B-26

TABLE B3 Statistical Analysis of Primary Neoplasms in Female Rats in the 2-Year Feed Study of Fumonisin B1

	0 ppm	5 ppm	15 ppm	50 ppm	100 ppm
Clitoral Gland: Adenoma					
Overall rate ^a	10/41 (24%)	2/19 (11%)	9/25 (36%)	6/22 (27%)	10/40 (25%)
Adjusted rate ^b	27.8%	17.8%	48.9%	37.0%	27.6%
Terminal rate ^C	5/24 (21%)	2/5 (40%)	4/5 (80%)	4/7 (57%)	5/24 (21%)
First incidence (days)	574	740 (T)	509	642	659
oly-3 test ^d	P = 0.5089N	P = 0.3240N	P = 0.0967	P = 0.3948	P = 0.5840
.ung: Alveolar/Bronchiolar Adenor	na or Carcinoma				
Overall rate	0/47 (0%)	1/40 (3%)	0/48 (0%)	1/48 (2%)	3/48 (6%)
Adjusted rate	0.0%	3.2%	0.0%	2.5%	7.1%
Cerminal rate	0/26 (0%)	1/24 (4%)	0/24 (0%)	1/32 (3%)	2/29 (7%)
irst incidence (days)	e	740 (T)	_ ` `	740 (T)	680
Poly-3 test	P = 0.0340	P=0.4534	f	P = 0.5032	P=0.1218
/ammary Gland: Fibroadenoma					
Overall rate	18/47 (38%)	13/28 (46%)	16/33 (49%)	16/30 (53%)	11/48 (23%)
djusted rate	43.6%	59.8%	61.8%	67.2%	26.0%
erminal rate	10/25 (40%)	6/12 (50%)	9/10 (90%)	11/14 (79%)	9/29 (31%)
irst incidence (days)	321	498	509	539	673
oly-3 test	P=0.0112N	P=0.2318	P = 0.0914	P=0.0841	P=0.0803N
Aammary Gland: Carcinoma					
Overall rate	2/47 (4%)	3/28 (11%)	4/33 (12%)	0/30 (0%)	3/48 (6%)
djusted rate	5.0%	15.1%	15.8%	0.0%	7.2%
erminal rate	0/25 (0%)	1/12 (8%)	0/10 (0%)	0/14 (0%)	3/29 (10%)
'irst incidence (days)	706	509	406	_	740 (T)
oly-3 test	P=0.3600N	P=0.2319	P=0.1487	P=0.3613N	P=0.5147
Aammary Gland: Adenoma or Car	cinoma				
Overall rate	3/47 (6%)	3/28 (11%)	4/33 (12%)	0/30 (0%)	3/48 (6%)
djusted rate	7.6%	15.1%	15.8%	0.0%	7.2%
erminal rate	1/25 (4%)	1/12 (8%)	0/10 (0%)	0/14 (0%)	3/29 (10%)
'irst incidence (days)	706	509	406	_	740 (T)
oly-3 test	P=0.2642N	P=0.3579	P = 0.2561	P=0.2286N	P=0.6481N
Aammary Gland: Fibroadenoma, A	Adenoma, or Carcinoma	a			
overall rate	21/47 (45%)	15/28 (54%)	20/33 (61%)	16/30 (53%)	13/48 (27%)
djusted rate	50.5%	66.9%	71.9%	67.2%	30.7%
erminal rate	11/25 (44%)	7/12 (58%)	9/10 (90%)	11/14 (79%)	11/29 (38%)
'irst incidence (days)	321	498	406	539	673
oly-3 test	P=0.0032N	P = 0.2285	P = 0.0436	P = 0.2078	P=0.0578N
ituitary Gland (Pars Distalis): Ade	noma				
Overall rate	32/47 (68%)	20/30 (67%)	25/35 (71%)	23/34 (68%)	29/48 (60%)
djusted rate	75.6%	78.6%	83.3%	80.4%	63.6%
erminal rate	19/26 (73%)	11/15 (73%)	12/12 (100%)	15/19 (79%)	19/29 (66%)
instinuidance (darm)	574	460	509	400	477
First incidence (days)	014	100	000	100	- · ·

TABLE B3
Statistical Analysis of Primary Neoplasms in Female Rats in the 2-Year Feed Study of Fumonisin \mathbf{B}_1

