphoma malignant	3 (6%)	, ,	1 (20%)	3 (6%)
Stomach, forestomach	(47)	(10)	(4)	(45)
Papilloma squamous				1 (2%)
Stomach, glandular	(47)	(10)	(4)	(46)
Lymphoma malignant	(40)	(0)	(5)	1 (2%)
Tongue	(48)	(9)	(5)	(48)
Lymphoma malignant	1 (20/)			1 (2%)
Papilloma squamous	1 (2%)			
Cardiovascular System				
Heart	(48)	(10)	(5)	(48)
Histiocytic sarcoma	1 (2%)			1 (2%)
Lymphoma malignant	1 (2%)			1 (2%)

Chloral Hydrate, NTP TR 502 A-3 TABLE A1 Summary of the Incidence of Neoplasms in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Cont	rol 25 1	mg/kg 50 i	ng/kg 1	100 mg/kg
Endocrine System	(10)	(0)	(5)		(15)
Adrenal gland, cortex Histiocytic sarcoma	(46)	(9) 1	(5)	((47)
Lymphoma malignant	1 (2%)		,		2 (4%)
Adrenal gland, medulla Lymphoma malignant	(46) 1 (2%)	(9)	(3)	((46) 1 (2%)
Pheochromocytoma malignant	1 (2%)				1 (270)
Islets, pancreatic	(48)	(8)	(5)	((46)
Adenoma Pituitary gland	(45)	(44)	(47)	(2 (4%) (41)
Adenoma, pars distalis	. ,		(5%)	`	5 (12%)
Adenoma, pars intermedia Thyroid gland	2 (4%) (47)	(9)	(5)	((48)
Lymphoma malignant	(47)	())	(3)	(1 (2%)
General Body System					
Tissue NOS	(1)				
Lymphoma malignant, fat	1 (100%	5)			
Genital System	(10)	(0)	40		(40)
Clitoral gland Lymphoma malignant	(43)	(8)	(4)	((43) 2 (5%)
Ovary	(48)	(29)	(21)		(46)
Cystadenoma Histiocytic sarcoma	1 (2%) 1 (2%)		1	(5%)	2 (4%) 2 (4%)
Luteoma	1 (2%)				2 (470)
Lymphoma malignant	2 (4%)	1	(3%)		2 (4%)
Lymphoma malignant, periovarian tissue Uterus	1 (2%) (48)	(26)	(29)	(3 (7%) (47)
Hemangiosarcoma	1 (2%)			`	
Histiocytic sarcoma Leiomyoma	2 (4%)	1	(4%)	(3%)	3 (6%)
Lymphoma malignant			1	(370)	2 (4%)
Polyp	1 (2%)	(0)	(5)	,	(45)
Vagina Histiocytic sarcoma	(48) 2 (4%)	(9)	(5)	((45) 4 (9%)
Lymphoma malignant	2 (4%)				1 (2%)
Polyp					2 (4%)
Hematopoietic System					(45)
Bone marrow Hemangiosarcoma	(47) 1 (2%)	(10)	(5)	((47) 1 (2%)
Lymphoma malignant	3 (6%)				2 (4%)
Lymph node	(48)	(13)	(8)	((47)
Fibrosarcoma, inguinal Histiocytic sarcoma, lumbar	1 (2%)	1	(8%)		
Lymphoma malignant	1 (2/0)				1 (2%)
Lymphoma malignant, axillary		1	(8%)	(120/)	
Lymphoma malignant, deep cervical Lymphoma malignant, inguinal			1	(13%)	1 (2%)
Lymphoma malignant, lumbar	2 (4%)			(13%)	2 (4%)
Lymphoma malignant, mediastinal Lymphoma malignant, renal	1 (2%) 1 (2%)		(15%) (8%) 2	(25%)	1 (2%)

A-4 Chloral Hydrate, NTP TR 502

TABLE A1

Summary of the Incidence of Neoplasms in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate

