Study of Mutagenic Effects of Sorbitol (71-31) 6/72

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STUDY OF MUTAGENIC EFFECTS OF SORBITOL (71-31)

Prepared for:

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INTRODUCTION

Under contract to the Food and Drug Administration, Stanford Research Institute is examining the mutagenicity of 14 selected chemical compounds (Contract No. FDA 71-267). This report describes the results of tests conducted on Sorbitol (71-31).

Three methods are used to evaluate the genetic hazards of the test compounds. These are: (1) Host-Mediated Assay, (2) Cytogenetic Assay, and (3) Dominant Lethal Gene Test. Methodologies used to conduct these tests are described in detail in "Compound Report No. 1," January 1972. The same procedures were followed in obtaining the information presented in this report.

For the compound under consideration here single and repeated intubations were performed at three concentrations. These amounts were (1) a maximum tolerated dose or 5 g/kg, whichever was lower, (2) a low dose of 30 mg/kg or one near the use level, and (3) a level intermediate between the use level and the maximum tolerated dose.

SUMMARY

Host-Mediated Assay

Sorbitol (71-31) did not produce any measureable mutagenic response, but in the subacute treatment a slight increase was noted in the mitotic recombination frequency for Saccharomyces cerevisiae in the host-mediated assay. In the associated in vitro tests no mutagenic response was observed for the bacteria, but a slightly increased mitotic recombination frequency was obtained when S. cerevisiae was exposed to 5% sorbitol.

Cytogenetic Assay

Sorbitol (71-31) exhibits no adverse effect on metaphase chromosomes from rat bone marrow at any of the dose levels or time periods tested.

A moderate, dose-related, adverse effect from Sorbitol is exhibited by WI-38 (human embryonic lung) cells grown in vitro and scored at anaphase.

Dominant Lethal Gene Test

No consistent responses occurred to suggest that Sorbitol (71-31) is mutagenic to the rat as a result of this experimental procedure. The positive reference compound, TEM, a known mutagen, generally produced mutagenic responses from the first through the fifth weeks of the experiment, as expected. Statistical treatment of the Dominant Lethal Gene data according to the program outlined by FDA failed to show consistent significant differences which could be attributed to an effect of Sorbitol.

RESULTS AND DISCUSSION

Oral Toxicity

Single and multiple dose toxicity data are presented in Table 1. Sorbitol (71-31) given orally as a suspension in water at a dose of 10 g/kg of body weight caused no deaths. No effects, except transient depression of the rats for a few hours following dosing, were evident. When given daily at a dose of 5 g/kg for five days to other male rats, no unusual or adverse effects were observed.

Host-Mediated Assay

Table 2 presents a summary of the host-mediated assay results for sorbitol (71-31). Table 3 contains the data obtained on each individual mouse. This table is a computer printout of the calculations made on the data obtained for each mouse. Because of the nature of the computer, it is necessary to exceed its maximum number of significant figures to obtain a value as an exponent. For this reason, 12 significant figures are printed out. However, only three significant figures are used for calculations and reporting the results as summarized in Table 2. Table 4 summarizes the data obtained in the *in vitro* tests.

As can be seen from the results summarized in Table 2, no mutagenic response was observed for the two *Salmonella typhimurium* strains tested when mice were treated with the test compound. The mitotic recombination frequency of *Saccharomyces cerevisiae* was slightly increased for the subacute treatment. Table 4 shows no positive mutagenic response in the *in vitro* tests for *S. typhimurium* but the mitotic recombination frequency was 5.14 greater for cells exposed to 5% sorbitol than negative control cells. No lethal effects were observed for cells exposed at this concentration.

Cytogenetic Assay

Review of Table 5 indicates that no adverse effect on rat bone marrow chromosomes at any tested dose level or time period may be attributed to Compound 71-31 (sorbitol).

Table 6, however, reveals a progressive, though moderate, increase in the percentage of aberrant cells with increased dose level. This results primarily from the increased percentage of abnormal cells scored as "Other" at all three dose levels. In these cells, the chromosomes appear in a relatively normal anaphase configuration, but are very short

and thick and have migrated very unevenly toward the poles. They are different than the cells previously scored and reported as "Other." At the highest dose level, a distinct increase in the percentage of cells having bridges also contributes to the marked increase of aberrant cells at this dose level. Sorbitol (71-51) thus appears to have a moderately adverse dose-related effect on WI-38 cells grown in vitro.

Dominant Lethal Gene Test

Throughout this entire experiment the biological criteria used to evaluate mutagenic effects in the rat showed no consistent responses which could be attributed to treatment. There were occassional statistical differences between control and Sorbitol-dosed groups, but these were random occurrences without any suggestion of a time or dose-response effect.

Table 7 presents summary data of the implantations per pregnant female, Table 8 summarizes dead implants per pregnant female, Table 9 summarizes dead implants per total implants, Table 10 summarizes corpora lutea per pregnant female and Table 11 summarizes pre-implantation loss per pregnant female.

Appendix A contains the statistical analysis procedures for dominant lethal gene tests with a description and explanation of the computer printouts.

Appendix B contains the computer printouts for the raw data and statistical analyses.

Careful review and statistical evaluation of the data do not show sorbitol to be a mutagen in the rat by the dominant lethal gene test.

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ORAL TOXICITY - RAT

Table 1

Compound: Sorbitol
FDA NO: 71-31

Single Dose LD_{50}[a]	> 10 g/kg
Multiple Dose Toxicity[b]	> 5 g/kg

[a] Five male, Sprague-Dawley rats, weighing 200-250 g each, were fasted overnight and then given oral doses of the candidate compound, prepared as a suspension in water.

[b] Five nonfasted Sprague-Dawley male rats, were intubated daily for five days with specified amounts of the candidate compound, given as a partial suspension in water.

Table 2

HOST MEDIATED ASSAY
SUMMARY OF DATA

Compound No.: 71-31 (Sorbitol)

A. Acute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	3.82×10^{-8}	3.37	1.29×10^{-8}	0.68	1.30×10^{-4}	1.11
Intermediate	2.94×10^{-8}	1.77	1.65×10^{-8}	0.87	1.10×10^{-4}	0.94
Low Level	1.40×10^{-8}	0.84	1.93×10^{-8}	1.02	1.68×10^{-4}	1.44
Control (+)	1.51×10^{-6}	90.96	5.94×10^{-7}	31.43	1.05×10^{-3}	8.97
Control (-)	1.66×10^{-8}	1.00	1.89×10^{-8}	1.00	1.17×10^{-4}	1.00

B. Subacute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	9.50×10^{-9}	0.51	4.89×10^{-8}	1.62	3.14×10^{-4}	2.39
Intermediate	1.47×10^{-8}	0.79	1.77×10^{-8}	0.59	2.12×10^{-4}	1.61
Low Level	8.36×10^{-9}	0.45	2.33×10^{-8}	0.77	1.66×10^{-4}	1.27
Control (-)	1.86×10^{-8}	1.00	3.02×10^{-8}	1.00	1.31×10^{-4}	1.00

Table 3

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: G-46

Treatment: CONTROL (+)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.140416666666ex 04	.109000000000ex 10	.128822629968ex-05
2	.116000000000ex 04	.130000000000ex 10	.892307692307ex-06
3	.113333333333ex 03	.816666666665ex 08	.138775510203ex-05
4	.121916666666ex 04	.160000000000ex 10	.761979166662ex-06
5	.130416666666ex 04	.805000000000ex 09	.162008281572ex-05
6	.191666666666ex 03	.950000000000ex 08	.201754385964ex-05
7	.159750000000ex 04	.118333333333ex 10	.135000000000ex-05
8	.100166666666ex 04	.667500000000ex 09	.150062421971ex-05
9	.916666666665ex 01	.333333333333ex 07	.274999999999ex-05
			.150761323951ex-05

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: G-46

Treatment: CONTROL (-)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.400000000000ex 02	.250000000000ex 10	.160000000000ex-07
2	.816666666665ex 02	.340000000000ex 10	.240196078430ex-07
3	.166666666666ex 02	.211666666666ex 10	.787401574802ex-08
4	.208333333333ex 02	.123666666666ex 10	.168463611860ex-07
5	.133333333333ex 02	.753333333330ex 09	.176991150442ex-07
6	.916666666665ex 01	.533333333330ex 09	.171875000000ex-07
			.166044333035ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.333333333333ex 01	.801666666665ex 09	.415800415800ex-08
2	.583333333330ex 01	.323333333333ex 09	.180412371133ex-07
3	.833333333330ex 01	.188333333333ex 09	.442477876105ex-07
4	.266666666666ex 02	.385000000000ex 09	.692640692638ex-07
5	.166666666666ex 01	.550000000000ex 09	.303030303029ex-08
6	.666666666665ex 01	.703333333330ex 09	.947867298580ex-08
7	.333333333333ex 01	.801666666665ex 09	.415800415800ex-08
8	.333333333333ex 01	.636666666665ex 09	.523560209424ex-08
9	.500000000000ex 01	.503333333330ex 09	.993377483450ex-08
			.186163839162ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: G-46

Treatment: MAXIMUM

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.500000000000ex 01	.150000000000ex 10	.333333333333ex-08
2	.391666666666ex 02	.128000000000ex 10	.305989583332ex-07
3	.666666666665ex 01	.630000000000ex 09	.105820105819ex-07
4	.258333333333ex 02	.205000000000ex 09	.126016260162ex-06
5	.200000000000ex 02	.106166666666ex 10	.188383045527ex-07
6	.541666666665ex 02	.861666666665ex 09	.628626692455ex-07
7	.125000000000ex 02	.835000000000ex 09	.149700598802ex-07
			.381716565838ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.583333333330ex 01	.738333333330ex 09	.790067720089ex-08
2	.833333333330ex 00	.118333333333ex 09	.704225352111ex-08
3	.833333333330ex 00	.160000000000ex 09	.520833333331ex-08
4	.500000000000ex 01	.433333333333ex 09	.115384615384ex-07
5	.500000000000ex 01	.658333333330ex 09	.759493670889ex-08
6	.666666666665ex 01	.355000000000ex 09	.187793427229ex-07
7	.750000000000ex 01	.673333333330ex 09	.111386138614ex-07
8	.333333333333ex 01	.490000000000ex 09	.680272108842ex-08
			.950066749690ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: G-46

Treatment: INTERMEDIATE

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.333333333333ex 01	.135000000000ex 09	.246913580246ex-07
2	.133333333333ex 02	.153333333333ex 10	.869565217391ex-08
3	.458333333333ex 02	.131500000000ex 10	.348542458808ex-07
4	.366666666666ex 02	.133166666666ex 10	.275344180226ex-07
5	.151666666666ex 03	.121833333333ex 10	.124487004103ex-06
6	.333333333333ex 01	.648333333330ex 09	.514138817482ex-08
7	.833333333330ex 00	.300000000000ex 09	.277777777776ex-08
8	.916666666665ex 01	.124333333333ex 10	.737265415550ex-08
			.294443122887ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.333333333333ex 01	.168333333333ex 09	.198019801980ex-07
2	.833333333330ex 00	.173333333333ex 09	.480769230768ex-08
3	.166666666666ex 01	.298333333333ex 09	.558659217875ex-08
4	.500000000000ex 01	.135000000000ex 09	.370370370370ex-07
5	.500000000000ex 01	.595000000000ex 09	.840336134453ex-08
6	.416666666666ex 01	.200000000000ex 09	.208333333333ex-07
7	.250000000000ex 01	.388333333333ex 09	.643776824034ex-08
			.147011092341ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: G-46

Treatment: LOW

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.250000000000ex 01	.112833333333ex 10	.221565731167ex-08
2	.116666666666ex 02	.107333333333ex 10	.108695652173ex-07
3	.141666666666ex 02	.558333333330ex 09	.253731343283ex-07
4	.300000000000ex 02	.170500000000ex 10	.175953079178ex-07
5	.750000000000ex 01	.765000000000ex 09	.980392156862ex-08
6	.233333333333ex 02	.151833333333ex 10	.153677277716ex-07
7	.250000000000ex 01	.107333333333ex 10	.232919254659ex-08
8	.250000000000ex 02	.146666666666ex 10	.170454545455ex-07
9	.233333333333ex 02	.916666666665ex 09	.254545454545ex-07
			.140060562956ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.416666666666ex 01	.485000000000ex 09	.859106529208ex-08
2	.250000000000ex 01	.216666666666ex 09	.115384615384ex-07
3	.166666666666ex 01	.398333333333ex 09	.418410041839ex-08
4	.500000000000ex 01	.485000000000ex 09	.103092783505ex-07
5	.583333333330ex 01	.735000000000ex 09	.793650793646ex-08
6	.333333333333ex 01	.640000000000ex 09	.520833333332ex-08
7	.583333333330ex 01	.640000000000ex 09	.911458333328ex-08
8	.333333333333ex 01	.333333333333ex 09	.100000000000ex-07
			.836029127526ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: TA-1530

Treatment: CONTROL (+)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.288333333333ex 03	.606666666665ex 09	.475274725275ex-06
2	.795833333330ex 03	.791666666665ex 09	.100526315789ex-05
3	.767500000000ex 03	.756666666665ex 09	.101431718061ex-05
4	.319000000000ex 03	.495000000000ex 09	.644444444444ex-06
5	.131666666666ex 03	.905000000000ex 09	.145488029465ex-06
6	.203333333333ex 03	.733333333330ex 09	.277272727273ex-06
			.593676710823ex-06

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 3 (Continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: TA-1530

Treatment: CONTROL (-)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.216666666666ex 02	.106666666666ex 10	.203125000000ex-07
2	.166666666666ex 01	.416666666666ex 08	.399999999999ex-07
3	.241666666666ex 02	.151000000000ex 10	.160044150109ex-07
4	.180000000000ex 02	.164666666666ex 10	.109311740891ex-07
5	.166666666666ex 02	.633333333330ex 09	.263157894737ex-07
6	.133333333333ex 02	.771666666665ex 09	.172786177105ex-07
7	.183333333333ex 02	.102333333333ex 11	.179153094462ex-08
			.189477181752ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.833333333330ex 01	.241666666666ex 09	.344827586206ex-07
2	.916666666665ex 01	.636666666665ex 09	.143979057591ex-07
3	.141666666666ex 02	.500000000000ex 09	.283333333332ex-07
4	.141666666666ex 02	.615000000000ex 09	.230352303521ex-07
5	.666666666665ex 01	.213333333333ex 09	.312499999999ex-07
6	.833333333330ex 01	.343333333333ex 09	.242718446601ex-07
7	.191666666666ex 02	.343333333333ex 09	.558252427183ex-07
			.302280450631ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: TA-1530