	0 ppm	5 ppm	15 ppm	50 ppm	100 ppm
Pituitary Gland (Pars Distalis): Adenor	ma or Carcinoma				
Overall rate	32/47 (68%)	20/30 (67%)	25/35 (71%)	23/34 (68%)	30/48 (63%)
Adjusted rate	75.6%	78.6%	83.3%	80.4%	65.4%
Terminal rate	19/26 (73%)	11/15 (73%)	12/12 (100%)	15/19 (79%)	19/29 (66%)
First incidence (days)	574	460	509	400	477
Poly-3 test	P=0.1126N	P = 0.5933N	P=0.2375	P = 0.5455	P=0.2550N
Skin (Subcutaneous Tissue): Fibroma,	Fibrous Histiocytom	a. Histiocytic Sarc	coma. or Sarcoma		
Overall rate	1/48 (2%)	0/18 (0%)	1/27 (4%)	0/21 (0%)	3/48 (6%)
Adjusted rate	2.4%	0.0%	5.8%	0.0%	7.1%
Terminal rate	0/26 (0%)	0/2 (0%)	1/3 (33%)	0/5 (0%)	2/29 (7%)
First incidence (days)	587	_ ` `	740 (T)	_ ` `	671
Poly-3 test	P=0.1878	P = 0.7444N	P=0.5497	P=0.6956N	P = 0.3074
Thyroid Gland (C-cell): Adenoma					
Overall rate	3/48 (6%)	0/18 (0%)	3/25 (12%)	0/19 (0%)	6/48 (13%)
Adjusted rate	7.4%	0.0%	17.9%	0.0%	14.1%
Terminal rate	3/26 (12%)	0/2 (0%)	0/1 (0%)	0/3 (0%)	3/29 (10%)
First incidence (days)	740 (T)	_	453	_	659
Poly-3 test	P = 0.1990	P = 0.4401N	P = 0.2428	P=0.3896N	P = 0.2559
Thyroid Gland (C-cell): Adenoma or C	Carcinoma				
Overall rate	4/48 (8%)	0/18 (0%)	4/25 (16%)	1/19 (5%)	7/48 (15%)
Adjusted rate	9.9%	0.0%	23.9%	9.0%	16.4%
Terminal rate	4/26 (15%)	0/2 (0%)	1/1 (100%)	1/3 (33%)	4/29 (14%)
First incidence (days)	740 (T)	_ ` `	453	740 (T)	659
Poly-3 test	P=0.2383	P = 0.3563N	P = 0.1684	P = 0.6243N	P = 0.2771
Uterus: Stromal Polyp					
Overall rate	10/47 (21%)	4/23 (17%)	5/30 (17%)	3/23 (13%)	7/48 (15%)
Adjusted rate	24.6%	28.3%	23.6%	19.4%	16.2%
Terminal rate	7/26 (27%)	3/7 (43%)	3/6 (50%)	2/7 (29%)	4/29 (14%)
First incidence (days)	537	659	453	649	477
Poly-3 test	P=0.1723N	P = 0.5979	P = 0.6056N	P=0.4175N	P = 0.2645N
Uterus: Stromal Polyp, Stromal Sarco	na. or Carcinoma				
Overall rate	10/47 (21%)	4/23 (17%)	5/30 (17%)	3/23 (13%)	8/48 (17%)
Adjusted rate	24.6%	28.3%	23.6%	19.4%	18.5%
Terminal rate	7/26 (27%)	3/7 (43%)	3/6 (50%)	2/7 (29%)	5/29 (17%)
First incidence (days)	537	659	453	649	477
Poly-3 test	P=0.2631N	P = 0.5979	P = 0.6056N	P = 0.4175N	P = 0.3614N
All Organs: Mononuclear Cell Leukem	ia				
Overall rate	13/48 (27%)	13/40 (33%)	16/48 (33%)	9/48 (19%)	16/48 (33%)
Adjusted rate	30.6%	39.0%	38.8%	21.8%	35.9%
Terminal rate	6/26 (23%)	7/24 (29%)	6/24 (25%)	4/32 (13%)	7/29 (24%)
First incidence (days)	574	468	495	580	477
Poly-3 test	P = 0.4956N	P = 0.3354	P = 0.2612	P=0.2350N	P = 0.3542
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TABLE B3

Statistical Analysis of Primary Neoplasms in Female Rats in the 2-Year Feed Study of Fumonisin B1

	0 ppm	5 ppm	15 ppm	50 ppm	100 ppm
All Organs: Benign Neoplasms					
Overall rate	41/48 (85%)	26/40 (65%)	37/48 (77%)	38/48 (79%)	42/48 (88%)
Adjusted rate	89.9%	73.5%	81.9%	86.2%	88.5%
Terminal rate	22/26 (85%)	15/24 (63%)	19/24 (79%)	26/32 (81%)	25/29 (86%)
First incidence (days)	321	460	453	400	477
Poly-3 test	P = 0.1454	P=0.0282N	P=0.2859N	P=0.3275N	P = 0.6053
All Organs: Malignant Neoplasm	S				
Overall rate	18/48 (38%)	17/40 (43%)	22/48 (46%)	14/48 (29%)	25/48 (52%)
Adjusted rate	41.6%	49.0%	50.3%	33.0%	55.3%
Terminal rate	7/26 (27%)	8/24 (33%)	7/24 (29%)	6/32 (19%)	13/29 (45%)
First incidence (days)	574	468	406	580	477
Poly-3 test	P=0.2318	P=0.3806	P=0.2439	P=0.2508N	P=0.1168
All Organs: Benign or Malignant	t Neoplasms				
Overall rate	43/48 (90%)	32/40 (80%)	44/48 (92%)	43/48 (90%)	46/48 (96%)
Adjusted rate	92.5%	85.5%	92.8%	95.0%	95.8%
Terminal rate	22/26 (85%)	17/24 (71%)	21/24 (88%)	28/32 (88%)	27/29 (93%)
First incidence (days)	321	460	406	400	477
Poly-3 test	P = 0.0788	P = 0.1774N	P = 0.4964	P = 0.5927	P = 0.2681

(T)Terminal sacrifice

Number of neoplasm-bearing animals/number of animals examined microscopically b

Poly-3 estimated neoplasm incidence after adjustment for intercurrent mortality

с Observed incidence at terminal kill

Not applicable; no neoplasms in animal group Value of statistic cannot be computed. e

f

d Beneath the control incidence are the P values associated with the trend test. Beneath the exposed group incidence are the P values corresponding to pairwise comparisons between the controls and that exposed group. For all tissues except the lung, only the pairwise comparisons between the 100 ppm group and control group are unbiased; overall rates and all other pairwise comparisons may not be valid. The Poly-3 test accounts for differential mortality in animals that do not reach terminal sacrifice. A negative trend or a lower incidence in an exposure group is indicated by N.