Hematopoietic System (continued) Lymph node, mandibular		Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
Lymphon andisplant	Hematopoietic System (continued)				
Lymphoma malignant		(47)	(11)	(5)	(46)
Histocytic sarcoma		4 (9%)			6 (13%)
Lymphoma malignant	Lymph node, mesenteric	(46)	(9)	(7)	(44)
Spleen					
1 (2%)					
Lymphoma malignant		* *	(14)	* *	, ,
Thymphoma malignant			c (100)	* /	, ,
Lymphoma malignant					
Integumentary System					
Mammary gland (44) (6) (5) (44) Adenoma 1 (17%) 1 (20%) 1 (2%) Adenoma 1 (2%) 1 (17%) 1 (2%) Lymphoma malignant 1 (2%) 1 (10%) (5) (46) Skin (45) (10) (5) (46) Fibrosarcoma 1 (2%) 2 (4%) 1 (10%) 2 (4%) Hemangiosarcoma 1 (2%) 1 (10%) 5 (48) Lymphoma malignant 1 (2%) 1 (10%) 5 (48) Osteosarcoma, metastatic, bone 4(47) (10) (5) (48) Skeletal muscle (48) (11) (5) (48) Skeletal muscle (48) (11) (5) (48) Lymphoma malignant 1 (2%) 2 (18%) 1 (2%) Nervous System None Respiratory System Lung (48) (48) (48) (48) Alveolar/bronchiolar adenoma 1 (2%) 2	Lymphoma mangham	3 (170)	1 (20%)	2 (40%)	0 (1470)
Adenocarcinoma Adenoma Fibrosarcoma Lymphoma malignant Lymphoma malign					
Adenoma Fibrosarcoma 1 (2%) Lymphoma malignant 1 (2%) Skin (45) (10) (5) (46) Fibrosarcoma 2 (4%) Fibrosarcoma 3 (2%) Hemangiosarcoma 1 (2%) 2 (4%) Histiocytic sarcoma 1 (2%) 1 (10%) Lymphoma malignant 1 (2%) Lymphoma malignant 1 (2%) Osteosarcoma, metastatic, bone (47) (10) (5) (48) Musculoskeletal System Bone (47) (10) (5) (48) Skeletal muscle (48) (11) (5) (48) Fibrosarcoma Lymphoma malignant 1 (2%) 1 (10%) Nervous System None Respiratory System Lung (48) (48) (48) (48) (48) Alveolar/bronchiolar adenoma 1 (2%) 1 (2%) 2 (4%) 4 (8%) Histiocytic sarcoma 1 (2%) 1 (2%) 2 (4%) 4 (8%) Lymphoma malignant 4 (8%) 4 (8%) 1 (2%) 9 (19%) Osteosarcoma, metastatic, bone		(44)	(6)		
Fibrosarcoma				1 (20%)	1 (2%)
Skin			1 (17%)		
Skin					
Fibrosarcoma	• • •		(10)	(5)	(46)
Hemangiosarcoma		(45)	(10)	(5)	, ,
Histiocytic sarcoma		1 (2%)			
Lymphoma malignant		1 (270)	1 (10%)		2 (470)
Musculoskeletal System Some		1 (2%)	1 (10/0)		
Bone			1 (10%)		
Bone	Musaulaskalatal System				
Osteosarcoma, lumbar, vertebra 1 (10%) Skeletal muscle (48) (11) (5) (48) Fibrosarcoma 2 (18%) 1 (2%) Lymphoma malignant 1 (2%) Nervous System None Respiratory System Lung (48) (48) (48) (48) Alveolar/bronchiolar adenoma 1 (2%) 1 (2%) 2 (4%) 4 (8%) Histiocytic sarcoma 1 (2%) 1 (2%) 2 (4%) 2 (4%) Lymphoma malignant 4 (8%) 4 (8%) 1 (2%) 9 (19%) Osteosarcoma, metastatic, bone 1 (2%) 1 (2%) 1 (2%) 1 (2%) Osteosarcoma, metastatic, uncertain primary site 1 (2%)		(47)	(10)	(5)	(48)
Skeletal muscle		(47)		(3)	(40)
Fibrosarcoma		(48)		(5)	(48)
Nervous System None Sespiratory System Sesp		(10)		(3)	(10)
Respiratory System Lung (48)			= (****)		1 (2%)
Respiratory System Lung (48) (48) (48) (48) Alveolar/bronchiolar adenoma 1 (2%) 1 (2%) 2 (4%) 4 (8%) Histiocytic sarcoma 1 (2%) 1 (2%) 2 (4%) 2 (4%) Lymphoma malignant 4 (8%) 4 (8%) 1 (2%) 9 (19%) Osteosarcoma, metastatic, bone 1 (2%) 5 (2%) 5 (2%) Osteosarcoma, metastatic, uncertain primary site 1 (2%) 1 (2%) Trachea (47) (9) (4) (46)					
Lung (48) (48) (48) (48) (48) Alveolar/bronchiolar adenoma 1 (2%) 1 (2%) 2 (4%) 4 (8%) Histiocytic sarcoma 1 (2%) 1 (2%) 2 (4%) Lymphoma malignant 4 (8%) 4 (8%) 1 (2%) 9 (19%) Osteosarcoma, metastatic, bone 1 (2%) 5 (2%) 5 (2%) Osteosarcoma, metastatic, uncertain primary site 1 (2%) 1 (2%) Trachea (47) (9) (4) (46)	None				
Alveolar/bronchiolar adenoma 1 (2%) 1 (2%) 2 (4%) 4 (8%) Histiocytic sarcoma 1 (2%) 1 (2%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 2 (4%) 3 (1 (2%) 9 (19%) 9 (1 (2%) 9 (1 (440			
Histiocytic sarcoma 1 (2%) 1 (2%) 2 (4%) Lymphoma malignant 4 (8%) 4 (8%) 1 (2%) 9 (19%) Osteosarcoma, metastatic, bone Osteosarcoma, metastatic, uncertain primary site Trachea (47) (9) (4) (46)					
Lymphoma malignant 4 (8%) 4 (8%) 1 (2%) 9 (19%) Osteosarcoma, metastatic, bone 1 (2%) 1 (2%) Osteosarcoma, metastatic, uncertain primary site 1 (2%) 1 (2%) Trachea (47) (9) (4) (46)				2 (4%)	
Osteosarcoma, metastatic, bone Osteosarcoma, metastatic, uncertain primary site Trachea 1 (2%) 1 (2%) 1 (2%) 4 (46)				1 (2%)	
Osteosarcoma, metastatic, uncertain primary site 1 (2%) Trachea (47) (9) (4) (46)	, ,	+ (070)		1 (270)	7 (1770)
uncertain primary site 1 (2%) Trachea (47) (9) (4) (46)			1 (2/0)		
Trachea (47) (9) (4) (46)					1 (2%)
	1 ,	(47)	(9)	(4)	
	Lymphoma malignant				1 (2%)

Chloral Hydrate, NTP TR 502 A-5 TABLE A1 Summary of the Incidence of Neoplasms in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
Special Senses System Harderian gland Adenoma Carcinoma Lymphoma malignant Lacrimal gland Lymphoma malignant	(48) 2 (4%) 1 (2%) 2 (4%) (41) 1 (2%)	(10) 1 (10%) (6)	(6) 1 (17%) (4)	(47) 2 (4%) 2 (4%) (40) 1 (3%)
Urinary System Kidney Histiocytic sarcoma Lymphoma malignant Urinary bladder Lymphoma malignant	(48) 1 (2%) 6 (13%) (47) 3 (6%)	(10) 2 (20%) (10)	(5) (5) 3	(48) 8 (17%) (43) (7%)
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 animals with metastatic neoplasms	21 102 8 10 16 92	18 49 6 7 12 42 1 2	17 32 8 8 10 24	33 144 16 21 23 123 1