Treatment: MAXIMUM

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.325000000000ex 02	.855000000000ex 09	.380116959064ex-07
2	.200000000000ex 01	.346666666666ex 09	.576923076924ex-08
3	.916666666665ex 01	.851666666665ex 09	.107632093933ex-07
4	.170000000000ex 02	.118166666666ex 10	.143864598026ex-07
5	.133333333333ex 02	.246666666666ex 10	.540540540540ex-08
6	.158333333333ex 02	.180000000000ex 10	.879629629627ex-08
7	.116666666666ex 02	.160000000000ex 10	.729166666662ex-08
			.129177091771ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.125000000000ex 02	.508333333330ex 09	.245901639345ex-07
2	.250000000000ex 01	.255000000000ex 09	.980392156862ex-08
3	.250000000000ex 01	.900000000000ex 08	.277777777777ex-07
4	.170000000000ex 02	.750000000000ex 08	.226666666666ex-06
5	.333333333333ex 01	.350000000000ex 09	.952380952380ex-08
6	.116666666666ex 02	.536666666665ex 09	.217391304347ex-07
7	.800000000000ex 01	.365000000000ex 09	.219178082191ex-07
			.488598968745ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: TA-1530

Treatment: INTERMEDIATE

Acute

Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
.141666666666ex 02	.108166666666ex 10	.130970724191ex-07
.500000000000ex 01	.633333333330ex 09	.789473684214ex-08
.216666666666ex 02	.113500000000ex 10	.190895741555ex-07
.000000000000ex 01	.741666666665ex 09	.121348314607ex-07
.666666666666ex 02	.563333333330ex 09	.295857988166ex-07
.108333333333ex 02	.728333333330ex 09	.148741418764ex-07
.116666666666ex 02	.866666666665ex 09	.134615384614ex-07
.666666666665ex 01	.330000000000ex 09	.202020202019ex-07
.125000000000ex 02	.686666666665ex 09	.182038834951ex-07
		.165048441918ex-07

Subacute

Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
.150000000000ex 02	.481666666666ex 09	.311418685121ex-07
.600000000000ex 02	.718333333330ex 09	.222737819026ex-07
.650000000000ex 01	.761666666665ex 09	.820568927791ex-08
.500000000000ex 01	.790000000000ex 09	.632911392405ex-08
.166666666666ex 02	.806666666665ex 09	.206611570247ex-07
		.177223221282ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: TA-1530

Treatment: LOW

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.191666666666ex 02	.935000000000ex 09	.204991087343ex-07
2	.258333333333ex 02	.870000000000ex 09	.296934865900ex-07
3	.916666666665ex 01	.763333333330ex 09	.120087336244ex-07
4	.100000000000ex 02	.941666666665ex 09	.106194690265ex-07
5	.133333333333ex 02	.145166666666ex 10	.918484500575ex-08
6	.500000000000ex 01	.393333333333ex 09	.127118644067ex-07
7	.240000000000ex 02	.560000000000ex 09	.428571428571ex-07
8	.100000000000ex 02	.585000000000ex 09	.170940170940ex-07
			.193335834172ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.100000000000ex 02	.355000000000ex 09	.281690140845ex-07
2	.833333333330ex 01	.588333333330ex 09	.141643059490ex-07
3	.333333333333ex 01	.916666666665ex 08	.363636363636ex-07
4	.375000000000ex 01	.216666666666ex 09	.173076923077ex-07
5	.500000000000ex 01	.335000000000ex 09	.149253731343ex-07
6	.500000000000ex 01	.171666666666ex 09	.291262135923ex-07
			.233427059051ex-07

Table 5 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: D-3

Treatment: CONTROL (+)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.170000000000ex 05	.185000000000ex 08	.918918918918ex-03
2	.150000000000ex 05	.468333333333ex 08	.320284697509ex-03
3	.110000000000ex 05	.316666666666ex 08	.347368421053ex-03
4	.150000000000ex 05	.111250000000ex 08	.134831460674ex-02
5	.195000000000ex 05	.256666666666ex 08	.759740259742ex-03
6	.150000000000ex 05	.118500000000ex 08	.126582278481ex-02
7	.170000000000ex 05	.176666666666ex 08	.962264150947ex-03
8	.210000000000ex 05	.198333333333ex 08	.105882352941ex-02
9	.500000000000ex 04	.172500000000ex 07	.289855072463ex-02
10	.245000000000ex 05	.381666666666ex 08	.641921397381ex-03
			.105220094911ex-02

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: D-3

Treatment: CONTROL (-)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.250000000000ex 04	.246666666666ex 08	.101351351351ex-03
2	.200000000000ex 04	.176666666666ex 08	.113207547170ex-03
3	.200000000000ex 04	.206666666666ex 08	.967741935486ex-04
4	.100000000000ex 04	.712500000000ex 07	.140350877192ex-03
5	.250000000000ex 04	.129250000000ex 08	.193423597678ex-03
6	.200000000000ex 04	.173333333333ex 08	.115384615384ex-03
7	.200000000000ex 04	.171666666666ex 08	.116504854369ex-03
8	.150000000000ex 04	.903333333330ex 08	.166051660517ex-04
9	.150000000000ex 04	.108500000000ex 09	.138248847926ex-04
10	.200000000000ex 04	.757500000000ex 07	.264026402640ex-03
			.117145349017ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.200000000000ex 04	.311666666666ex 08	.641711229947ex-04
2	.000000000000ex 03	.225000000000ex 06	.000000000000ex 00
3	.350000000000ex 04	.160000000000ex 08	.218750000000ex-03
4	.350000000000ex 04	.126666666666ex 08	.276315789475ex-03
5	.150000000000ex 04	.166666666666ex 08	.900000000003ex-04
6	.300000000000ex 04	.118333333333ex 08	.253521126761ex-03
7	.200000000000ex 04	.136666666666ex 08	.146341463415ex-03
8	.500000000000ex 03	.129000000000ex 08	.387596899224ex-04
9	.150000000000ex 04	.166666666666ex 08	.900000000003ex-04
			.130873243617ex-03

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: D-3

Treatment: MAXIMUM

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.200000000000ex 04	.120500000000ex 08	.165975103734ex-03
2	.300000000000ex 04	.165000000000ex 08	.181818181818ex-03
3	.350000000000ex 04	.270000000000ex 08	.129629629629ex-03
4	.200000000000ex 04	.177250000000ex 08	.112834978843ex-03
5	.500000000000ex 03	.325000000000ex 07	.153846153846ex-03
6	.400000000000ex 04	.270000000000ex 08	.148148148148ex-03
7	.166666666666ex 04	.151666666666ex 08	.109890109890ex-03
8	.150000000000ex 04	.105500000000ex 08	.142180094786ex-03
9	.200000000000ex 04	.326666666666ex 08	.612244897960ex-04
10	.250000000000ex 04	.275000000000ex 08	.909090909090ex-04
			.129645598137ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.250000000000ex 04	.199250000000ex 08	.125470514429ex-03
2	.350000000000ex 04	.109000000000ex 08	.321100917431ex-03
3	.300000000000ex 04	.143333333333ex 08	.209302325581ex-03
4	.100000000000ex 04	.120000000000ex 07	.833333333333ex-03
5	.400000000000ex 04	.188333333333ex 08	.212389380531ex-03
6	.300000000000ex 04	.131666666666ex 08	.227848101266ex-03
7	.250000000000ex 04	.925000000000ex 07	.270270270270ex-03
			.314244977600ex-03

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: D-3

Treatment: INTERMEDIATE

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.200000000000ex 04	.201666666666ex 08	.991735537193ex-04
2	.300000000000ex 04	.280000000000ex 08	.107142857142ex-03
3	.166666666666ex 04	.147750000000ex 08	.112803158487ex-03
4	.150000000000ex 04	.107000000000ex 08	.140186915887ex-03
5	.100000000000ex 04	.154000000000ex 08	.649350649350ex-04
6	.300000000000ex 04	.159250000000ex 08	.188383045525ex-03
7	.150000000000ex 04	.178333333333ex 08	.841121495328ex-04
8	.200000000000ex 04	.251666665666ex 08	.794701986757ex-04
			.109525867987ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.150000000000ex 04	.760000000000ex 07	.197368421052ex-03
2	.450000000000ex 04	.144250000000ex 08	.311958405545ex-03
3	.200000000000ex 04	.129750000000ex 08	.154142581888ex-03
4	.350000000000ex 04	.897500000000ex 07	.389972144846ex-03
5	.350000000000ex 04	.183333333333ex 08	.190909090909ex-03
6	.250000000000ex 04	.286666666666ex 08	.872093023257ex-04
7	.150000000000ex 04	.990000000000ex 07	.151515151515ex-03
			.211867871151ex-03

Table 3 (concluded)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-31 (Sorbitol)

Organism: D-3

Treatment: LOW

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.400000000000ex 04	.170000000000ex 08	.235294117647ex-03
2	.500000000000ex 03	.175000000000ex 07	.285714285714ex-03
3	.250000000000ex 04	.180000000000ex 08	.138888888888ex-03
4	.350000000000ex 04	.265000000000ex 08	.132075471698ex-03
5	.400000000000ex 04	.151666666666ex 08	.263736263737ex-03
6	.300000000000ex 04	.148333333333ex 08	.202247191011ex-03
7	.100000000000ex 04	.165000000000ex 08	.606060606060ex-04
8	.250000000000ex 04	.345000000000ex 08	.724637681159ex-04
9	.250000000000ex 04	.155000000000ex 08	.161290322580ex-03
10	.350000000000ex 04	.280000000000ex 08	.125000000000ex-03
			.167731636998ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.450000000000ex 04	.201666666666ex 08	.223140495868ex-03
2	.300000000000ex 04	.340000000000ex 08	.882352941176ex-04
3	.454545454545ex 03	.126666666666ex 07	.358851674642ex-03
4	.100000000000ex 04	.104500000000ex 08	.956937799043ex-04
5	.450000000000ex 04	.335000000000ex 08	.134328358208ex-03
6	.350000000000ex 04	.238333333333ex 08	.146853146853ex-03
7	.277777777777ex 04	.124000000000ex 09	.224014336916ex-04
8	.250000000000ex 04	.952500000000ex 07	.262467191601ex-03
			.166496421860ex-03

Table 4

HOST-MEDIATED ASSAY
IN VITRO MUTAGENICITY OF COMPOUND 71-31 (Sorbitol)

Salmonella typhimurium G-46

5% w/v 71-31	EMS
negative	positive

Salmonella typhimurium TA-1530

5% w/v 71-31	EMS
negative	positive

Saccharomyces cerevisiae D-3

Compound	Concentration	Survival (%)	Recombinants/10^5 Survivors	RFt/RFc
71-31	5% w/v	100	20.00	5.14
EMS	0.1% w/v	86	289.79	74.50
Control (-)	--	100	3.89	1.00

Table 5

CYTOGENETIC ASSAY
METAPHASE SUMMARY SHEET BY TIME OF SACRIFICE
Compound 71-31 (Sorbitol)

Dosage (mg/kg)	Time*	Mitotic Index (%)	No. of Animals	No. of Cells	Cells with Breaks (%)	Cells with Rearrangements (%)	Cells with More Than One Type of Aber. (%)	Cells with Aber. (%)
TEM (0.4 mg/kg)	6	0.60	5	250	15.6	1.2	0.8	16.0
Negative Control	6	1.55	3	150	0.7	0	0	0.7
30 mg/kg	6	1.55	5	250	0	0	0	0
2500 mg/kg	6	2.30	5	250	0.4	0	0	0.4
5000 mg/kg	6	1.55	5	250	1.2	0	0	1.2
Negative Control	24	0.80	3	150	0.7	0	0	0.7
30 mg/kg	24	1.40	5	250	0.4	0	0	0.4
2500 mg/kg	24	1.15	5	250	0.4	0	0	0.4
5000 mg/kg	24	1.55	5	250	0	0	0	0
Negative Control	48	1.25	3	150	0	0	0	0
30 mg/kg	48	1.65	5	250	0.4	0	0	0.4
2500 mg/kg	48	2.60	5	250	0.4	0	0	0.4
5000 mg/kg	48	1.50	5	250	0	0	0	0
Negative Control	SA**	1.65	3	150	0	0	0	0
30 mg/kg	SA	1.10	5	250	0.4	0	0	0.4
2500 mg/kg	SA	1.35	5	250	0	0	0	0
5000 mg/kg	SA	0.90	5	250	0	0	0	0

* Time of sacrifice after treatment (hours)
** SA=subacute

Table 6

CYTOGENETIC ASSAY
ANAPHASE SUMMARY SHEET
Compound 71-31 (Sorbitol)

Dosage	Time*	No. of Cells	Cells with Acentric Fragments (%)	Cells with Bridges (%)	Multipolar Cells (%)	Other (Abnormal) (%)	Cells with More than One Type Aber. (%)	Cells with Aber. (%)
Negative Control	24	263	6.1	2.3	0	2.3	1.9	8.7
10 µg/ml	24	266	4.9	2.6	0	7.1	1.1	13.5
100 µg/ml	24	237	6.3	2.1	0	7.6	0.8	15.2
1000 µg/ml	24	277	6.5	4.3	0	8.7	1.8	17.3
TEM (0.05 µg/ml)	24	121	19.8	5.0	0	5.8	2.5	28.1

* Time of harvest after treatment (hours)

DOMINANT LETHAL GENE-RAT

Table 7

AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

Compound: Sorbitol
FDA No: 71-31

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-31 (30 mg/kg)	71-31 (2.5 g/kg)	71-31 (5 g/kg)
Acute-Single Dose					
1	236/19=12.4	193/19=10.2*	197/16=12.3	214/17=12.6	234/19=12.3
2	220/20=11.0	159/19= 8.4*	234/20=11.7	250/20=12.5	227/19=11.9
3	209/20=10.5	170/20= 8.5*	212/20=10.6	254/20=12.7**I	210/18=11.7
4	230/20=11.5	60/18= 3.3**	199/20=10.0	239/20=12.0	213/19=11.2
5	214/20=10.7	191/19=10.1	267/20=13.4**I	231/20=11.6	202/16=12.6**I
6	236/20=11.8	227/20=11.4	222/20=11.1	234/20=11.7	235/20=11.8
7	239/20=12.0	230/20=11.5	236/20=11.8	240/20=12.0	238/20=11.9
8	224/20=11.2	213/20=10.7	252/20=12.6*I	164/16=10.3	219/19=11.5
Subacute-Multiple Dose					
1			242/19=12.7	215/17=12.6	207/18=11.5
2			195/17=11.5	190/19=10.0	224/20=11.2
3			209/20=10.5	236/20=11.8	239/20=12.0
4			247/20=12.4	236/20=11.8	211/17=12.4
5			236/18=13.1**I	254/19=13.4**I	255/20=12.8**I
6			191/17=11.2	246/20=12.3	186/19= 9.8
7			215/20=10.8	212/18=11.8	237/19=12.5

* Significant at $P < 0.05$
** Significant at $P < 0.01$
I Increase above control

