

## Chloral Hydrate, NTP TR 503 B-1

TABLE B2

## Statistical Analysis of Primary Neoplasms in Dietary-Controlled Male Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
<b>Harderian Gland: Adenoma</b>				
Overall rate <sup>a</sup>	4/48 (8%)	3/8 (38%)	1/2 (50%)	4/48 (8%)
Adjusted rate <sup>b</sup>	8.5%	49.5%	87.1%	8.8%
Terminal rate <sup>c</sup>	4/45 (9%)	3/4 (75%)	1/1 (100%)	3/41 (7%)
First incidence (days)	757 (T)	757 (T)	757 (T)	739
Poly-3 test <sup>d</sup>	NA	— <sup>e</sup>	—	P=0.6243
<b>Harderian Gland: Adenoma or Carcinoma</b>				
Overall rate	4/48 (8%)	4/8 (50%)	1/2 (50%)	5/48 (10%)
Adjusted rate	8.5%	65.9%	87.1%	11.0%
Terminal rate	4/45 (9%)	4/4 (100%)	1/1 (100%)	4/41 (10%)
First incidence (days)	757 (T)	757 (T)	757 (T)	739
Poly-3 test	NA	—	—	P=0.4790
<b>Liver: Hepatocellular Adenoma</b>				
Overall rate	9/48 (19%)	7/48 (15%)	10/48 (21%)	10/48 (21%)
Adjusted rate	19.1%	15.2%	21.2%	21.8%
Terminal rate	9/45 (20%)	7/44 (16%)	10/47 (21%)	9/41 (22%)
First incidence (days)	757 (T)	757 (T)	757 (T)	625
Poly-3 test	P=0.3381	P=0.4111N	P=0.5013	P=0.4753
<b>Liver: Hepatocellular Carcinoma</b>				
Overall rate	2/48 (4%)	5/48 (10%)	4/48 (8%)	8/48 (17%)
Adjusted rate	4.2%	10.9%	8.5%	17.3%
Terminal rate	2/45 (4%)	5/44 (11%)	4/47 (9%)	4/41 (10%)
First incidence (days)	757 (T)	757 (T)	757 (T)	486
Poly-3 test	P=0.0371	P=0.2078	P=0.3382	P=0.0422
<b>Liver: Hepatocellular Adenoma or Carcinoma</b>				
Overall rate	11/48 (23%)	11/48 (23%)	14/48 (29%)	18/48 (38%)
Adjusted rate	23.4%	23.9%	29.7%	38.6%
Terminal rate	11/45 (24%)	11/44 (25%)	14/47 (30%)	13/41 (32%)
First incidence (days)	757 (T)	757 (T)	757 (T)	486
Poly-3 test	P=0.0450	P=0.5728	P=0.3231	P=0.0844
<b>Lung: Alveolar/bronchiolar Adenoma</b>				
Overall rate	9/48 (19%)	1/6 (17%)	3/5 (60%)	5/48 (10%)
Adjusted rate	19.1%	24.6%	72.3%	11.0%
Terminal rate	9/45 (20%)	1/2 (50%)	3/4 (75%)	5/41 (12%)
First incidence (days)	757 (T)	757 (T)	757 (T)	757 (T)
Poly-3 test	NA	—	—	P=0.2130N
<b>Lung: Alveolar/bronchiolar Adenoma or Carcinoma</b>				
Overall rate	11/48 (23%)	1/6 (17%)	3/5 (60%)	5/48 (10%)
Adjusted rate	23.4%	24.6%	72.3%	11.0%
Terminal rate	11/45 (24%)	1/2 (50%)	3/4 (75%)	5/41 (12%)
First incidence (days)	757 (T)	757 (T)	757 (T)	757 (T)
Poly-3 test	NA	—	—	P=0.0966N

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## Statistical Analysis of Primary Neoplasms in Dietary-Controlled Male Mice in the 2-Year Gavage Study of Chloral Hydrate

	Vehicle Control	25 mg/kg	50 mg/kg	100 mg/kg
<b>All Organs: Histiocytic Sarcoma</b>				
Overall rate	2/48 (4%)	1/48 (2%)	0/48 (0%)	3/48 (6%)
Adjusted rate	4.2%	2.1%	0.0%	6.6%
Terminal rate	1/45 (2%)	0/44 (0%)	0/47 (0%)	3/41 (7%)
First incidence (days)	754	612	—	757 (T)
Poly-3 test	P=0.3319	P=0.5042N	P=0.2371N	P=0.4839
<b>All Organs: Malignant Lymphoma</b>				
Overall rate	6/48 (13%)	4/48 (8%)	1/48 (2%)	4/48 (8%)
Adjusted rate	12.5%	8.6%	2.1%	8.8%
Terminal rate	4/45 (9%)	3/44 (7%)	1/47 (2%)	4/41 (10%)
First incidence (days)	250	645	757 (T)	757 (T)
Poly-3 test	P=0.2895N	P=0.3907N	P=0.0592N	P=0.4044N
<b>All Organs: Benign Neoplasms</b>				
Overall rate	20/48 (42%)	12/48 (25%)	12/48 (25%)	17/48 (35%)
Adjusted rate	42.5%	26.0%	25.5%	37.0%
Terminal rate	20/45 (44%)	12/44 (27%)	12/47 (26%)	15/41 (37%)
First incidence (days)	757 (T)	757 (T)	757 (T)	625
Poly-3 test	P=0.4418N	P=0.0722N	P=0.0622N	P=0.3719N
<b>All Organs: Malignant Neoplasms</b>				
Overall rate	12/48 (25%)	14/48 (29%)	5/48 (10%)	16/48 (33%)
Adjusted rate	25.0%	29.8%	10.6%	34.3%
Terminal rate	9/45 (20%)	11/44 (25%)	5/47 (11%)	11/41 (27%)
First incidence (days)	250	612	757 (T)	486
Poly-3 test	P=0.2713	P=0.3861	P=0.0574N	P=0.2227
<b>All Organs: Benign or Malignant Neoplasms</b>				
Overall rate	27/48 (56%)	24/48 (50%)	16/48 (33%)	29/48 (60%)
Adjusted rate	56.3%	51.0%	33.9%	61.6%
Terminal rate	24/45 (53%)	21/44 (48%)	16/47 (34%)	23/41 (56%)
First incidence (days)	250	612	757 (T)	486
Poly-3 test	P=0.3573	P=0.3821N	P=0.0221N	P=0.3745

(T)Terminal sacrifice

NA Not applicable

<sup>a</sup> Number of neoplasm-bearing animals/number of animals with tissue examined microscopically<sup>b</sup> Poly-3 estimated neoplasm incidence after adjustment for intercurrent mortality<sup>c</sup> Observed incidence at terminal kill<sup>d</sup> 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.<sup>e</sup> Tissue was examined microscopically only when it was observed to be abnormal at necropsy; thus statistical comparisons with the vehicle controls are not appropriate.