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

b Primary neoplasms: all neoplasms except metastatic neoplasms

A-6 Chloral Hydrate, NTP TR 502

TABLE A2

Statistical Analysis of Primary Neoplasms in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
Liver: Hepatocellular Adenoma				
Overall rate a	1/48 (2%)	2/48 (4%)	3/48 (6%)	2/48 (4%)
Adjusted rate b	2.3%	4.5%	6.4%	4.7%
Terminal rate	1/37 (3%)	1/39 (3%)	3/43 (7%)	2/36 (6%)
First incidence (days)	757 (T)	752	757 (T)	757 (T)
Poly-3 test	P=0.4037	P=0.5155	P=0.3379	P=0.5027
Liver: Hepatocellular Adenoma or Car	cinoma			
Overall rate	2/48 (4%)	2/48 (4%)	3/48 (6%)	3/48 (6%)
Adjusted rate	4.7%	4.5%	6.4%	7.0%
Terminal rate	2/37 (5%)	1/39 (3%)	3/43 (7%)	3/36 (8%)
First incidence (days)	757 (T)	752	757 (T)	757 (T)
Poly-3 test	P=0.3708	P=0.6779N	P=0.5403	P=0.5035
Lung: Alveolar/Bronchiolar Adenoma				
Overall rate	1/48 (2%)	1/48 (2%)	2/48 (4%)	4/48 (8%)
Adjusted rate	2.3%	2.2%	4.3%	9.4%
Terminal rate	1/37 (3%)	1/39 (3%)	2/43 (5%)	4/36 (11%)
First incidence (days)	757 (T)	757 (T)	757 (T)	757 (T)
Poly-3 test	P=0.0711	P=0.7508N	P=0.5308	P=0.1805
Pituitary Gland (Pars Distalis): Adenor	na			
Overall rate	0/45 (0%)	2/44 (5%)	0/47 (0%)	5/41 (12%)
Adjusted rate	0.0%	4.7%	0.0%	13.3%
Terminal rate	0/36 (0%)	1/38 (3%)	0/42 (0%)	5/32 (16%)
First incidence (days)	e	700		757 (T)
Poly-3 test	P=0.0073	P=0.2473	f	P=0.0237
Skin: Fibrosarcoma, Hemangiosarcoma	a or Histiocytic Sarcom	19		
Overall rate	1/45 (2%)	1/10 (10%)	0/5 (0%)	4/46 (9%)
Adjusted rate	2.4%	14.9%	0.0%	9.6%
Terminal rate	1/37 (3%)	0/1 (0%)	0/0	3/36 (8%)
First incidence (days)	757 (T)	737	_	692
Poly-3 test	(NA)	^g	^g	P=0.1867
All Organs: Histiocytic Sarcoma				
Overall rate	3/48 (6%)	2/48 (4%)	0/48 (0%)	5/48 (10%)
Adjusted rate	7.0%	4.4%	0.0%	11.4%
Terminal rate	2/37 (5%)	0/39 (0%)	0/43 (0%)	2/36 (6%)
First incidence (days)	681	638	_	567
Poly-3 test	P=0.2238	P=0.4781N	P=0.1046N	P=0.3698
All Organs: Malignant Lymphoma				
Overall rate	9/48 (19%)	7/48 (15%)	8/48 (17%)	15/48 (31%)
Adjusted rate	20.5%	15.3%	17.1%	34.1%
Terminal rate	4/37 (11%)	4/39 (10%)	7/43 (16%)	11/36 (31%)
First incidence (days)	605	622	722 (T)	555
Poly-3 test	P=0.0455	P=0.3571N	P=0.4432N	P=0.1210

Chloral Hydrate, NTP TR 502 A-7

TABLE A2
Statistical Analysis of Primary Neoplasms in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
All Organs: Benign Neoplasms				
Overall rate	8/48 (17%)	6/48 (13%)	8/48 (17%)	16/48 (33%)
Adjusted rate	18.3%	13.4%	17.2%	37.5%
Terminal rate	6/37 (16%)	4/39 (10%)	8/43 (19%)	15/36 (42%)
First incidence (days)	551	700	757 (T)	747
Poly-3 test	P=0.0092	P=0.3652N	P=0.5505N	P=0.0404
All Organs: Malignant Neoplasms				
Overall rate	16/48 (33%)	12/48 (25%)	10/48 (21%)	23/48 (48%)
Adjusted rate	36.0%	25.7%	21%	51%
Terminal rate	9/37 (24%)	6/39 (15%)	9/43 (21%)	15/36 (42%)
First incidence (days)	605	564	722 (T)	555
Poly-3 test	P=0.0417	P=0.2006N	P=0.0948N	P=0.1194
All Organs: Benign or Malignant Neopl	asms			
Overall rate	21/48 (44%)	18/48 (38%)	17/48 (35%)	33/48 (69%)
Adjusted rate	46.6%	38.3%	36.4%	73.0%
Terminal rate	13/37 (35%)	10/39 (26%)	16/43 (37%)	25/36 (69%)
First incidence (days)	551	564	722 (T)	555
Poly-3 test	P=0.0024	P=0.2774N	P=0.2192N	P=0.0093

(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

C 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 lower incidence in a dose group is indicated by N.

e Not applicable; no neoplasms in animal group

Value of statistic cannot be computed.