DOMINANT LETHAL GENE-RAT

Table 8

AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

				Compound:	Sorbitol
				FDA No:	71-31
Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-31 (30 mg/kg)	71-31 (2.5 g/kg)	71-31 (5 g/kg)
Acute-Single Dose					
1	18/19=0.95	75/19=3.95**	20/16=1.25	18/17=1.06	8/19=0.42
2	11/20=0.55	135/19=7.11**	11/20=0.55	6/20=0.30	11/19=0.58
3	18/20=0.90	144/20=7.20**	17/20=0.85	19/20=0.95	7/18=0.39
4	19/20=0.95	58/18=3.22**	15/20=0.75	29/20=1.45	17/19=0.89
5	15/20=0.75	62/19=3.26**	12/20=0.60	18/20=0.90	5/16=0.31
6	22/20=1.10	41/20=2.05*	16/20=0.80	9/20=0.45 *D	11/20=0.55
7	24/20=1.20	26/20=1.30	24/20=1.20	12/20=0.60	15/20=0.75
8	11/20=0.55	18/20=0.90	28/20=1.40	17/16=1.06	11/19=0.58
Subacute-Multiple Dose					
1			12/19=0.63	9/17=0.53	20/18=1.11
2			11/17=0.65	15/19=0.79	11/20=0.55
3			13/20=0.65	14/20=0.70	15/20=0.75
4			24/20=1.20	6/20=0.30	26/17=1.53
5			17/18=0.94	11/19=0.58	25/20=1.25
6			19/17=1.12	13/20=0.65	8/19=0.42
7			20/20=1.00	11/18=0.61	11/19=0.58

* Significant at $P < 0.05$
** Significant at $P < 0.01$
D Decrease below control

DOMINANT LETHAL GENE-RAT

Table 9

DEAD IMPLANTS/TOTAL IMPLANTS

Compound: Sorbitol
FDA No: 71-31

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-31 (30 mg/kg)	71-31 (2.5 g/kg)	71-31 (5 g/kg)
Acute-Single Dose					
1	18/236=0.08	75/193=0.39**	20/197=0.10	18/214=0.08	8/234=0.03
2	11/220=0.05	135/159=0.85**	11/234=0.05	6/250=0.02*D	11/227=0.05
3	18/209=0.09	144/170=0.85**	17/212=0.08	19/254=0.07	7/210=0.03
4	19/230=0.08	58/60 =0.97**	15/199=0.08	29/239=0.12	17/213=0.08
5	15/214=0.07	62/191=0.32**	12/267=0.04	18/231=0.08	5/202=0.02
6	22/236=0.09	41/227=0.18	16/222=0.07	9/234=0.04	11/235=0.05
7	24/239=0.10	26/230=0.11	24/236=0.10	12/240=0.05	15/238=0.06
8	11/224=0.05	18/213=0.08	28/252=0.11	17/164=0.10*	11/219=0.05
Subacute-Multiple Dose					5g X5
1			12/242=0.05	9/215=0.04	20/207=0.10
2			11/195=0.06	15/190=0.08	11/224=0.05
3			13/209=0.06	14/236=0.06	15/239=0.06
4			24/247=0.10	6/236=0.03	26/211=0.12
5			17/236=0.07	11/254=0.04	25/255=0.10
6			19/191=0.10	13/246=0.05	8/186=0.04
7			20/215=0.09	11/212=0.05	11/237=0.05

* Significant at $P < 0.05$
** Significant at $P < 0.01$
D Decrease below control

DOMINANT LETHAL GENE-RAT

Table 10

AVERAGE CORPORA LUTEA PER PREGNANT FEMALE

Compound: Sorbitol
FDA No: 71-31

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-31 (30 mg/kg)	71-31 (2.5 g/kg)	71-31 (5 g/kg)
Acute-Single Dose					
1	252/19=13.3	252/19=13.3	216/16=13.5	233/17=13.7	257/19=13.5
2	254/20=12.7	220/19=11.6	257/20=12.9	278/20=13.9	244/19=12.8
3	244/20=12.2	247/20=12.4	264/20=13.2	271/20=13.6*I	230/18=12.8
4	260/20=13.0	227/18=12.6	237/20=11.9	267/20=13.4	250/19=13.2
5	244/20=12.2	234/19=12.3	277/20=13.9*I	252/20=12.6	210/16=13.1 *I
6	265/20=13.3	253/20=12.7	247/20=12.4	270/20=13.5	253/20=12.7
7	259/20=13.0	250/20=12.5	248/20=12.4	271/20=13.6	267/20=13.4
8	242/20=12.1	258/20=12.9	260/20=13.0 *I	203/16=12.7	237/19=12.5
Subacute-Multiple Dose					
1			250/19=13.2	235/17=13.8	235/18=13.1
2			210/17=12.4	251/19=13.2	260/20=13.0
3			243/20=12.2	265/20=13.3	269/20=13.5 *I
4			278/20=13.9	266/20=13.3	226/17=13.3
5			247/18=13.7**I	280/19=14.7**I	268/20=13.4 *I
6			206/17=12.1*	262/20=13.1	225/19=11.8*
7			257/20=12.9	236/18=13.1	243/19=12.8

* Significant at $P < 0.05$
** Significant at $P < 0.01$
I Increase above control

DOMINANT LETHAL GENE-RAT

Table 11

AVERAGE PREIMPLANTATION LOSS PER PREGNANT FEMALE

Compound: Sorbitol
FDA No: 71-31

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-31 (30 mg/kg)	71-31 (2.5 g/kg)	71-31 (5 g/kg)
Acute-Single Dose					
1	16/19=0.84	59/19=3.11*	19/16=1.19	19/17=1.12	23/19=1.21
2	34/20=1.70	61/19=3.21*	23/20=1.15	28/20=1.40	17/19=0.89
3	35/20=1.75	77/20=3.85*	52/20=2.60	17/20=0.85	20/18=1.11
4	30/20=1.50	167/18=9.28**	38/20=1.90	28/20=1.40	37/19=1.95
5	30/20=1.50	43/19=2.26	10/20=0.50 *D	21/20=1.05	8/16=0.50
6	29/20=1.45	26/20=1.30	25/20=1.25	36/20=1.80	18/20=0.90
7	20/20=1.00	20/20=1.00	12/20=0.60	31/20=1.55	29/20=1.45
8	18/20=0.90	45/20=2.25	8/20=0.40	39/16=2.44	18/19=0.95
Subacute-Multiple Dose					
1			8/19=0.42	20/17=1.18	28/18=1.56
2			15/17=0.88	61/19=3.21	36/20=1.80
3			34/20=1.70	29/20=1.45	30/20=1.50
4			31/20=1.55	30/20=1.50	15/17=0.88
5			11/18=0.61	26/19=1.37	13/20=0.65
6			15/17=0.88	16/20=0.80	39/19=2.05
7			42/20=2.10	24/18=1.33	6/19=0.32

* Significant at $P < 0.05$
** Significant at $P < 0.01$
D Decrease below control

APPENDIX A

Statistical Analysis Procedures for Dominant Lethal Gene Tests With a Description and Explanation of the Computer Printouts

Statistical Analysis Procedures for Dominant Lethal Gene Tests With

A Description and Explanation of the Computer Printouts

The first stage of the analysis of the dominant lethal tests of the mutagenic studies on chemicals will be the preparation of punched cards from work sheets. Each sheet contains autopsy data for the female rats that were mated, two per male, to 10 males of the same dosage group in one particular week. There are 9 dosage groups for some of the chemical additives studied, and 8 groups for the others. The 9 groups consist of 5 1-dose groups and 4 5-dose (multiple treatment) groups. The 1-dose groups are for the vehicle control, 3 additive dosage levels, and a positive control (TEM). Each rat in these groups is mated weekly for 8 weeks. The 5-dose groups are for the vehicle control and the 3 additive dosage levels. The rats in these groups are mated weekly for 7 weeks. (There will be a deck of 1360 cards for each compound.)

The second stage is the execution of a computer program, KLUTE, which performs the following operations (where each statistical calculation is done once for each week's data):

1. The data cards are read and stored in central memory while a check is made to verify that the number of corpora lutea on each side is greater than or equal to the number of implants. If any data fail this check, the run is aborted and the data will be returned for review. The entire set of input data is printed out.

2. The fertility index (the number of pregnant females divided by the number of mated females) is calculated.

3. The chi-square test is done to compare each dosage level to the control on fertility. Let:

N_i = no. of mated females at dose level i,

n_i = no. of pregnant females at dose level i.

Then the chi-square 2 x 2 tables are of the form:

$$\begin{bmatrix} n_o & n_i \\ N_o - n_o & N_i - n_i \end{bmatrix}$$

and chi-squared (with 1 degree of freedom) is:

$$X_1^2 = \frac{(N_o+N_1)(|n_o(N_1-n_1)-n_1(N_o-n_o)|-(N_o+N_1)/2)^2}{(n_o+n_1)(N_o-n_o+N_1-n_1)(N_o)(N_1)} \quad \text{(corrected for continuity)}$$

where the subscript o represents the control group.*

For each dosage group (including the control group and TEM), the following is printed out: the number of pregnant females (N PRG), the number of mated females (N MTD), the fertility index and X^2.

4. Armitage's test for a linear trend in proportions is applied to the fertility index. The formula for this calculation is found on pages 248-248 of "Statistical Calculations" by Snedecor and Cochran, 6th Edition, Iowa State University Press, 1967. Using the notation of (3) above, we have a 2 x 3 contingency table of the form:

	dose 1	dose 2	dose 3	row totals
	n_1	n_2	n_3	t
	N_1-n_1	N_2-n_2	N_3-n_3	T-t
Column Totals	N_1	N_2	N_3	T

Armitages' "chi-square" is given as $X^2_{(C-1)}-X^2_1$, where C=3 and

$$X_1^2 = \frac{T(T\Sigma nx - t\Sigma Nx)^2}{t(T-t)(T\Sigma Nx^2-(\Sigma Nx)^2)}, \quad X^2_{(C-1)} = \frac{T^2(\Sigma\frac{n^2}{N} - t^2)}{t(T-t)},$$

where Σnx stands for $\sum_{i=1}^{C} n_i x_i$, $\Sigma\frac{n^2}{N}$ for $\sum_{i=1}^{C}\frac{n_i^2}{N_i}$, etc, and the x_i are the dosage levels.

This calculation will be repeated with x replaced by log x. The Armitage test will also be applied to the following 2 x 4 contingency table:

*In all tests, the single-dose treatment groups are compared with the single-dose control group and the multiple-dose treatment groups compared with the multiple-dose control group.

Control	dose 1	dose 2	dose 3
n_o	n_1	n_2	n_3
N_o-n_o	N_1-n_1	N_2-n_2	N_3-n_3

In this case, C=4.

The printout for the Armitage tests includes the number pregnant (N PRG) and the number mated (N MTD) for each of the 3 or 4 groups included in the tests, plus $X^2_{(C-1)}$, X^2_{-1} and their difference (labeled ARMTG CHISQ).

5. The t-test is applied to determine significant differences between the average number of implantations per pregnant female at a dose level, and the average for the control. Let

n_i = no. of pregnant females at dose level i.

u_{ij} = total no. of implantations for pregnant female j of dose i.

Then,

$$\bar{u}_i = \frac{1}{n_i} \sum_{j=1}^{n_i} u_{ij}$$

$$S_i^2 = \sum_{j=1}^{n_i} (u_{ij}-\bar{u}_i)^2$$

The T-statistic for dose i has $n_o + n_i - 2$ degrees of freedom, and is equal to:

$$t_i = \frac{\bar{u}_o - \bar{u}_i}{\left[\frac{S_o^2 + S_i^2}{n_o+n_i-2}\left(\frac{1}{n_o} + \frac{1}{n_i}\right)\right]^{1/2}}$$

The t-test printout gives, for each group: the number pregnant (N PRG), the mean and standard deviation of the number of implantations. The absolute value of T and the degrees of freedom (DF) are given for each treatment group and for TEM.

6. A regression fit of the average number of implanations, $\bar{u}_i$, is made for both the arithmetic and logarithmic dose X_i and $\log X_i$) to see which is better.

These two fits include the data from the three treatment groups only. A third regression using the X_i as independent variables, include data from the three treatment groups and the control group. For each regression, the quantities computed and printed for this step are:

N = the number of observations
= total number of pregnant females.

The regressions are computed as follows:

Let N = the number of observations, i.e., the total number of pregnant females in the groups used in the regression,

X_i = the value of the independent variable (dose or log dose) for the i-th female.

U_i = the value of the dependent variable (number of implantations) for the i-th female.

Then,

$$\text{XBAR} = \bar{X} = \frac{1}{N}\sum_{i=1}^{N} X_i$$

SD X = standard deviation of the X_i

$$= \left[\frac{1}{N-1} SS_X\right]^{1/2},$$

where $SS_X = \sum_{i=1}^{N} (X_i - \bar{X})^2$

$$\text{UBAR} = U = \frac{1}{N}\sum_{i=1}^{N} U_i,$$

SD U = standard deviation of the U_i

$$= \left[\frac{1}{N-1} SS_U\right]^{1/2},$$

where $SS_U = \sum_{i=1}^{N} (U_i - \bar{U})^2$,

and $SS_{XU} = \sum_{i=1}^{N} (X_i - \bar{X})(U_i - \bar{U})$.

From these quantities, we compute:

B = estimate of the slope of the regression line

$= SS_{XU}/SS_X$,

A = estimate of the intercept of the regression line.

$= \bar{U} - B\bar{X}$,

Also,

VAR U X = variance of U about the regression line

$$= \frac{SS_U - SS_{XY}^2/SS_X}{N-2}$$

and from this is computed,

VARB = variance of the estimate, B

$$= \frac{VARU.X}{SS_X}$$

VARA = variance of the estimate, A

$$= VARU.X\left[\frac{1}{N} + \frac{\bar{X}^2}{SS_X}\right]$$

VARUBAR = variance of $\bar{U}$,

$$= \frac{VARU.X}{N}$$

and

CV U = coefficient of variation of U.

$$= \frac{(VARU.X)^{1/2}}{\bar{U}}$$

And finally we have:

TB = the t-statistic for testing the hypothesis that the regression slope is zero

$$= \frac{B}{\sqrt{VARB}}$$

DF = number of degrees of freedom for TB.

N - 2

7. The preimplantation loss, y_{ij} is calculated for each pregnant female, j, as the number of corpora lutea, v_{ij}, minus the number of implantations, u_{ij}. Then the Freeman-Tukey transformation is applied to y_{ij} as follows:

$$f_{ij} = \sin^{-1}\sqrt{\frac{y_{ij}}{v_{ij}+1}} + \sin^{-1}\sqrt{\frac{y_{ij}+1}{v_{ij}+1}}$$

The t-test is then applied to the f's. Let

$$\bar{f}_i = \frac{1}{n_i}\sum_{j=1}^{n_i} f_{ij}$$

$$S_i^2 = \sum_{j=1}^{n_i} (f_{ij}-\bar{f}_i)^2,$$

where n_i, and n_o are defined above (step 3).