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

A-8 Chloral Hydrate, NTP TR 502

TABLE A3a

Historical Incidence of Pituitary Gland Pars Distalis Neoplasms in Control Female B6C3F₁/Nctr BR Mice^a

Study Adenoma or Carcinoma

Doxylamine	2/38
Fumonisin B ₁	0/29
Pyrilamine	2/45
Sulfamethazine	10/158
Triprolidine	1/38
Total (%)	15/308 (4.90

 Total (%)
 15/308 (4.9%)

 Mean Å standard deviation
 3.7% Å 2.5%

 Range
 0%-6%

TABLE A3b Historical Incidence of Malignant Lymphoma in Control Female B6C3F₁/Nctr BR Mice^a

Study Incidence in Controls

Doxylamine	13/48
Fumonisin B ₁	20/47
Pyrilamine	10/48
Sulfamethazine	39/184
Triprolidine	10/47
Total (%)	92/374 (24.6%)
Mean Å standard deviation	26.6% Å 9.3%
Range	21%-43%

Data as of September 1999. Studies were conducted at the National Center for Toxicological Research in animals given NIH-31 feed. Includes data for histiocytic, lymphocytic, mixed, unspecified, or undifferentiated cell type lymphomas

a Data as of September 1999. Studies were conducted at the National Center for Toxicological Research in animals given NIH-31 feed.

Chloral Hydrate, NTP TR 502 A-9
TABLE A3c

Historical Incidence of Alveolar/bronchiolar Neoplasms in Control Female B6C3F₁/Nctr BR Mice^a

Study	Adenoma	Incidence in Controls Carcinoma	Adenoma or Carcinoma
Doxylamine	3/48	0/48	3/48
Fumonisin B ₁	2/47	0/47	2/47
Pyrilamine	1/48	0/48	1/48
Sulfamethazine	5/182	1/182	6/182
Triprolidine	3/47	2/47	5/47
Total (%)	14/372 (3.8%)	3/372 (0.8%)	17/372 (4.6%)
Mean Å standard deviation	4.4% Å 2.0%	1.0% Å 1.9%	5.3% Å 3.3%
Range	2%-6%	0%-4%	2%-11%

a Data as of September 1999. Studies were conducted at the National Center for Toxicological Research in animals given NIH-31 feed.

TABLE A3d Historical Incidence of Hepatocellular Neoplasms in Control Female B6C3F $_{\rm I}$ /Nctr BR Mice $^{\rm a}$

Study	Adenoma	Incidence in Controls Carcinoma	Adenoma or Carcinoma
Doxylamine	0/46	0/46	0/46
Fumonisin B ₁	5/47	0/47	5/47
Pyrilamine	1/47	0/47	1/47
Sulfamethazine	8/184	2/184	10/184
Triprolidine	2/47	2/47	4/47
Total (%)	16/371 (4.3%)	4/371 (1.1%)	20/371 (5.4%)
Mean Å standard deviation	4.3% Å 4.0%	1.1% Å 1.9%	5.3% Å 4.4%
Range	0%-11%	0%-4%	0%-11%

a Data as of September 1999. Studies were conducted at the National Center for Toxicological Research in animals given NIH-31 feed.

A-10 Chloral Hydrate, NTP TR 502

TABLE A4

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

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
Disposition Summary				
Animals initially in study	48	48	48	48
Early deaths				
Accidental deaths	•		1	1
Moribund	2	4	3	2
Natural deaths Survivors	9	5	1	9
Died last week of study		1		
Terminal sacrifice	37	38	43	36
Animals examined microscopically	48	48	48	48
Alimentary System				
Esophagus	(47)	(9)	(4)	(44)
Hyperkeratosis	1 (2%)	,	. ,	1 (2%)
Ulcer	1 (2%)			
Gallbladder	(46)	(8)	(4)	(47)
Infiltration cellular, lymphocytic	4 (9%)	(6)	(2)	4 (9%)
Intestine large, cecum	(42)	(6)	(3)	(41)
Hyperplasia, lymphoid Intestine large, rectum	5 (12%) (44)	(8)	(3)	4 (10%) (43)
Erosion	2 (5%)	(6)	(3)	(43)
Hyperplasia, lymphoid	2 (370)			1 (2%)
Intestine small, duodenum	(40)	(7)	(4)	(42)
Inflammation				1 (2%)
Intestine small, ileum	(40)	(6)	(3)	(39)
Hyperplasia, lymphoid	2 (5%)			1 (3%)
Inflammation	(41)		(5)	1 (3%)
Intestine small, jejunum Inflammation	(41)	(6)	(5)	(41) 1 (2%)
Liver	(48)	(48)	(48)	(48)
Angiectasis	(40)	2 (4%)	(40)	(40)
Basophilic focus	1 (2%)	2 (4%)	1 (2%)	2 (4%)
Clear cell focus		1 (2%)		
Congestion				1 (2%)
Cyst, bile duct			1 (2%)	
Degeneration		4 (201)	1 (2%)	4 (00)
Eosinophilic focus	2 (60/)	1 (2%)	4 (8%)	1 (2%)
Hematopoietic cell proliferation Infiltration cellular, lymphocytic	3 (6%) 33 (69%)	13 (27%) 35 (73%)	16 (33%) 40 (83%)	4 (8%) 36 (75%)
Inflammation	2 (4%)	33 (7370)	40 (83%)	1 (2%)
Mineralization	2 (470)			1 (2%)
Necrosis	32 (67%)	35 (73%)	31 (65%)	32 (67%)
Necrosis, coagulative	1 (2%)	. ,	2 (4%)	` '
Regeneration			1 (2%)	
Tension lipoidosis	17 (35%)	13 (27%)	16 (33%)	16 (33%)
Vacuolization cytoplasmic	26 (54%)	36 (75%)	30 (63%)	23 (48%)
Mesentery Negrosis for	(1)	(1) 1 (100%)	(1)	(1)
Necrosis, fat		1 (100%)	1 (100%)	1 (100%)