Then

$$t_i = \frac{\bar{f}_o - \bar{f}_i}{\left[\frac{S_o^2+S_i^2}{n_o+n_i-2}\left(\frac{1}{n_o}+\frac{1}{n_i}\right)\right]^{1/2}}$$

The printout gives, for each group, the number of pregnant females (N PRG), the mean and standard deviation of the f_{ij}'s. For each treatment group and for TEM, the absolute value of $t_i(T)$, and its degrees of freedom (DF) are given.

8. The number of dead implants, z_{ij}, for each female, j, is the sum of the early and late deaths. The Freeman-Tukey transformation and the subsequent t-test is applied to the dead implants by repeating step 7 above with z_{ij} substituted for y_{ij}.

The printout is the same as for step 7, except that the number of females (N FEM) in each group is printed instead of N PRG.

9. The number of females with one or more dead implants, m_i, is calculated. In the printout, the m_i are referred to as N WDI (i.e., "number with dead implants").

10. The chi-square test and Armitage's test for a linear trend is calculated for the proportion of females with one or more dead implants,

$$p_i = \frac{m_i}{N_i},$$

by repeating steps 3 and 4, above, with m_i substituted for n_i.

In the printout, the ratio, p_i, is called the "death index", in analogy with the fertility index.

11. The ratios, p_i, computed above, undergo a probit analysis to determine whether the probit of this proportion is linearly related to the log dose. Computer subroutine PROBT, from the IBM System/360 Scientific Subroutine Package Version III, is used to compute A and B and the X^2 statistic for the regression equation,

$$P_i = A + B*\log x_i$$

where P_i is derived by the program from

$$\int_{P_i-5}^{\infty} N_x(0,1)dx = p_i.$$

($N_x(o,1)$ is the normal curve, with a mean of 0 and a standard deviation of 1).

12. The number of dead implants, z_{ij}, and the number of total implants, u_{ij}, are calculated for each female, j. The Freeman-Tukey transformation and subsequent t-test is applied to this data by repeating step 7, above, as follows:

$$f_{ij} = \sin^{-1}\sqrt{\frac{z_{ij}}{u_{ij}+1}} + \sin^{-1}\sqrt{\frac{z_{ij}+1}{u_{ij}+1}}$$

$$\bar{f}_i = \frac{1}{N_i}\sum_{j=1}^{N_i} f_{ij}$$

$$S_i^2 = \sum_{j=1}^{N_i} (f_{ij}-\bar{f}_i)^2$$

$$t_i = \frac{\bar{f}_o-\bar{f}_i}{\left[\frac{S_o^2+S_i^2}{N_o+N_i-2}\left(\frac{1}{N_o}+\frac{1}{N_i}\right)\right]^{1/2}}$$

The printout for this step is the same as for step 7, except that the number of females (N FEM) in each group is printed instead of N PRG.

13. Five one-way analyses of variance are performed on the control groups' data. The five variables analyzed are:

a. number of pregnant females,
b. number of implantations per pregnant female,
c. the pre-implantation loss per pregnant female,
d. the number of dead implants per female,
e. the ratio of dead implants to the total implants.

For each of these variables the ANOVA calculations are as follows:

Let R_{kj} = value of one of the above variables for female j assigned to male k, and

L_k = no. of females assigned to male k.

M = no. of males

$$\bar{R}_k = \frac{1}{L_k} \sum_{j=1}^{L_k} R_{kj}$$

$$\bar{R} = \frac{1}{M} \sum_{k=1}^{M} \bar{R}_k$$

Then, the sum-of-squares-within-males = $SUMSQ_w$

$$= \sum_{j=1}^{L_k} (R_{kj} - \bar{R}_k)^2,$$

the degrees-of-freedom-within-males = DF_w

$$= \sum_{k=1}^{M} (L_k - 1),$$

and the mean-square-within-males = $MEANSQ_w = \frac{SUMSQ_w}{DF_w}$.

Similarly, the sum-of-squares-between-males = $SUMSQ_B = \sum_{k=1}^{M} L_k (\bar{R}_k - \bar{R})^2$,

the degrees-of-freedom-between-males = $DF_B = M-1$,

and the mean-square-between-males = $MEANSQ_B = \frac{SUMSQ_B}{DF_B}$.

Finally, the F-ratio is $F = \frac{MEANSQ_B}{MEANSQ_W}$.

In the printout, these quantities are labeled without the subscripts, but the "within" and "between" quantities are identified by the page heading. Also, the total-sum-of-squares = $SUMSQ_W + SUMSQ_B$ and its degrees-of-freedom

$$= \sum_{k=1}^{M} L_k - 1,$$

are printed.

14. The t-test is applied to determine significant differences between the average number of corpora lutea per pregnant female at a dose level, and the average for the control. Let

n_i = no. of pregnant females at dose level i.

C_{ij} = total no. of corpora lutea for pregnant female j of dose i.

Then,

$$\bar{C}_i = \frac{1}{n_i} \sum_{j=1}^{n_i} C_{ij}$$

$$S_i^2 = \sum_{j=1}^{n_i} (C_{ij} - \bar{C}_i)^2$$

The T-statistic for dose i has $n_o + n_i - 2$ degrees of freedom, and is equal to:

$$t_i = \frac{\bar{C}_o - \bar{C}_i}{\left[\frac{S_o^2 + S_i^2}{n_o + n_i - 2}\left(\frac{1}{n_o} + \frac{1}{n_i}\right)\right]^{1/2}}.$$

The t-test printout gives, for each group: the number pregnant (N PRG), the mean and standard deviation of the number of corpora lutea. The absolute value of T and the degrees of freedom (DF) are given for each treatment group and for TEM.

APPENDIX B

Raw Data and Statistical Analyses

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	1	S	0.0000	1	1	Y	3	4	0	0	0	0	3	4
CNTRL31	1	S	0.0000	1	2	Y	2	10	1	0	0	0	5	10
CNTRL31	1	S	0.0000	2	3	Y	9	4	1	0	0	0	9	4
CNTRL31	1	S	0.0000	2	4	Y	6	7	1	0	0	0	7	8
CNTRL31	1	S	0.0000	3	5	Y	6	8	0	0	0	0	6	8
CNTRL31	1	S	0.0000	3	6	Y	7	6	0	0	0	2	7	6
CNTRL31	1	S	0.0000	4	7	Y	5	5	0	0	0	1	7	6
CNTRL31	1	S	0.0000	4	8	Y	6	5	1	0	0	0	6	7
CNTRL31	1	S	0.0000	5	9	Y	5	4	0	0	0	0	5	8
CNTRL31	1	S	0.0000	5	10	Y	8	3	0	0	0	0	8	3
CNTRL31	1	S	0.0000	6	11	Y	5	9	0	0	2	2	5	11
CNTRL31	1	S	0.0000	6	12	Y	7	6	1	0	0	0	7	6
CNTRL31	1	S	0.0000	7	13	Y	7	6	1	0	0	0	7	7
CNTRL31	1	S	0.0000	7	14	Y	9	3	0	0	1	0	9	3
CNTRL31	1	S	0.0000	8	15	Y	9	6	1	0	0	0	9	6
CNTRL31	1	S	0.0000	8	16	Y	4	11	1	0	0	0	5	12
CNTRL31	1	S	0.0000	9	17	Y	5	5	0	0	0	0	6	6
CNTRL31	1	S	0.0000	9	18	Y	5	6	0	0	0	1	6	6
CNTRL31	1	S	0.0000	10	19	Y	8	5	1	0	0	0	9	5
CNTRL31	1	S	0.0000	10	20	N	0	0	0	0	0	0	0	0
71 - 31	1	S	.0300	51	101	Y	6	4	0	0	0	0	7	4
71 - 31	1	S	.0300	51	102	N	0	0	0	0	0	0	0	0
71 - 31	1	S	.0300	52	103	N	0	0	0	0	0	0	0	0
71 - 31	1	S	.0300	52	104	N	0	0	0	0	0	0	0	0
71 - 31	1	S	.0300	53	105	Y	6	9	1	1	0	0	6	9
71 - 31	1	S	.0300	53	106	Y	8	6	0	0	0	0	8	6
71 - 31	1	S	.0300	54	107	Y	7	7	0	1	1	0	9	8
71 - 31	1	S	.0300	54	108	N	0	0	0	0	0	0	0	0
71 - 31	1	S	.0300	55	109	Y	4	11	0	0	0	1	4	11
71 - 31	1	S	.0300	55	110	Y	5	6	0	0	0	0	5	8
71 - 31	1	S	.0300	56	111	Y	9	3	0	0	2	0	9	6
71 - 31	1	S	.0300	56	112	Y	6	7	0	0	0	0	6	7
71 - 31	1	S	.0300	57	113	Y	7	4	0	0	1	1	7	4
71 - 31	1	S	.0300	57	114	Y	6	8	0	0	0	0	6	8
71 - 31	1	S	.0300	58	115	Y	6	7	0	0	0	0	6	7
71 - 31	1	S	.0300	58	116	Y	10	2	0	0	0	0	13	3
71 - 31	1	S	.0300	59	117	Y	10	3	0	0	1	1	10	5
71 - 31	1	S	.0300	59	118	Y	2	2	0	1	0	0	4	3
71 - 31	1	S	.0300	60	119	Y	10	5	0	0	1	1	11	5
71 - 31	1	S	.0300	60	120	Y	3	8	0	2	1	3	3	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71 - 31	1	S	2.5000	61	121	Y	8	6	0	0	0	0	8	6
71 - 31	1	S	2.5000	61	122	Y	6	9	0	0	0	0	7	9
71 - 31	1	S	2.5000	62	123	Y	8	8	2	4	0	0	8	10
71 - 31	1	S	2.5000	62	124	Y	3	10	0	0	0	0	3	10
71 - 31	1	S	2.5000	63	125	Y	3	9	0	0	0	1	3	9
71 - 31	1	S	2.5000	63	126	Y	5	6	0	0	0	0	6	7
71 - 31	1	S	2.5000	64	127	Y	6	7	0	0	0	0	7	7
71 - 31	1	S	2.5000	64	128	Y	9	5	0	0	0	0	10	6
71 - 31	1	S	2.5000	65	129	Y	3	4	0	2	0	1	7	6
71 - 31	1	S	2.5000	65	130	Y	9	5	0	0	0	0	10	5
71 - 31	1	S	2.5000	66	131	N	0	0	0	0	0	0	0	0
71 - 31	1	S	2.5000	66	132	Y	4	8	0	0	0	0	4	8
71 - 31	1	S	2.5000	67	133	Y	6	6	0	0	0	0	6	6
71 - 31	1	S	2.5000	67	134	N	0	0	0	0	0	0	0	0
71 - 31	1	S	2.5000	68	135	N	0	0	0	0	0	0	0	0
71 - 31	1	S	2.5000	68	136	Y	4	7	0	0	0	0	4	7
71 - 31	1	S	2.5000	69	137	Y	4	7	0	0	0	2	7	6
71 - 31	1	S	2.5000	69	138	Y	6	8	0	0	0	0	6	8
71 - 31	1	S	2.5000	70	139	Y	8	5	1	0	3	1	8	6
71 - 31	1	S	2.5000	70	140	Y	4	8	1	0	0	0	4	9
71 - 31	1	S	5.0000	71	141	Y	7	5	0	0	0	0	7	5
71 - 31	1	S	5.0000	71	142	Y	5	5	0	0	0	0	6	7
71 - 31	1	S	5.0000	72	143	Y	5	7	0	2	0	0	6	7
71 - 31	1	S	5.0000	72	144	N	0	0	0	0	0	0	0	0
71 - 31	1	S	5.0000	73	145	Y	5	8	0	0	0	0	5	8
71 - 31	1	S	5.0000	73	146	Y	11	3	1	0	0	0	11	4
71 - 31	1	S	5.0000	74	147	Y	3	9	0	0	0	0	4	11
71 - 31	1	S	5.0000	74	148	Y	5	7	0	0	0	0	5	9
71 - 31	1	S	5.0000	75	149	Y	6	5	0	0	0	0	6	7
71 - 31	1	S	5.0000	75	150	Y	6	6	0	0	0	0	6	9
71 - 31	1	S	5.0000	76	151	Y	8	5	1	0	0	0	8	5
71 - 31	1	S	5.0000	76	152	Y	5	12	2	1	0	0	6	12
71 - 31	1	S	5.0000	77	153	Y	6	8	0	0	0	0	6	8
71 - 31	1	S	5.0000	77	154	Y	3	5	0	0	0	0	5	6
71 - 31	1	S	5.0000	78	155	Y	6	8	0	0	0	0	6	8
71 - 31	1	S	5.0000	78	156	Y	6	6	0	0	0	0	6	7
71 - 31	1	S	5.0000	79	157	Y	3	7	0	0	0	0	4	8
71 - 31	1	S	5.0000	79	158	Y	5	7	0	0	0	0	5	7
71 - 31	1	S	5.0000	80	159	Y	6	6	0	1	0	0	6	7
71 - 31	1	S	5.0000	80	160	Y	4	10	0	0	0	0	4	10

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	1	S	.0002	11	21	Y	1	0	0	0	0	0	5	6
TEM31	1	S	.0002	11	22	Y	9	6	0	0	1	2	9	6
TEM31	1	S	.0002	12	23	Y	2	2	0	0	0	0	6	5
TEM31	1	S	.0002	12	24	Y	7	7	2	4	1	0	7	7
TEM31	1	S	.0002	13	25	Y	4	6	0	0	3	3	8	6
TEM31	1	S	.0002	13	26	Y	6	5	1	0	0	0	7	5
TEM31	1	S	.0002	14	27	Y	2	2	0	0	1	0	9	4
TEM31	1	S	.0002	14	28	Y	2	9	1	2	0	0	4	9
TEM31	1	S	.0002	15	29	Y	9	6	0	0	5	3	9	6
TEM31	1	S	.0002	15	30	Y	2	7	0	0	0	0	3	7
TEM31	1	S	.0002	16	31	Y	1	6	1	4	0	0	4	7
TEM31	1	S	.0002	16	32	Y	6	8	3	3	0	0	6	8
TEM31	1	S	.0002	17	33	Y	3	6	1	1	0	0	7	7
TEM31	1	S	.0002	17	34	Y	3	8	0	0	2	7	4	11
TEM31	1	S	.0002	18	35	Y	4	9	1	4	1	0	4	9
TEM31	1	S	.0002	18	36	N	0	0	0	0	0	0	0	0
TEM31	1	S	.0002	19	37	Y	3	8	0	2	0	0	4	10
TEM31	1	S	.0002	19	38	Y	5	11	1	4	0	0	5	11
TEM31	1	S	.0002	20	39	Y	4	8	2	5	1	0	4	8
TEM31	1	S	.0002	20	40	Y	3	3	1	1	1	0	6	9
CNTRL31	1	M	0.0000	1	1	Y	3	4	0	0	0	0	3	4
CNTRL31	1	M	0.0000	1	2	Y	2	10	1	0	0	0	5	10
CNTRL31	1	M	0.0000	2	3	Y	9	4	1	0	0	0	9	4
CNTRL31	1	M	0.0000	2	4	Y	8	7	1	0	0	0	7	8
CNTRL31	1	M	0.0000	3	5	Y	6	8	0	0	0	0	6	8
CNTRL31	1	M	0.0000	3	6	Y	7	6	0	0	0	2	7	6
CNTRL31	1	M	0.0000	4	7	Y	5	6	0	0	0	1	7	6
CNTRL31	1	M	0.0000	4	8	Y	6	5	1	0	0	0	6	7
CNTRL31	1	M	0.0000	5	9	Y	5	8	0	0	0	0	5	8
CNTRL31	1	M	0.0000	5	10	Y	8	3	0	0	0	0	8	3
CNTRL31	1	M	0.0000	6	11	Y	5	9	0	0	2	2	5	11
CNTRL31	1	M	0.0000	6	12	Y	7	6	1	0	0	0	7	6
CNTRL31	1	M	0.0000	7	13	Y	7	6	1	0	0	0	7	7
CNTRL31	1	M	0.0000	7	14	Y	9	3	0	0	1	0	9	3
CNTRL31	1	M	0.0000	8	15	Y	9	6	1	0	0	0	9	6
CNTRL31	1	M	0.0000	8	16	Y	4	11	1	0	0	0	5	12
CNTRL31	1	M	0.0000	9	17	Y	5	6	0	0	0	0	6	6
CNTRL31	1	M	0.0000	9	18	Y	6	6	0	0	0	1	6	6
CNTRL31	1	M	0.0000	10	19	Y	8	5	1	0	0	0	9	5
CNTRL31	1	M	0.0000	10	20	N	0	0	0	0	0	0	0	0

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-31 SORBITOL

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71 - 31	1	M	.0300	41	81	Y	8	4	0	0	0	0	8	4
71 - 31	1	M	.0300	41	82	Y	7	4	0	0	0	0	7	4
71 - 31	1	M	.0300	42	83	Y	8	6	0	0	0	0	8	6
71 - 31	1	M	.0300	42	84	Y	9	4	0	0	0	0	9	5
71 - 31	1	M	.0300	43	85	Y	4	8	0	0	0	0	5	8
71 - 31	1	M	.0300	43	86	Y	12	4	0	0	0	0	12	4
71 - 31	1	M	.0300	44	87	Y	7	6	1	0	0	0	7	6
71 - 31	1	M	.0300	44	88	Y	9	3	2	0	0	0	9	3
71 - 31	1	M	.0300	45	89	Y	6	5	0	0	0	0	8	5
71 - 31	1	M	.0300	45	90	Y	6	7	0	0	0	0	6	7
71 - 31	1	M	.0300	46	91	Y	5	8	0	0	0	0	5	9
71 - 31	1	M	.0300	46	92	Y	4	9	0	0	2	2	4	9
71 - 31	1	M	.0300	47	93	Y	6	7	0	0	0	0	8	7
71 - 31	1	M	.0300	47	94	Y	5	8	0	0	0	1	5	8
71 - 31	1	M	.0300	48	95	Y	7	5	0	1	0	1	7	6
71 - 31	1	M	.0300	48	96	N	0	0	0	0	0	0	0	0
71 - 31	1	M	.0300	49	97	Y	4	9	0	0	0	0	4	9
71 - 31	1	M	.0300	49	98	Y	9	4	0	0	1	0	9	5
71 - 31	1	M	.0300	50	99	Y	9	3	0	0	0	0	10	3
71 - 31	1	M	.0300	50	100	Y	6	5	0	0	1	0	6	5
71 - 31	1	M	2.5000	51	101	Y	5	4	0	1	0	0	5	7
71 - 31	1	M	2.5000	51	102	Y	5	7	0	0	0	0	5	8
71 - 31	1	M	2.5000	52	103	N	0	0	0	0	0	0	0	0
71 - 31	1	M	2.5000	52	104	Y	8	4	0	1	1	0	8	5
71 - 31	1	M	2.5000	53	105	Y	5	9	0	0	0	1	5	9
71 - 31	1	M	2.5000	53	106	Y	3	8	0	0	0	0	4	10
71 - 31	1	M	2.5000	54	107	N	0	0	0	0	0	0	0	0
71 - 31	1	M	2.5000	54	108	Y	7	5	0	0	0	0	7	5
71 - 31	1	M	2.5000	55	109	Y	7	5	0	0	0	0	8	6
71 - 31	1	M	2.5000	55	110	Y	4	9	0	1	0	0	5	9
71 - 31	1	M	2.5000	56	111	Y	4	10	0	0	0	0	5	10
71 - 31	1	M	2.5000	56	112	N	0	0	0	0	0	0	0	0
71 - 31	1	M	2.5000	57	113	Y	7	9	0	0	0	0	7	9
71 - 31	1	M	2.5000	57	114	Y	1	9	0	0	0	0	1	11
71 - 31	1	M	2.5000	58	115	Y	4	10	0	0	0	0	4	10
71 - 31	1	M	2.5000	58	116	Y	3	10	0	0	2	0	4	10
71 - 31	1	M	2.5000	59	117	Y	2	9	0	0	0	0	2	9
71 - 31	1	M	2.5000	59	118	Y	7	7	0	0	0	0	8	7
71 - 31	1	M	2.5000	60	119	Y	3	12	0	0	1	1	3	12
71 - 31	1	M	2.5000	60	120	Y	10	3	0	0	0	0	11	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71 - 31	1	M	5.0000	61	121	Y	3	10	0	0	0	0	3	10
71 - 31	1	M	5.0000	61	122	Y	2	9	0	0	0	1	3	10
71 - 31	1	M	5.0000	62	123	Y	3	3	0	0	0	0	6	6
71 - 31	1	M	5.0000	62	124	Y	9	4	0	0	1	0	10	4
71 - 31	1	M	5.0000	63	125	Y	0	4	0	0	0	0	6	5
71 - 31	1	M	5.0000	63	126	Y	7	6	0	0	0	2	7	6
71 - 31	1	M	5.0000	64	127	Y	8	6	0	0	0	0	8	6
71 - 31	1	M	5.0000	64	128	Y	6	6	0	1	1	0	6	7
71 - 31	1	M	5.0000	65	129	Y	4	8	0	0	0	0	4	8
71 - 31	1	M	5.0000	65	130	Y	7	4	1	0	0	0	9	4
71 - 31	1	M	5.0000	66	131	Y	3	6	1	3	0	0	4	8
71 - 31	1	M	5.0000	66	132	Y	4	11	0	0	1	0	6	11
71 - 31	1	M	5.0000	67	133	Y	6	7	1	0	0	0	6	7
71 - 31	1	M	5.0000	67	134	Y	5	7	0	0	0	0	6	7
71 - 31	1	M	5.0000	68	135	Y	7	6	0	1	0	0	7	7
71 - 31	1	M	5.0000	68	136	N	0	0	0	0	0	0	0	0
71 - 31	1	M	5.0000	69	137	Y	10	4	0	0	1	0	10	4
71 - 31	1	M	5.0000	69	138	Y	5	5	0	0	0	0	6	6
71 - 31	1	M	5.0000	70	139	Y	8	4	0	1	2	2	8	4
71 - 31	1	M	5.0000	70	140	N	0	0	0	0	0	0	0	0

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	2	S	0.0000	1	1	Y	3	7	0	0	0	1	3	7
CNTRL31	2	S	0.0000	1	2	Y	8	5	0	0	1	0	8	6
CNTRL31	2	S	0.0000	2	3	Y	7	9	0	0	0	0	7	9
CNTRL31	2	S	0.0000	2	4	Y	7	6	0	0	0	0	7	6
CNTRL31	2	S	0.0000	3	5	Y	2	8	1	1	0	0	2	8
CNTRL31	2	S	0.0000	3	6	Y	1	1	0	0	0	0	1	7
CNTRL31	2	S	0.0000	4	7	Y	2	9	0	1	0	0	2	9
CNTRL31	2	S	0.0000	4	8	Y	5	5	0	0	0	1	5	7
CNTRL31	2	S	0.0000	5	9	Y	7	7	0	0	0	0	7	7
CNTRL31	2	S	0.0000	5	10	Y	6	7	0	0	1	2	6	7
CNTRL31	2	S	0.0000	6	11	Y	5	9	0	0	0	0	5	9
CNTRL31	2	S	0.0000	6	12	Y	8	7	0	0	0	0	13	11
CNTRL31	2	S	0.0000	7	13	Y	7	4	0	0	0	0	7	4
CNTRL31	2	S	0.0000	7	14	Y	3	11	0	0	0	0	3	11
CNTRL31	2	S	0.0000	8	15	Y	6	5	0	0	0	0	6	5
CNTRL31	2	S	0.0000	8	16	Y	5	6	0	0	0	0	6	6
CNTRL31	2	S	0.0000	9	17	Y	5	5	0	0	1	0	5	5
CNTRL31	2	S	0.0000	9	18	Y	2	5	0	0	0	0	2	9
CNTRL31	2	S	0.0000	10	19	Y	5	9	0	1	0	0	5	9
CNTRL31	2	S	0.0000	10	20	Y	0	1	0	0	0	0	5	7
71 - 31	2	S	.0300	51	101	Y	7	6	0	0	0	1	7	6
71 - 31	2	S	.0300	51	102	Y	7	3	0	0	0	0	8	3
71 - 31	2	S	.0300	52	103	Y	7	6	0	0	0	0	7	6
71 - 31	2	S	.0300	52	104	Y	5	5	0	0	0	0	6	5
71 - 31	2	S	.0300	53	105	Y	6	5	1	0	1	0	6	5
71 - 31	2	S	.0300	53	106	Y	6	6	1	0	0	0	7	7
71 - 31	2	S	.0300	54	107	Y	1	9	0	0	0	1	6	10
71 - 31	2	S	.0300	54	108	Y	4	8	0	0	0	0	4	8
71 - 31	2	S	.0300	55	109	Y	7	6	0	0	0	1	7	6
71 - 31	2	S	.0300	55	110	Y	5	7	0	0	0	0	5	8
71 - 31	2	S	.0300	56	111	Y	7	3	0	0	0	0	8	4
71 - 31	2	S	.0300	56	112	Y	9	5	0	0	0	0	9	5
71 - 31	2	S	.0300	57	113	Y	5	7	2	1	0	0	5	7
71 - 31	2	S	.0300	57	114	Y	0	4	0	0	0	0	4	6
71 - 31	2	S	.0300	58	115	Y	6	6	0	0	1	0	6	6
71 - 31	2	S	.0300	58	116	Y	9	6	0	0	0	0	10	6
71 - 31	2	S	.0300	59	117	Y	9	4	0	0	0	0	9	4
71 - 31	2	S	.0300	59	118	Y	5	9	0	0	0	0	5	9
71 - 31	2	S	.0300	60	119	Y	7	5	1	0	0	0	8	7
71 - 31	2	S	.0300	60	120	Y	4	8	0	0	0	0	4	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71 - 31	2	S	2.5000	61	121	Y	6	10	0	0	0	0	6	10
71 - 31	2	S	2.5000	61	122	Y	5	9	0	0	0	0	5	9
71 - 31	2	S	2.5000	62	123	Y	4	6	0	0	0	0	8	6
71 - 31	2	S	2.5000	62	124	Y	5	0	0	0	0	0	5	7
71 - 31	2	S	2.5000	63	125	Y	7	6	0	0	0	0	7	6
71 - 31	2	S	2.5000	63	126	Y	1	10	0	0	0	0	1	12
71 - 31	2	S	2.5000	64	127	Y	9	5	0	0	0	0	9	6
71 - 31	2	S	2.5000	64	128	Y	6	10	0	1	0	0	7	10
71 - 31	2	S	2.5000	65	129	Y	10	4	0	0	0	0	10	4
71 - 31	2	S	2.5000	65	130	Y	8	2	0	0	0	0	9	2
71 - 31	2	S	2.5000	66	131	Y	5	6	0	0	0	0	5	7
71 - 31	2	S	2.5000	66	132	Y	4	8	0	0	0	0	5	9
71 - 31	2	S	2.5000	67	133	Y	8	5	0	0	0	0	8	5
71 - 31	2	S	2.5000	67	134	Y	8	7	0	0	0	1	8	8
71 - 31	2	S	2.5000	68	135	Y	10	4	0	0	0	0	13	5
71 - 31	2	S	2.5000	68	136	Y	6	6	0	0	0	0	6	6
71 - 31	2	S	2.5000	69	137	Y	4	8	0	0	0	0	4	8
71 - 31	2	S	2.5000	69	138	Y	8	6	0	0	0	0	9	8
71 - 31	2	S	2.5000	70	139	Y	7	4	0	0	0	0	8	4
71 - 31	2	S	2.5000	70	140	Y	5	8	1	0	1	2	5	8
71 - 31	2	S	5.0000	71	141	Y	3	10	0	0	0	0	3	10
71 - 31	2	S	5.0000	71	142	Y	6	4	0	1	0	0	7	4
71 - 31	2	S	5.0000	72	143	Y	6	7	0	0	0	0	6	7
71 - 31	2	S	5.0000	72	144	Y	8	6	0	0	0	0	8	6
71 - 31	2	S	5.0000	73	145	Y	6	6	0	0	0	0	6	6
71 - 31	2	S	5.0000	73	146	Y	7	6	0	0	0	0	7	6
71 - 31	2	S	5.0000	74	147	Y	4	6	0	0	0	0	5	6
71 - 31	2	S	5.0000	74	148	Y	4	8	0	0	0	0	4	8
71 - 31	2	S	5.0000	75	149	Y	5	8	0	0	0	0	5	8
71 - 31	2	S	5.0000	75	150	Y	5	6	0	0	0	0	5	6
71 - 31	2	S	5.0000	76	151	Y	7	5	0	0	0	0	8	5
71 - 31	2	S	5.0000	76	152	N	0	0	0	0	0	0	0	0
71 - 31	2	S	5.0000	77	153	Y	6	5	0	0	2	4	6	5
71 - 31	2	S	5.0000	77	154	Y	3	6	0	0	0	0	12	10
71 - 31	2	S	5.0000	78	155	Y	5	6	0	0	0	0	5	7
71 - 31	2	S	5.0000	78	156	Y	5	8	0	1	0	0	5	8
71 - 31	2	S	5.0000	79	157	Y	5	9	0	1	1	1	5	9
71 - 31	2	S	5.0000	79	158	Y	9	4	0	0	0	0	9	4
71 - 31	2	S	5.0000	80	159	Y	4	8	0	0	0	0	4	8
71 - 31	2	S	5.0000	80	160	Y	8	3	0	0	0	0	8	3