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

Chloral Hydrate, NTP TR 502 A-11 TABLE A4 Summary of the Incidence of Nonneoplastic Lesions in Regimen A Female Mice in the 2-Year Gavage Study

of Chloral Hydrate

	Vehicle Control		25 mg/kg		50 mg/kg		100 mg/kg		
Alimentary System (continued)									
Pancreas	(48)		(8)		(5)		(46)		
Atrophy		(2%)		(13%)	,		` /		
Ectasia, duct								(2%)	
Focal cellular change		(4%)	2	(200/)		(40%)		(4%)	
Infiltration cellular, lymphocytic Polyarteritis	26	(54%)	3	(38%)		(40%) (20%)	19	(41%)	
Salivary glands	(48)		(10)		(5)		(48)		
Atrophy	(.0)		(10)		(5)			(4%)	
Hyperplasia, duct	1	(2%)							
Infiltration cellular, lymphocytic	38	(79%)	6	(60%)		(80%)	41	(85%)	
Polyarteritis	(47)		(10)			(20%)	(45)		
Stomach, forestomach	(47)		(10)	(200/)	(4)		(45)	(40/)	
Hyperkeratosis Ulcer				(30%) (10%)			2	(4%)	
Stomach, glandular	(47)		(10)	(1070)	(4)		(46)		
Crystals	, ,	(2%)	(- /		()		(- /		
Cyst		(4%)			1	(25%)	3	(7%)	
Degeneration, hyaline	1	(2%)					_		
Mineralization	(49)			(10%)	(5)			(4%)	
Tongue Infiltration cellular, mast cell	(48)	(4%)	(9)		(5)		(48)		
Inflammation	2	(470)	1	(11%)					
Polyarteritis	1	(2%)	•	(11/0)	1	(20%)			
Cardiovascular System									
Blood vessel, aorta	(42)		(8)		(5)		(45)		
Mineralization	()			(13%)	(5)		(.5)		
Heart	(48)		(10)		(5)		(48)		
Degeneration	1	(2%)		(10%)					
Dilatation			1	(10%)			2	(40/)	
Infiltration cellular, lymphocytic Inflammation	1	(2%)						(4%) (2%)	
Polyarteritis		(2%)						(2%)	
Thrombus		(2%)						(270)	
Endocrine System	(16)		(0)		(5)		(45)		
Adrenal gland	(46)	(20/)	(9)		(5)		(47)	(20/)	
Accessory adrenal cortical nodule Adrenal gland, cortex	(46)	(2%)	(9)		(5)		(47)	(2%)	
Ectopic tissue		(2%)	(2)		(3)		2	(4%)	
Hyperplasia		(,						(2%)	
Hyperplasia, spindle cell		(93%)	6	(67%)	2	(40%)		(94%)	
Thrombus		(2%)							
Vacuolization cytoplasmic		(4%)	(0)		(2)		/45		
Adrenal gland, medulla	(46)		(9)		(3)		(46)	(40%)	
Hyperplasia Vacuolization cytoplasmic	1	(2%)						(4%) (2%)	
Islets, pancreatic	(48)	\= / · /	(8)		(5)		(46)	(=/0)	
Hyperplasia	()		(-)			(20%)		(2%)	

A-12 Chloral Hydrate, NTP TR 502

TABLE A4

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

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg		
Endocrine System (continued)	(20)	(0)	(0)	(10)		
Parathyroid gland	(38)	(9)	(3)	(40)		
Cyst Ectopic thymus	1 (3%)			1 (3%) 2 (5%)		
Infiltration cellular, lymphocytic	1 (3%)			1 (3%)		
Vacuolization cytoplasmic	1 (3%)			1 (3%)		
Pituitary gland	(45)	(44)	(47)	(41)		
Angiectasis		1 (2%)	2 (4%)	1 (2%)		
Degeneration, cystic, pars distalis		2 (5%)	1 (2%)			
Hemorrhage	4 (00)	6 (1.40/)	4 (00)	1 (2%)		
Hyperplasia, pars distalis Thyroid gland	4 (9%)	6 (14%)	4 (9%)	9 (22%)		
Crystals	(47)	(9)	(5)	(48) 1 (2%)		
Cyst, follicle		1 (11%)		1 (270)		
Degeneration	1 (2%)	1 (11%)		1 (2%)		
Ectopic thymus	` '	, ,		1 (2%)		
Hyperplasia, follicular cell		1 (11%)		2 (4%)		
Infiltration cellular, lymphocytic	4 (9%)					
Polyarteritis	44 (22)	2 (22)	1 (20%)	40 (040)		
Ultimobranchial cyst	11 (23%)	2 (22%)	1 (20%)	10 (21%)		
General Body System None						
Genital System						
Clitoral gland	(43)	(8)	(4)	(43)		
Atrophy	40 (93%)	6 (75%)	4 (100%)	38 (88%)		
Ovary	(48)	(29)	(21)	(46)		
Atrophy	39 (81%)	7 (24%)	1 (5%)	35 (76%)		
Congestion Cyst	1 (2%) 10 (21%)	15 (52%)	13 (62%)	14 (30%)		
Cyst, periovarian tissue	16 (33%)	5 (17%)	4 (19%)	15 (33%)		
Hematocyst	7 (15%)	3 (10%)	2 (10%)	3 (7%)		
Hyperplasia, adenomatous	2 (4%)		1 (5%)	1 (2%)		
Hyperplasia, tubular				2 (4%)		
Infiltration cellular, lymphocytic	5 (10%)	1 (20()		2 (4%)		
Mineralization Polyarteritis		1 (3%)		1 (2%)		
Uterus	(48)	(26)	(29)	1 (2%) (47)		
Angiectasis	1 (2%)	(20)	1 (3%)	1 (2%)		
Atrophy	2 (4%)	5 (19%)	3 (10%)	2 (4%)		
Dilatation	2 (4%)	2 (8%)	2 (7%)			
Fibrosis	1 (2%)	1 (4%)	1 (3%)	1 (2%)		
Hyperplasia, cystic, endometrium	37 (77%)	16 (62%)	23 (79%)	37 (79%)		
Hypertrophy, myometrium Inflammation		1 (40/)		2 (4%)		
Metaplasia, squamous		1 (4%)		1 (2%)		
Prolapse	1 (2%)			1 (2%)		
Vagina	(48)	(9)	(5)	(45)		
Atrophy	2 (4%)	4 (44%)	2 (40%)	3 (7%)		
Dysplasia	1 (2%)	1 (11%)		2 (4%)		
Infiltration cellular, lymphocytic	3 (6%)			2 (4%)		

Chloral Hydrate, NTP TR 502 A-13 TABLE A4 Summary of the Incidence of Nonneoplastic Lesions in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control		25 mg/kg		50 mg/kg		100 mg/kg	
Hamadan sindin Gundann								
Hematopoietic System	(47)		(10)		(5)		(47)	
Bone marrow	(47)	(60/)	(10)	(500/)	(5)		(47)	(120/)
Hyperplasia		(6%)		(50%)	(0)			(13%)
Lymph node	(48)		(13)		(8)		(47)	(20/)
Hematopoietic cell proliferation Hematopoietic cell proliferation, inguinal								(2%)
Hemorrhage, inguinal								(2%) (2%)
Hyperplasia, lymphoid, inguinal					1	(13%)	1	(270)
Hyperplasia, lymphoid, thoracic						(13%)		
Infiltration cellular, histocytic, inguinal					1	(1370)	1	(2%)
Lymph node, mandibular	(47)		(11)		(5)		(46)	(270)
Hematopoietic cell proliferation	(47)		(11)		(3)		` /	(2%)
Hemorrhage	3	(6%)	3	(27%)			1	(270)
Hyperplasia, lymphoid		(15%)		(9%)	1	(20%)	Q	(20%)
Hyperplasia, plasma cell	,	(1370)	1	(7/0)	1	(2070)		(2%)
Infiltration cellular, histiocytic			1	(9%)			1	(270)
Lymph node, mesenteric	(46)		(9)	(270)	(7)		(44)	
Atrophy	. ,	(4%)		(22%)	(,)		` /	(2%)
Hematopoietic cell proliferation	_	(170)	-	(22,0)				(2%)
Hemorrhage	4	(9%)			1	(14%)		(5%)
Hyperplasia, lymphoid		(4%)	1	(11%)		(29%)		(5%)
Infiltration cellular, histiocytic		` /		` /		,		(2%)
Polyarteritis, artery					1	(14%)		` /
Spleen	(47)		(14)		(19)		(47)	
Atrophy	2	(4%)	2	(14%)			1	(2%)
Congestion			1	(7%)			3	(6%)
Hematopoietic cell proliferation	4	(9%)		(21%)	5	(26%)	9	(19%)
Hyperplasia, lymphoid	13	(28%)	4	(29%)	5	(26%)	11	(23%)
Infiltration cellular, lymphocytic								(2%)
Infiltration cellular, plasma cell								(2%)
Inflammation								(2%)
Thymus	(41)		(5)		(5)		(44)	
Atrophy, cortex		(73%)	3	(60%)	3	(60%)	34	(77%)
Congestion	1	(2%)						
Cyst	_							(2%)
Ectopic parathyroid gland		(2%)						(2%)
Hyperplasia, lymphoid, medulla	14	(34%)		(20%)			17	(39%)
Inflammation			1	(20%)				
Integumentary System								
Mammary gland	(44)		(6)		(5)		(44)	
Hyperplasia	1	(2%)	1	(17%)			7	(16%)
Inflammation	1	(2%)						
Lactation	4	(9%)	1	(17%)			1	(2%)
Skin	(45)		(10)		(5)		(46)	
Edema			1	(10%)				