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	2	S	.0002	11	21	Y	5	4	1	1	2	0	5	4
TEM31	2	S	.0002	11	22	Y	3	7	3	6	0	0	6	8
TEM31	2	S	.0002	12	23	Y	4	3	0	0	4	3	5	5
TEM31	2	S	.0002	12	24	Y	4	4	4	4	0	0	8	6
TEM31	2	S	.0002	13	25	Y	4	3	0	0	4	1	5	3
TEM31	2	S	.0002	13	26	Y	4	7	3	6	0	0	5	9
TEM31	2	S	.0002	14	27	Y	6	5	6	5	0	0	7	6
TEM31	2	S	.0002	14	28	Y	4	5	4	4	0	0	4	8
TEM31	2	S	.0002	15	29	Y	3	7	2	3	0	0	3	7
TEM31	2	S	.0002	15	30	Y	6	0	5	0	0	0	9	5
TEM31	2	S	.0002	16	31	Y	2	2	2	2	0	0	6	5
TEM31	2	S	.0002	16	32	N	0	0	0	0	0	0	0	0
TEM31	2	S	.0002	17	33	Y	4	5	0	2	3	3	4	5
TEM31	2	S	.0002	17	34	Y	1	3	0	1	1	2	4	7
TEM31	2	S	.0002	18	35	Y	6	3	6	3	0	0	8	4
TEM31	2	S	.0002	18	36	Y	4	3	4	3	0	0	7	5
TEM31	2	S	.0002	19	37	Y	6	4	0	0	4	2	6	4
TEM31	2	S	.0002	19	38	Y	4	4	3	3	0	0	5	7
TEM31	2	S	.0002	20	39	Y	5	3	5	3	0	0	7	4
TEM31	2	S	.0002	20	40	Y	3	9	3	9	0	0	3	11
CNTRL31	2	M	0.0000	1	1	Y	3	7	0	0	0	1	3	7
CNTRL31	2	M	0.0000	1	2	Y	8	5	0	0	1	0	8	6
CNTRL31	2	M	0.0000	2	3	Y	7	9	0	0	0	0	7	9
CNTRL31	2	M	0.0000	2	4	Y	7	6	0	0	0	0	7	6
CNTRL31	2	M	0.0000	3	5	Y	2	8	1	1	0	0	2	8
CNTRL31	2	M	0.0000	3	6	Y	1	1	0	0	0	0	1	7
CNTRL31	2	M	0.0000	4	7	Y	2	9	0	1	0	0	2	9
CNTRL31	2	M	0.0000	4	8	Y	5	5	0	0	0	1	5	7
CNTRL31	2	M	0.0000	5	9	Y	7	7	0	0	0	0	7	7
CNTRL31	2	M	0.0000	5	10	Y	6	7	0	0	1	2	6	7
CNTRL31	2	M	0.0000	6	11	Y	5	9	0	0	0	0	5	9
CNTRL31	2	M	0.0000	6	12	Y	8	7	0	0	0	0	13	11
CNTRL31	2	M	0.0000	7	13	Y	7	4	0	0	0	0	7	4
CNTRL31	2	M	0.0000	7	14	Y	3	11	0	0	0	0	3	11
CNTRL31	2	M	0.0000	8	15	Y	6	5	0	0	0	0	6	5
CNTRL31	2	M	0.0000	8	16	Y	5	6	0	0	0	0	6	6
CNTRL31	2	M	0.0000	9	17	Y	5	5	0	0	1	0	5	5
CNTRL31	2	M	0.0000	9	18	Y	2	5	0	0	0	0	2	9
CNTRL31	2	M	0.0000	10	19	Y	5	9	0	1	0	0	5	9
CNTRL31	2	M	0.0000	10	20	Y	0	1	0	0	0	0	5	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71 - 31	2	M	.0300	41	81	Y	9	4	0	0	0	0	9	4
71 - 31	2	M	.0300	41	82	Y	7	4	0	0	0	0	7	4
71 - 31	2	M	.0300	42	83	Y	5	5	0	0	0	1	5	6
71 - 31	2	M	.0300	42	84	Y	6	7	0	0	0	0	6	7
71 - 31	2	M	.0300	43	85	Y	3	3	2	0	0	1	6	7
71 - 31	2	M	.0300	43	86	Y	6	6	0	0	0	0	6	6
71 - 31	2	M	.0300	44	87	Y	7	5	0	0	0	0	7	5
71 - 31	2	M	.0300	44	88	Y	4	8	0	0	0	0	5	8
71 - 31	2	M	.0300	45	89	Y	8	6	0	0	0	0	8	6
71 - 31	2	M	.0300	45	90	Y	4	3	0	0	0	0	4	6
71 - 31	2	M	.0300	46	91	Y	4	7	0	0	0	1	4	7
71 - 31	2	M	.0300	46	92	Y	4	6	0	1	0	0	4	7
71 - 31	2	M	.0300	47	93	Y	6	7	0	0	0	0	7	7
71 - 31	2	M	.0300	47	94	Y	7	5	3	0	2	0	7	5
71 - 31	2	M	.0300	48	95	N	0	0	0	0	0	0	0	0
71 - 31	2	M	.0300	48	96	N	0	0	0	0	0	0	0	0
71 - 31	2	M	.0300	49	97	Y	8	6	0	0	0	0	8	7
71 - 31	2	M	.0300	49	98	Y	2	9	0	0	0	0	2	9
71 - 31	2	M	.0300	50	99	Y	3	11	0	0	0	0	3	11
71 - 31	2	M	.0300	50	100	N	0	0	0	0	0	0	0	0
71 - 31	2	M	2.5000	51	101	Y	3	9	0	0	0	0	3	10
71 - 31	2	M	2.5000	51	102	Y	5	3	1	0	0	1	6	6
71 - 31	2	M	2.5000	52	103	Y	5	7	0	0	0	0	5	7
71 - 31	2	M	2.5000	52	104	Y	1	0	1	0	0	0	8	4
71 - 31	2	M	2.5000	53	105	Y	1	5	0	1	0	0	8	6
71 - 31	2	M	2.5000	53	106	Y	5	9	0	1	0	1	6	9
71 - 31	2	M	2.5000	54	107	Y	3	9	0	0	0	0	3	9
71 - 31	2	M	2.5000	54	108	Y	3	8	0	0	0	0	5	8
71 - 31	2	M	2.5000	55	109	Y	3	4	1	1	0	0	5	5
71 - 31	2	M	2.5000	55	110	Y	7	3	0	0	0	0	7	6
71 - 31	2	M	2.5000	56	111	Y	6	8	0	0	0	0	6	8
71 - 31	2	M	2.5000	56	112	Y	3	6	0	0	0	0	3	9
71 - 31	2	M	2.5000	57	113	Y	7	5	0	1	0	0	8	5
71 - 31	2	M	2.5000	57	114	Y	7	6	2	2	0	0	7	6
71 - 31	2	M	2.5000	58	115	N	0	0	0	0	0	0	0	0
71 - 31	2	M	2.5000	58	116	Y	9	6	0	0	1	0	10	6
71 - 31	2	M	2.5000	59	117	Y	7	4	0	0	0	0	7	5
71 - 31	2	M	2.5000	59	118	Y	4	6	0	0	0	0	4	6
71 - 31	2	M	2.5000	60	119	Y	6	6	0	0	0	0	6	6
71 - 31	2	M	2.5000	60	120	Y	1	0	1	0	0	0	13	10

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71 - 31	2	M	5.0000	61	121	Y	4	8	0	0	0	0	4	8
71 - 31	2	M	5.0000	61	122	Y	8	6	0	0	0	0	8	6
71 - 31	2	M	5.0000	62	123	Y	5	7	0	0	1	0	5	7
71 - 31	2	M	5.0000	62	124	Y	7	6	0	0	0	0	7	6
71 - 31	2	M	5.0000	63	125	Y	3	10	0	0	0	0	4	12
71 - 31	2	M	5.0000	63	126	Y	0	4	0	0	0	0	2	7
71 - 31	2	M	5.0000	64	127	Y	9	5	0	0	0	0	9	5
71 - 31	2	M	5.0000	64	128	Y	11	3	0	0	0	0	11	3
71 - 31	2	M	5.0000	65	129	Y	11	2	0	0	0	0	11	4
71 - 31	2	M	5.0000	65	130	Y	8	4	0	0	0	0	8	4
71 - 31	2	M	5.0000	66	131	Y	7	7	0	0	0	0	8	7
71 - 31	2	M	5.0000	66	132	Y	8	6	1	0	0	0	8	7
71 - 31	2	M	5.0000	67	133	Y	4	8	0	2	0	0	4	12
71 - 31	2	M	5.0000	67	134	Y	2	9	0	0	1	2	2	12
71 - 31	2	M	5.0000	68	135	Y	8	5	0	0	1	1	8	5
71 - 31	2	M	5.0000	68	136	Y	3	5	0	0	0	0	3	7
71 - 31	2	M	5.0000	69	137	Y	7	3	1	0	0	0	8	3
71 - 31	2	M	5.0000	69	138	Y	6	1	0	0	0	0	8	3
71 - 31	2	M	5.0000	70	139	Y	7	6	1	0	0	0	7	6
71 - 31	2	M	5.0000	70	140	Y	0	1	0	0	0	0	5	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	3	S	0.0000	1	1	Y	1	5	0	1	0	0	7	6
CNTRL31	3	S	0.0000	1	2	Y	7	8	1	1	0	0	7	8
CNTRL31	3	S	0.0000	2	3	Y	4	7	0	0	0	0	4	8
CNTRL31	3	S	0.0000	2	4	Y	6	4	0	0	0	0	6	5
CNTRL31	3	S	0.0000	3	5	Y	8	3	0	0	1	0	8	3
CNTRL31	3	S	0.0000	3	6	Y	7	6	0	0	1	2	8	6
CNTRL31	3	S	0.0000	4	7	Y	8	2	1	0	0	0	8	3
CNTRL31	3	S	0.0000	4	8	Y	8	4	1	0	0	0	4	8
CNTRL31	3	S	0.0000	5	9	Y	4	3	1	0	1	0	4	7
CNTRL31	3	S	0.0000	5	10	Y	4	6	0	0	0	0	4	6
CNTRL31	3	S	0.0000	6	11	Y	5	8	1	0	0	0	5	8
CNTRL31	3	S	0.0000	6	12	Y	7	6	0	0	0	0	7	6
CNTRL31	3	S	0.0000	7	13	Y	1	8	0	0	0	0	1	9
CNTRL31	3	S	0.0000	7	14	Y	6	6	0	0	1	0	6	7
CNTRL31	3	S	0.0000	8	15	Y	6	5	0	0	0	0	6	7
CNTRL31	3	S	0.0000	8	16	Y	6	5	0	0	0	0	8	11
CNTRL31	3	S	0.0000	9	17	Y	3	6	1	2	0	0	3	7
CNTRL31	3	S	0.0000	9	18	Y	3	1	1	1	0	0	4	6
CNTRL31	3	S	0.0000	10	19	Y	6	6	0	0	0	0	6	6
CNTRL31	3	S	0.0000	10	20	Y	4	6	0	0	0	0	4	7
71 - 31	3	S	.0300	51	101	Y	2	2	0	0	1	0	10	5
71 - 31	3	S	.0300	51	102	Y	8	6	0	0	0	0	8	7
71 - 31	3	S	.0300	52	103	Y	5	4	0	0	0	0	5	6
71 - 31	3	S	.0300	52	104	Y	6	5	1	1	1	1	8	6
71 - 31	3	S	.0300	53	105	Y	2	2	0	0	1	0	6	5
71 - 31	3	S	.0300	53	106	Y	3	8	0	0	0	5	3	8
71 - 31	3	S	.0300	54	107	Y	8	4	0	0	0	0	8	5
71 - 31	3	S	.0300	54	108	Y	2	2	0	0	0	0	4	6
71 - 31	3	S	.0300	55	109	Y	1	5	1	2	0	0	4	8
71 - 31	3	S	.0300	55	110	Y	4	7	0	0	0	0	4	9
71 - 31	3	S	.0300	56	111	Y	6	7	0	0	0	1	7	7
71 - 31	3	S	.0300	56	112	Y	8	4	0	0	0	0	9	4
71 - 31	3	S	.0300	57	113	Y	7	7	0	0	0	0	7	7
71 - 31	3	S	.0300	57	114	Y	8	6	0	0	0	0	9	7
71 - 31	3	S	.0300	58	115	Y	4	8	0	0	0	0	4	9
71 - 31	3	S	.0300	58	116	Y	8	5	0	0	0	0	8	7
71 - 31	3	S	.0300	59	117	Y	6	7	0	0	0	0	6	7
71 - 31	3	S	.0300	59	118	Y	6	3	0	1	0	0	8	4
71 - 31	3	S	.0300	60	119	Y	9	3	0	0	1	0	9	5
71 - 31	3	S	.0300	60	120	Y	8	6	0	0	0	0	8	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-31 SORBITOL