A-14 Chloral Hydrate, NTP TR 502

TABLE A4

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

Musculoskeletal System Grain Gra		Vehicle Contro	ol 25 mg/kg	50 mg/kg	100 mg/kg	
Dependention, curitage 1 (2%) 10 (23%) 10 (24%)		(47)	(10)	(5)	(47)	
Fibrous esteodystrophy 18 (38%)	,	(17)	(10)		` '	
Polyarteritis		18 (38%)			, ,	
Fibrous osteodystrophy, multifocal 36 (77%) 3 (30%) (30%) (48) Infilitation cellular, lymphocytic 2 (4%) 1 (9%) 1 (9%) 1 (2%) Polyateritis 1 (2%)				1 (20%)		
Skeletal muscle				(5)	` '	
Infiltration cellular, lymphocytic 2 (4%) 1 (9%) 1 (2%)		, ,			, ,	
Nervous System				(5)		
Brain, cerebellum (48) (10) (5) (48) Degeneration 1 (2%) Thrombus 1 (2%) Brain, cerebrum (48) (10) (5) (48) Degeneration 1 (2%) 1 (20%) 22 (46%) Polyarterits 1 (20%) 1 (20%) 22 (46%) Polyarterits 1 (2%) 1 (20%) (47) Thrombus 1 (2%) 1 (2%) (47) Degeneration 1 (2%) 1 (2%) 1 (2%) Developmental malformation 1 (2%) 1 (2%) 1 (2%) Infiltration cellular, lymphocytic 1 (2%) 1 (2%) 1 (2%) Thrombus 1 (2%) (48)<		, ,	1 (9%)		1 (2%)	
Brain, cerebellum (48) (10) (5) (48) Degeneration 1 (2%) Thrombus 1 (2%) Thrombus 1 (2%) Thrombus (48) (10) (5) (48) Degeneration 1 (2%) 1 (20%) 22 (46%) 22 (46%) Polyarterius 1 (20%) 22 (46%) 24 (46%) 1 (20%) 22 (46%) Polyarterius 1 (20%) 1 (20%) 1 (20%) 22 (46%) Polyarterius 1 (20%) 1 (20%) 1 (20%) (47) Polyarterius 1 (20%) 1 (20%) 1 (20%) (47) Polyarterius 1 (2%) <td< td=""><td>Nervous System</td><td></td><td></td><td></td><td></td></td<>	Nervous System					
Degeneration		(48)	(10)	(5)	(48)	
Brain, cerebrum (48) (10) (5) (48) Degeneration 1 (2%) 1 (20%) 22 (46%) Mineralization, multifocal, thalamus 28 (58%) 3 (30%) 1 (20%) 22 (46%) Polyarteritis 1 (2%) 1 (20%) 1 (27%) Spinal cord, thoracic (48) (10) (5) (47) Developmental malformation 1 (2%) 1 (2%) 1 (2%) Infiltration cellular, lymphocytic 1 (2%) 1 (2%) 1 (2%) Larynx (44) (5) (1) (43) Infiltration cellular, lymphocytic 1 (2%) 1 (2%) 1 (2%) Lung (48) (48) (48) (48) Foreign body 1 (2%) 1 (2%) 1 (2%) Hemorrhage 2 (4%) (48) (48) (48) Hyperplasia, alveolus 1 (2%) 1 (2%) 1 (2%) Infiltration cellular, histiocytic 37 (77%) 2 (4%) 2 (4%) 1 (2%) Inflammation 1 (2%) 2 (4%) 2	Degeneration		,	. ,	,	
Degeneration		1 (2%)				
Mineralization, multifocal, thalamus 28 (58%) 3 (30%) 1 (20%) 22 (46%) Polyarteritis 1 (2%) 1 (20%) 1 (20%) 1 (20%) 1 (20%) 1 (20%) 1 (20%) 1 (20%) 1 (20%) 1 (20%) 1 (2%) 1 (, ,	(10)	(5)	(48)	
Polyarteritis			2 (200/)	1 (200()	00 (460/)	
Thombus		28 (58%)	3 (30%)	` /	22 (46%)	
Spinal cord, thoracic (48)		1 (2%)		1 (20%)		
Degeneration		, ,	(10)	(5)	(47)	
Infiltration cellular, lymphocytic Thrombus			` /	· /	,	
Thrombus					, ,	
Respiratory System		4 (20)			1 (2%)	
Larynx (44) (5) (1) (43) Infiltration cellular, lymphocytic 1 (2%) 1 (20%) 1 (2%) Lung (48) (48) (48) (48) Foreign body 1 (2%) 1 (2%) 1 (2%) Hemorrhage 2 (4%) 1 (2%) 1 (2%) Hyperplasia, alveolar epithelium 1 (2%) 1 (2%) 1 (2%) Hyperplasia, alveolus 1 (2%) 2 (4%) 2 (4%) 1 (2%) Infiltration cellular, histiocytic 37 (77%) 24 (50%) 29 (60%) 29 (60%) Infiltration cellular, lymphocytic 37 (77%) 24 (50%) 29 (60%) 29 (60%) Inflammation 4 (8%) 1 (2%) 2 (4%) 1 (2%) Wineralization 1 (2%) 2 (4%) 1 (2%) Nose (47) (10) (5) (48) Cyst, nasolacrimal duct 1 (2%) 1 (2%) Cytoplasmic alteration, 1 (2%) 1 (2%) Infiltration cellular, lymphocytic, 1 (2%) 1 (2%) naso	Thrombus	1 (2%)				
Infiltration cellular, lymphocytic	Respiratory System					
Inflammation			(5)	(1)	(43)	
Lung (48) (48) (48) (48) (48) Foreign body 1 (2%) 1 (2%) 1 (2%) Hemorrhage 2 (4%) 1 (2%) 1 (2%) Hyperplasia, alveolus 1 (2%) 2 (4%) 2 (4%) 1 (2%) Infiltration cellular, histiocytic 37 (77%) 24 (50%) 29 (60%) 29 (60%) 29 (60%) 29 (60%) 1 (2%) <t< td=""><td></td><td>1 (2%)</td><td>1 (200()</td><td></td><td>1 (20()</td></t<>		1 (2%)	1 (200()		1 (20()	
Foreign body		(49)		(49)	, ,	
Hemorrhage			(48)	(46)	(46)	
Hyperplasia, alveolar epithelium 1 (2%) 1				1 (2%)		
Hyperplasia, alveolus		` ,		` ,	1 (2%)	
Infiltration cellular, lymphocytic 37 (77%) 24 (50%) 29 (60%) 29 (60%) Inflammation 4 (8%) 2 (4%) Leukocytosis 1 (2%) 1 (2%) Mineralization 1 (2%) 2 (4%) 1 (2%) Thrombus 1 (2%) (47) (10) (5) (48) Cyst, nasolacrimal duct 1 (2%) (5) (48) Cytoplasmic alteration, respiratory epithelium 1 (2%) 1 (2%) Infiltration cellular, lymphocytic, nasolacrimal duct 1 (2%) 1 (2%) Infiltration, glands 1 (2%) 1 (2%) Inflammation 1 (2%) 1 (10%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)	Hyperplasia, alveolus		1 (2%)			
Inflammation 4 (8%) Leukocytosis 1 (2%) Mineralization 1 (2%) Thrombus 1 (2%) 2 (4%) 1 (2%) Nose (47) (10) (5) (48) Cyst, nasolacrimal duct 1 (2%) Cytoplasmic alteration, respiratory epithelium Infiltration cellular, lymphocytic, nasolacrimal duct 1 (2%) Infiltration, glands 1 (2%) Infiltration, nasolacrimal duct 1 (2%) Mineralization, nasolacrimal duct 1 (2%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)		25 (55)			, ,	
Leukocytosis 1 (2%) Mineralization 1 (2%) Thrombus 1 (2%) 2 (4%) 1 (2%) Nose (47) (10) (5) (48) Cyst, nasolacrimal duct 1 (2%) 1 (2%) Cytoplasmic alteration, 1 (2%) 1 (2%) respiratory epithelium 1 (2%) 1 (2%) Infiltration cellular, lymphocytic, 1 (2%) 1 (2%) nasolacrimal duct 1 (2%) 1 (2%) Infiltration, glands 1 (10%) 1 (2%) Mineralization, nasolacrimal duct 1 (10%) 1 (2%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)		, ,	24 (50%)	29 (60%)		
Mineralization 1 (2%) Thrombus 1 (2%) 2 (4%) 1 (2%) Nose (47) (10) (5) (48) Cyst, nasolacrimal duct 1 (2%) 1 (2%) Cytoplasmic alteration, 1 (2%) 1 (2%) respiratory epithelium 1 (2%) 1 (2%) Infiltration cellular, lymphocytic, 1 (2%) 1 (2%) Infiltration, glands 1 (2%) 1 (2%) Inflammation 1 (2%) 1 (10%) Mineralization, nasolacrimal duct 1 (10%) 4 Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)		4 (8%)	1 (2%)		2 (4%)	
Thrombus 1 (2%) 2 (4%) 1 (2%) Nose (47) (10) (5) (48) Cyst, nasolacrimal duct 1 (2%) Cytoplasmic alteration, respiratory epithelium Infiltration cellular, lymphocytic, nasolacrimal duct 1 (2%) Infiltration, glands Inflammation 1 (2%) Mineralization, nasolacrimal duct 1 (10%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)						
Nose (47) (10) (5) (48) Cyst, nasolacrimal duct 1 (2%) 1 (2%) Cytoplasmic alteration, 1 (2%) 1 (2%) respiratory epithelium 1 (2%) 1 (2%) Infiltration cellular, lymphocytic, 1 (2%) 1 (2%) Infiltration, glands 1 (2%) 1 (2%) Inflammation 1 (2%) 1 (10%) Mineralization, nasolacrimal duct 1 (10%) 4 Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)		1 (2%)		1 (2%)		
Cytoplasmic alteration, 1 (2%) respiratory epithelium 1 (2%) Infiltration cellular, lymphocytic, 1 (2%) nasolacrimal duct 1 (2%) Infiltration, glands 1 (2%) Inflammation 1 (2%) Mineralization, nasolacrimal duct 1 (10%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)					(48)	
respiratory epithelium Infiltration cellular, lymphocytic, nasolacrimal duct Infiltration, glands Inflammation I (2%) Mineralization, nasolacrimal duct Trachea (47) (9) (4) (46) Ectasia, glands	3 /	1 (2%)				
Infiltration cellular, lymphocytic, nasolacrimal duct Infiltration, glands Inflammation I (2%) Mineralization, nasolacrimal duct Trachea (47) (9) (4) (46) Ectasia, glands						
nasolacrimal duct 1 (2%) Infiltration, glands 1 (2%) Inflammation 1 (2%) Mineralization, nasolacrimal duct 1 (10%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)					1 (2%)	
Infiltration, glands Inflammation 1 (2%) Mineralization, nasolacrimal duct 1 (10%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)					1 (20%)	
Inflammation 1 (2%) Mineralization, nasolacrimal duct 1 (10%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)						
Mineralization, nasolacrimal duct 1 (10%) Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)		1 (2%)			1 (270)	
Trachea (47) (9) (4) (46) Ectasia, glands 1 (25%) 1 (2%)		- (-,-)	1 (10%)			
Ectasia, glands 1 (25%) 1 (2%)	Trachea	(47)				
					1 (2%)	
Inflammation 1 (2%) 1 (11%)	Inflammation	1 (2%)	1 (11%)			

Chloral Hydrate, NTP TR 502 A-15
TABLE A4
Summary of the Incidence of Nonneoplastic Lesions in Regimen A Female Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control		25 mg/kg		50 mg/kg		100	100 mg/kg		
Special Senses System										
Eye	(41)		(4)		(5)		(40)			
Degeneration, retina		(2%)								
Thrombus		(2%)								
Harderian gland	(48)		(10)		(6)		(47)			
Hyperplasia								(2%)		
Infiltration cellular, lymphocytic	18	(38%)					12	(26%)		
Inflammation		(201)			1	(17%)				
Thrombus		(2%)								
Lacrimal gland	(41)	(201)	(6)		(4)		(40)			
Atrophy		(2%)	_		_			(8%)		
Infiltration cellular, lymphocytic		(61%)		(50%)		(75%)		(50%)		
Zymbal's gland	(43)	(201)	(6)		(3)		(40)	(20)		
Inflammation	1	(2%)					1	(3%)		
W. G.										
Urinary System	(40)		(10)		(F)		(40)			
Kidney	(48)		(10)	(2004)	(5)		(48)			
Accumulation hyaline droplet	•	(40)	3	(30%)	1	(20%)		(4%)		
Amyloid deposition, glomerulus		(4%)					1	(2%)		
Congestion		(2%)		(2004)		(000)		(2.50()		
Cyst, renal tubule	14	(29%)	2	(20%)		(80%)	17	(35%)		
Glomerulosclerosis						(20%)				
Hydronephrosis		(201)			1	(20%)				
Hydronephrosis, bilateral		(2%)	_							
Infiltration cellular, lymphocytic		(81%)	5	(50%)	4	(80%)	38	(79%)		
Inflammation	1	(2%)								
Mineralization			1	(10%)						
Necrosis, renal tubule							1	(2%)		
Nephropathy	3	(6%)	1	(10%)						
Pigmentation, renal tubule						(20%)	1	(2%)		
Polyarteritis		(2%)				(20%)				
Urinary bladder	(47)		(10)		(5)		(43)			
Infiltration cellular, lymphocytic		(81%)	6	(60%)		(100%)	35	(81%)		
Polyarteritis	1	(2%)			1	(20%)				