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71 - 31	3	S	2.5000	61	121	Y	6	10	0	0	3	0	6	10
71 - 31	3	S	2.5000	61	122	Y	6	5	0	0	0	0	6	5
71 - 31	3	S	2.5000	62	123	Y	3	7	0	0	0	0	5	7
71 - 31	3	S	2.5000	62	124	Y	8	6	0	0	0	0	8	6
71 - 31	3	S	2.5000	63	125	Y	5	9	1	0	0	4	5	9
71 - 31	3	S	2.5000	63	126	Y	6	6	0	0	1	0	6	6
71 - 31	3	S	2.5000	64	127	Y	9	5	1	0	0	0	9	5
71 - 31	3	S	2.5000	64	128	Y	5	9	0	0	0	0	5	10
71 - 31	3	S	2.5000	65	129	Y	3	8	0	0	0	0	3	9
71 - 31	3	S	2.5000	65	130	Y	6	6	1	0	0	0	7	6
71 - 31	3	S	2.5000	66	131	Y	9	5	0	0	0	0	9	5
71 - 31	3	S	2.5000	66	132	Y	7	7	0	0	1	0	9	9
71 - 31	3	S	2.5000	67	133	Y	8	6	0	0	0	0	8	7
71 - 31	3	S	2.5000	67	134	Y	8	0	1	0	0	0	10	5
71 - 31	3	S	2.5000	68	135	Y	7	5	0	0	0	0	7	6
71 - 31	3	S	2.5000	68	136	Y	6	7	0	0	0	0	6	7
71 - 31	3	S	2.5000	69	137	Y	7	6	0	0	0	0	7	6
71 - 31	3	S	2.5000	69	138	Y	6	6	0	0	0	0	6	6
71 - 31	3	S	2.5000	70	139	Y	7	5	0	0	0	1	7	5
71 - 31	3	S	2.5000	70	140	Y	8	4	1	0	3	1	9	4
71 - 31	3	S	5.0000	71	141	Y	5	9	0	0	0	0	5	10
71 - 31	3	S	5.0000	71	142	Y	5	7	1	1	0	0	5	7
71 - 31	3	S	5.0000	72	143	N	0	0	0	0	0	0	0	0
71 - 31	3	S	5.0000	72	144	Y	5	5	0	1	0	0	6	5
71 - 31	3	S	5.0000	73	145	Y	7	6	0	0	0	0	7	6
71 - 31	3	S	5.0000	73	146	Y	7	6	0	0	0	0	7	6
71 - 31	3	S	5.0000	74	147	Y	8	4	1	0	0	0	9	4
71 - 31	3	S	5.0000	74	148	Y	3	6	0	0	0	0	3	7
71 - 31	3	S	5.0000	75	149	Y	3	8	0	0	0	0	3	9
71 - 31	3	S	5.0000	75	150	Y	4	5	0	0	0	0	4	8
71 - 31	3	S	5.0000	76	151	Y	3	9	0	0	0	0	3	9
71 - 31	3	S	5.0000	76	152	N	0	0	0	0	0	0	0	0
71 - 31	3	S	5.0000	77	153	Y	9	2	0	0	0	0	9	3
71 - 31	3	S	5.0000	77	154	Y	7	5	0	0	0	1	7	5
71 - 31	3	S	5.0000	78	155	Y	7	4	1	0	0	0	7	4
71 - 31	3	S	5.0000	78	156	Y	6	1	0	0	0	0	6	7
71 - 31	3	S	5.0000	79	157	Y	6	9	0	0	0	0	6	9
71 - 31	3	S	5.0000	79	158	Y	5	10	0	1	0	0	6	10
71 - 31	3	S	5.0000	80	159	Y	6	6	0	0	0	0	9	7
71 - 31	3	S	5.0000	80	160	Y	3	9	0	0	0	0	3	9

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	3	S	.0002	11	21	Y	2	4	0	0	1	1	3	7
TEM31	3	S	.0002	11	22	Y	4	8	4	8	0	0	4	9
TEM31	3	S	.0002	12	23	Y	6	7	5	5	0	0	6	7
TEM31	3	S	.0002	12	24	Y	4	4	4	4	0	0	6	7
TEM31	3	S	.0002	13	25	Y	7	2	0	0	7	2	10	3
TEM31	3	S	.0002	13	26	Y	8	1	6	1	1	0	8	1
TEM31	3	S	.0002	14	27	Y	7	3	7	2	0	0	8	4
TEM31	3	S	.0002	14	28	Y	5	3	5	3	0	0	8	5
TEM31	3	S	.0002	15	29	Y	4	7	3	5	0	0	5	7
TEM31	3	S	.0002	15	30	Y	4	9	2	5	0	0	4	10
TEM31	3	S	.0002	16	31	Y	1	1	1	1	0	0	5	8
TEM31	3	S	.0002	16	32	Y	2	0	2	0	0	0	8	5
TEM31	3	S	.0002	17	33	Y	3	4	3	4	0	0	7	5
TEM31	3	S	.0002	17	34	Y	4	9	3	5	0	0	4	10
TEM31	3	S	.0002	18	35	Y	5	4	5	4	0	0	5	7
TEM31	3	S	.0002	18	36	Y	3	3	3	3	0	0	6	8
TEM31	3	S	.0002	19	37	Y	5	5	5	5	0	0	6	6
TEM31	3	S	.0002	19	38	Y	3	4	0	0	3	4	7	4
TEM31	3	S	.0002	20	39	Y	1	3	1	3	0	0	4	7
TEM31	3	S	.0002	20	40	Y	7	4	4	3	1	0	7	6
CNTRL31	3	M	0.0000	1	1	Y	1	5	0	1	0	0	7	6
CNTRL31	3	M	0.0000	1	2	Y	7	8	1	1	0	0	7	8
CNTRL31	3	M	0.0000	2	3	Y	4	7	0	0	0	0	4	8
CNTRL31	3	M	0.0000	2	4	Y	6	4	0	0	0	0	6	5
CNTRL31	3	M	0.0000	3	5	Y	8	3	0	0	1	0	8	3
CNTRL31	3	M	0.0000	3	6	Y	7	6	0	0	1	2	8	6
CNTRL31	3	M	0.0000	4	7	Y	8	2	1	0	0	0	8	3
CNTRL31	3	M	0.0000	4	8	Y	8	4	1	0	0	0	4	8
CNTRL31	3	M	0.0000	5	9	Y	4	3	1	0	1	0	4	7
CNTRL31	3	M	0.0000	5	10	Y	4	6	0	0	0	0	4	6
CNTRL31	3	M	0.0000	6	11	Y	5	8	1	0	0	0	5	8
CNTRL31	3	M	0.0000	6	12	Y	7	6	0	0	0	0	7	6
CNTRL31	3	M	0.0000	7	13	Y	1	8	0	0	0	0	1	9
CNTRL31	3	M	0.0000	7	14	Y	6	6	0	0	1	0	6	7
CNTRL31	3	M	0.0000	8	15	Y	6	5	0	0	0	0	6	7
CNTRL31	3	M	0.0000	8	16	Y	6	5	0	0	0	0	8	11
CNTRL31	3	M	0.0000	9	17	Y	3	6	1	2	0	0	3	7
CNTRL31	3	M	0.0000	9	18	Y	3	1	1	1	0	0	4	6
CNTRL31	3	M	0.0000	10	19	Y	6	6	0	0	0	0	6	6
CNTRL31	3	M	0.0000	10	20	Y	4	6	0	0	0	0	4	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	3	M	.0300	41	81	Y	6	5	1	1	0	0	8	5
71-31	3	M	.0300	41	82	Y	5	2	0	0	0	0	7	2
71-31	3	M	.0300	42	83	Y	3	7	0	1	0	0	4	7
71-31	3	M	.0300	42	84	Y	8	6	0	0	0	0	8	7
71-31	3	M	.0300	43	85	Y	4	9	0	0	0	0	4	9
71-31	3	M	.0300	43	86	Y	4	6	0	0	1	0	5	7
71-31	3	M	.0300	44	87	Y	5	7	0	1	0	0	6	8
71-31	3	M	.0300	44	88	Y	5	7	0	0	0	0	5	7
71-31	3	M	.0300	45	89	Y	6	4	0	0	0	0	6	5
71-31	3	M	.0300	45	90	Y	6	5	1	0	0	0	6	5
71-31	3	M	.0300	46	91	Y	7	5	0	0	0	0	7	5
71-31	3	M	.0300	46	92	Y	5	8	0	0	1	0	5	13
71-31	3	M	.0300	47	93	Y	6	7	0	0	0	0	6	7
71-31	3	M	.0300	47	94	Y	2	4	0	0	0	0	4	6
71-31	3	M	.0300	48	95	Y	3	8	0	0	0	1	4	8
71-31	3	M	.0300	48	96	Y	1	0	1	0	0	0	7	1
71-31	3	M	.0300	49	97	Y	6	4	0	1	0	0	6	4
71-31	3	M	.0300	49	98	Y	6	7	1	0	0	0	7	8
71-31	3	M	.0300	50	99	Y	7	4	0	0	0	0	7	4
71-31	3	M	.0300	50	100	Y	4	5	1	1	0	0	6	7
71-31	3	M	2.5000	51	101	Y	5	7	0	0	0	0	7	7
71-31	3	M	2.5000	51	102	Y	5	5	0	0	0	0	7	5
71-31	3	M	2.5000	52	103	Y	6	7	2	0	0	1	6	8
71-31	3	M	2.5000	52	104	Y	3	3	1	0	0	0	6	8
71-31	3	M	2.5000	53	105	Y	4	6	0	0	0	0	5	6
71-31	3	M	2.5000	53	106	Y	5	6	0	0	1	3	5	8
71-31	3	M	2.5000	54	107	Y	5	4	0	0	0	0	6	5
71-31	3	M	2.5000	54	108	Y	7	6	1	0	0	0	8	6
71-31	3	M	2.5000	55	109	Y	7	5	0	0	0	0	7	5
71-31	3	M	2.5000	55	110	Y	7	6	0	0	0	0	7	6
71-31	3	M	2.5000	56	111	Y	6	6	2	0	0	0	7	6
71-31	3	M	2.5000	56	112	Y	3	10	0	0	0	0	4	13
71-31	3	M	2.5000	57	113	Y	8	4	0	0	0	0	9	4
71-31	3	M	2.5000	57	114	Y	4	8	0	0	0	0	4	8
71-31	3	M	2.5000	58	115	Y	7	7	0	0	0	1	8	7
71-31	3	M	2.5000	58	116	Y	7	5	0	0	0	0	8	5
71-31	3	M	2.5000	59	117	Y	9	5	0	0	0	0	5	9
71-31	3	M	2.5000	59	118	Y	6	6	0	0	0	1	6	6
71-31	3	M	2.5000	60	119	Y	10	5	0	0	0	0	10	5
71-31	3	M	2.5000	60	120	Y	8	3	1	0	0	0	9	4

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	3	M	5.0000	61	121	Y	6	7	0	0	0	0	6	7
71-31	3	M	5.0000	61	122	Y	8	4	0	0	1	0	10	4
71-31	3	M	5.0000	62	123	Y	4	2	0	0	0	0	5	6
71-31	3	M	5.0000	62	124	Y	4	8	1	1	0	0	3	9
71-31	3	M	5.0000	63	125	Y	5	5	0	0	0	0	9	7
71-31	3	M	5.0000	63	126	Y	6	8	0	0	0	0	6	8
71-31	3	M	5.0000	64	127	Y	7	8	0	0	0	0	7	8
71-31	3	M	5.0000	64	128	Y	7	4	0	0	1	0	7	4
71-31	3	M	5.0000	65	129	Y	7	5	0	0	1	0	7	5
71-31	3	M	5.0000	65	130	Y	6	6	0	0	0	0	7	6
71-31	3	M	5.0000	66	131	Y	6	7	0	0	0	0	6	8
71-31	3	M	5.0000	66	132	Y	7	7	0	0	0	0	9	7
71-31	3	M	5.0000	67	133	Y	8	6	0	0	0	0	8	6
71-31	3	M	5.0000	67	134	Y	8	5	0	1	1	0	8	5
71-31	3	M	5.0000	68	135	Y	8	6	0	0	0	0	8	6
71-31	3	M	5.0000	68	136	Y	5	6	0	0	1	0	7	6
71-31	3	M	5.0000	69	137	Y	5	6	1	0	0	0	5	6
71-31	3	M	5.0000	69	138	Y	6	8	0	1	0	0	6	8
71-31	3	M	5.0000	70	139	Y	8	7	0	0	3	1	8	7
71-31	3	M	5.0000	70	140	Y	1	2	1	0	0	0	8	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	4	S	0.0000	1	1	Y	5	6	1	0	0	0	8	7
CNTRL31	4	S	0.0000	1	2	Y	6	7	0	0	0	0	6	7
CNTRL31	4	S	0.0000	2	3	Y	3	11	0	2	2	0	3	11
CNTRL31	4	S	0.0000	2	4	Y	1	1	0	0	0	0	3	7
CNTRL31	4	S	0.0000	3	5	Y	4	8	0	0	2	2	4	10
CNTRL31	4	S	0.0000	3	6	Y	6	3	0	0	1	0	7	6
CNTRL31	4	S	0.0000	4	7	Y	5	2	0	0	1	0	9	4
CNTRL31	4	S	0.0000	4	8	Y	5	10	0	0	0	0	5	10
CNTRL31	4	S	0.0000	5	9	Y	6	6	0	0	0	0	6	7
CNTRL31	4	S	0.0000	5	10	Y	7	7	0	0	0	1	7	7
CNTRL31	4	S	0.0000	6	11	Y	8	4	0	0	0	0	8	4
CNTRL31	4	S	0.0000	6	12	Y	7	5	3	0	0	0	8	5
CNTRL31	4	S	0.0000	7	13	Y	7	4	0	0	0	0	7	4
CNTRL31	4	S	0.0000	7	14	Y	8	6	0	0	1	0	8	6
CNTRL31	4	S	0.0000	8	15	Y	8	6	0	0	0	0	8	6
CNTRL31	4	S	0.0000	8	16	Y	4	9	0	0	0	2	5	10
CNTRL31	4	S	0.0000	9	17	Y	6	5	0	0	0	1	7	5
CNTRL31	4	S	0.0000	9	18	Y	7	5	0	0	0	0	8	4
CNTRL31	4	S	0.0000	10	19	Y	6	7	0	0	0	0	6	7
CNTRL31	4	S	0.0000	10	20	Y	7	3	0	0	0	0	7	3
71-31	4	S	.0300	51	101	Y	2	0	0	0	0	0	4	8
71-31	4	S	.0300	51	102	Y	2	2	0	1	0	0	12	4
71-31	4	S	.0300	52	103	Y	5	4	0	0	0	0	5	5
71-31	4	S	.0300	52	104	Y	5	6	2	0	0	0	5	6
71-31	4	S	.0300	53	105	Y	7	4	0	0	0	0	7	4
71-31	4	S	.0300	53	106	Y	7	4	0	0	0	0	7	4
71-31	4	S	.0300	54	107	Y	7	5	0	0	0	0	7	5
71-31	4	S	.0300	54	108	Y	5	6	0	0	0	0	5	6
71-31	4	S	.0300	55	109	Y	4	6	0	0	1	2	4	8
71-31	4	S	.0300	55	110	Y	9	4	0	1	0	0	9	4
71-31	4	S	.0300	56	111	Y	2	9	1	0	0	0	2	10
71-31	4	S	.0300	56	112	Y	6	5	0	2	1	0	6	5
71-31	4	S	.0300	57	113	Y	6	6	1	0	0	0	7	6
71-31	4	S	.0300	57	114	Y	6	6	1	0	0	0	6	6
71-31	4	S	.0300	58	115	Y	1	1	0	0	0	0	4	6
71-31	4	S	.0300	58	116	Y	4	5	0	0	0	0	5	6
71-31	4	S	.0300	59	117	Y	5	7	0	0	1	0	5	7
71-31	4	S	.0300	59	118	Y	7	7	0	0	1	0	7	7
71-31	4	S	.0300	60	119	Y	6	5	0	0	0	0	6	5
71-31	4	S	.0300	60	120	Y	3	8	0	0	0	0	3	8

MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	4	S	.0002	11	21	Y	1	1	0	0	1	1	3	9
TEM31	4	S	.0002	11	22	Y	2	2	2	2	0	0	8	4
TEM31	4	S	.0002	12	23	Y	2	1	2	1	0	0	7	4
TEM31	4	S	.0002	12	24	Y	2	2	2	2	0	0	11	3
TEM31	4	S	.0002	13	25	Y	0	2	0	2	0	0	8	12
TEM31	4	S	.0002	13	26	Y	4	4	4	4	0	0	7	4
TEM31	4	S	.0002	14	27	Y	3	2	3	2	0	0	6	4
TEM31	4	S	.0002	14	28	Y	2	5	1	5	0	0	5	8
TEM31	4	S	.0002	15	29	Y	1	4	1	3	0	0	1	10
TEM31	4	S	.0002	15	30	Y	0	1	0	1	0	0	5	7
TEM31	4	S	.0002	16	31	Y	1	1	1	1	0	0	5	7
TEM31	4	S	.0002	16	32	Y	0	2	0	2	0	0	5	12
TEM31	4	S	.0002	17	33	Y	1	1	0	1	1	0	8	8
TEM31	4	S	.0002	17	34	Y	2	0	1	0	1	0	7	4
TEM31	4	S	.0002	18	35	N	0	0	0	0	0	0	0	0
TEM31	4	S	.0002	18	36	Y	1	1	1	1	0	0	6	6
TEM31	4	S	.0002	19	37	Y	3	0	3	0	0	0	5	3
TEM31	4	S	.0002	19	38	Y	0	2	0	2	0	0	7	8
TEM31	4	S	.0002	20	39	N	0	0	0	0	0	0	0	0
TEM31	4	S	.0002	20	40	Y	2	2	0	0	2	2	5	5
CNTRL31	4	M	0.0000	1	1	Y	5	6	1	0	0	0	8	7
CNTRL31	4	M	0.0000	1	2	Y	6	7	0	0	0	0	6	7
CNTRL31	4	M	0.0000	2	3	Y	3	11	0	2	2	0	3	11
CNTRL31	4	M	0.0000	2	4	Y	1	1	0	0	0	0	3	7
CNTRL31	4	M	0.0000	3	5	Y	4	8	0	0	2	2	4	10
CNTRL31	4	M	0.0000	3	6	Y	6	3	0	0	1	0	7	6
CNTRL31	4	M	0.0000	4	7	Y	5	2	0	0	1	0	9	4
CNTRL31	4	M	0.0000	4	8	Y	5	10	0	0	0	0	5	10
CNTRL31	4	M	0.0000	5	9	Y	6	6	0	0	0	0	6	7
CNTRL31	4	M	0.0000	5	10	Y	7	7	0	0	0	1	7	7
CNTRL31	4	M	0.0000	6	11	Y	8	4	0	0	0	0	8	4
CNTRL31	4	M	0.0000	6	12	Y	7	5	3	0	0	0	8	5
CNTRL31	4	M	0.0000	7	13	Y	7	4	0	0	0	0	7	4
CNTRL31	4	M	0.0000	7	14	Y	8	6	0	0	1	0	8	6
CNTRL31	4	M	0.0000	8	15	Y	8	6	0	0	0	0	8	6
CNTRL31	4	M	0.0000	8	16	Y	4	9	0	0	0	2	5	10
CNTRL31	4	M	0.0000	9	17	Y	6	5	0	0	0	1	7	5
CNTRL31	4	M	0.0000	9	18	Y	7	4	0	0	0	0	8	4
CNTRL31	4	M	0.0000	10	19	Y	6	7	0	0	0	0	6	7
CNTRL31	4	M	0.0000	10	20	Y	7	3	0	0	0	0	7	3

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	4	M	.0300	41	81	Y	6	8	0	0	0	1	7	8
71-31	4	M	.0300	41	82	Y	9	4	0	0	0	2	9	5
71-31	4	M	.0300	42	83	Y	9	4	0	0	0	0	10	4
71-31	4	M	.0300	42	84	Y	5	6	0	0	0	0	5	7
71-31	4	M	.0300	43	85	Y	8	6	0	0	0	0	8	6
71-31	4	M	.0300	43	86	Y	7	6	0	0	1	0	7	8
71-31	4	M	.0300	44	87	Y	5	7	0	0	0	0	6	9
71-31	4	M	.0300	44	88	Y	6	8	0	0	0	1	6	8
71-31	4	M	.0300	45	89	Y	5	8	0	0	0	0	5	8
71-31	4	M	.0300	45	90	Y	9	5	0	1	0	0	9	5
71-31	4	M	.0300	46	91	Y	7	5	0	0	0	0	8	7
71-31	4	M	.0300	46	92	Y	6	7	0	0	0	0	6	7
71-31	4	M	.0300	47	93	Y	4	8	0	0	0	2	4	8
71-31	4	M	.0300	47	94	Y	10	5	0	0	0	0	10	5
71-31	4	M	.0300	48	95	Y	0	1	0	1	0	0	2	8
71-31	4	M	.0300	48	96	Y	6	6	0	0	1	0	6	8
71-31	4	M	.0300	49	97	Y	6	6	0	0	0	1	6	6
71-31	4	M	.0300	49	98	Y	7	5	0	0	0	0	7	6
71-31	4	M	.0300	50	99	Y	6	8	1	0	0	1	6	9
71-31	4	M	.0300	50	100	Y	6	6	1	0	5	5	12	10
71-31	4	M	2.5000	51	101	Y	3	8	0	0	0	0	4	9
71-31	4	M	2.5000	51	102	Y	7	6	0	0	0	0	7	6
71-31	4	M	2.5000	52	103	Y	7	8	0	0	0	0	7	10
71-31	4	M	2.5000	52	104	Y	2	7	0	0	0	0	1	9
71-31	4	M	2.5000	53	105	Y	0	5	0	1	0	0	7	8
71-31	4	M	2.5000	53	106	Y	6	6	0	0	0	0	6	6
71-31	4	M	2.5000	54	107	Y	5	4	0	0	0	0	5	6
71-31	4	M	2.5000	54	108	Y	5	7	0	0	0	0	6	7
71-31	4	M	2.5000	55	109	Y	6	6	0	0	0	0	6	7
71-31	4	M	2.5000	55	110	Y	7	5	0	0	0	0	7	5
71-31	4	M	2.5000	56	111	Y	4	9	0	0	0	0	4	9
71-31	4	M	2.5000	56	112	Y	8	6	0	1	0	0	9	7
71-31	4	M	2.5000	57	113	Y	8	5	0	0	0	0	8	5
71-31	4	M	2.5000	57	114	Y	6	7	0	0	0	0	6	7
71-31	4	M	2.5000	58	115	Y	4	9	0	0	0	1	5	9
71-31	4	M	2.5000	58	116	Y	6	6	0	0	1	0	6	6
71-31	4	M	2.5000	59	117	Y	2	10	0	1	0	0	3	10
71-31	4	M	2.5000	59	118	Y	5	8	0	0	0	1	5	8
71-31	4	M	2.5000	60	119	Y	4	9	0	0	0	0	4	9
71-31	4	M	2.5000	60	120	Y	4	6	0	0	0	0	4	7

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-31 SORBITOL

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	4	M	5.0000	61	121	Y	6	8	0	0	0	0	6	8
71-31	4	M	5.0000	61	122	Y	6	4	1	0	0	0	6	9
71-31	4	M	5.0000	62	123	N	0	0	0	0	0	0	0	0
71-31	4	M	5.0000	62	124	N	0	0	0	0	0	0	0	0
71-31	4	M	5.0000	63	125	Y	6	7	0	0	1	1	6	7
71-31	4	M	5.0000	63	126	Y	7	6	0	0	0	0	7	8
71-31	4	M	5.0000	64	127	Y	5	8	0	0	0	0	5	9
71-31	4	M	5.0000	64	128	Y	4	10	0	0	0	0	4	10
71-31	4	M	5.0000	65	129	Y	5	7	0	0	0	0	5	7
71-31	4	M	5.0000	65	130	Y	8	4	0	0	0	1	8	4
71-31	4	M	5.0000	66	131	Y	8	5	2	0	0	0	9	5
71-31	4	M	5.0000	66	132	N	0	0	0	0	0	0	0	0
71-31	4	M	5.0000	67	133	Y	8	4	0	0	1	1	8	4
71-31	4	M	5.0000	67	134	Y	3	9	1	2	0	0	3	9
71-31	4	M	5.0000	68	135	Y	5	7	0	0	0	0	5	8
71-31	4	M	5.0000	68	136	Y	3	9	1	1	0	0	6	10
71-31	4	M	5.0000	69	137	Y	4	7	0	0	0	0	6	7
71-31	4	M	5.0000	69	138	Y	8	5	2	0	0	0	8	5
71-31	4	M	5.0000	70	139	Y	8	5	1	0	3	1	8	5
71-31	4	M	5.0000	70	140	Y	3	9	1	2	2	1	3	10

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	5	S	0.0000	1	1	Y	5	7	0	0	0	0	7	7
CNTRL31	5	S	0.0000	1	2	Y	11	4	0	0	1	0	11	4
CNTRL31	5	S	0.0000	2	3	Y	5	6	0	0	0	0	5	6
CNTRL31	5	S	0.0000	2	4	Y	1	2	0	0	0	2	1	13
CNTRL31	5	S	0.0000	3	5	Y	5	6	0	1	0	0	5	6
CNTRL31	5	S	0.0000	3	6	Y	7	3	0	0	0	0	8	3
CNTRL31	5	S	0.0000	4	7	Y	6	6	0	1	1	0	6	7
CNTRL31	5	S	0.0000	4	8	Y	2	7	0	0	0	1	2	10
CNTRL31	5	S	0.0000	5	9	Y	8	2	0	1	0	0	8	4
CNTRL31	5	S	0.0000	5	10	Y	5	8	0	1	0	1	5	8
CNTRL31	5	S	0.0000	6	11	Y	4	6	0	0	0	0	5	6
CNTRL31	5	S	0.0000	6	12	Y	2	6	0	2	0	0	3	9
CNTRL31	5	S	0.0000	7	13	Y	6	5	0	0	0	0	6	5
CNTRL31	5	S	0.0000	7	14	Y	8	3	0	0	1	0	9	3
CNTRL31	5	S	0.0000	8	15	Y	4	10	0	0	0	0	4	10
CNTRL31	5	S	0.0000	8	16	Y	5	7	0	0	0	0	5	7
CNTRL31	5	S	0.0000	9	17	Y	3	7	0	0	0	0	3	7
CNTRL31	5	S	0.0000	9	18	Y	4	5	0	0	0	0	4	7
CNTRL31	5	S	0.0000	10	19	Y	9	5	0	0	1	0	9	5
CNTRL31	5	S	0.0000	10	20	Y	3	6	0	0	0	1	5	6
71-31	5	S	.0300	51	101	Y	6	8	0	0	0	0	6	8
71-31	5	S	.0300	51	102	Y	4	9	0	0	0	0	4	9
71-31	5	S	.0300	52	103	Y	7	8	0	0	0	0	7	8
71-31	5	S	.0300	52	104	Y	7	6	0	0	1	0	7	6
71-31	5	S	.0300	53	105	Y	8	8	0	0	0	0	8	8
71-31	5	S	.0300	53	106	Y	12	5	0	0	0	0	12	5
71-31	5	S	.0300	54	107	Y	8	5	0	0	0	0	8	5
71-31	5	S	.0300	54	108	Y	6	5	0	0	0	0	8	5
71-31	5	S	.0300	55	109	Y	6	10	0	0	2	2	6	10
71-31	5	S	.0300	55	110	Y	7	5	0	1	0	0	7	8
71-31	5	S	.0300	56	111	Y	4	9	0	1	0	1	4	9
71-31	5	S	.0300	56	112	Y	4	8	1	0	0	0	4	8
71-31	5	S	.0300	57	113	Y	5	7	0	0	0	0	6	7
71-31	5	S	.0300	57	114	Y	8	4	0	0	0	0	8	4
71-31	5	S	.0300	58	115	Y	3	9	0	0	0	0	3	9
71-31	5	S	.0300	58	116	Y	8	6	1	0	0	0	8	6
71-31	5	S	.0300	59	117	Y	6	5	0	1	0	0	8	5
71-31	5	S	.0300	59	118	Y	7	8	0	0	0	0	7	9
71-31	5	S	.0300	60	119	Y	9	4	0	0	0	0	9	4
71-31	5	S	.0300	60	120	Y	5	8	0	1	0	0	6	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	5	S	2.5000	61	121	Y	7	6	1	1	0	1	7	6
71-31	5	S	2.5000	61	122	Y	6	8	0	0	0	0	6	9
71-31	5	S	2.5000	62	123	Y	6	5	0	0	0	1	6	5
71-31	5	S	2.5000	62	124	Y	6	6	0	0	0	0	6	6
71-31	5	S	2.5000	63	125	Y	6	8	0	0	0	0	6	8
71-31	5	S	2.5000	63	126	Y	6	5	0	0	1	0	6	6
71-31	5	S	2.5000	64	127	Y	5	7	1	0	0	0	5	7
71-31	5	S	2.5000	64	128	Y	7	5	0	0	0	0	8	6
71-31	5	S	2.5000	65	129	Y	4	8	0	0	0	0	4	8
71-31	5	S	2.5000	65	130	Y	0	2	0	2	0	0	4	8
71-31	5	S	2.5000	66	131	Y	5	4	1	0	0	0	6	6
71-31	5	S	2.5000	66	132	Y	6	6	2	1	2	0	6	7
71-31	5	S	2.5000	67	133	Y	4	4	0	0	1	0	4	5
71-31	5	S	2.5000	67	134	Y	4	9	0	0	0	0	4	9
71-31	5	S	2.5000	68	135	Y	5	7	1	0	0	0	5	7
71-31	5	S	2.5000	68	136	Y	5	7	1	0	0	0	5	8
71-31	5	S	2.5000	69	137	Y	7	4	0	0	0	0	8	4
71-31	5	S	2.5000	69	138	Y	5	9	0	0	0	0	5	9
71-31	5	S	2.5000	70	139	Y	9	5	1	0	0	0	9	5
71-31	5	S	2.5000	70	140	Y	10	3	0	0	0	0	10	3
71-31	5	S	5.0000	71	141	Y	7	5	0	0	0	0	7	5
71-31	5	S	5.0000	71	142	Y	4	9	0	0	0	0	4	9
71-31	5	S	5.0000	72	143	Y	6	5	0	0	2	0	7	5
71-31	5	S	5.0000	72	144	Y	6	8	0	0	0	0	6	8
71-31	5	S	5.0000	73	145	Y	7	7	0	0	0	0	7	7
71-31	5	S	5.0000	73	146	N	0	0	0	0	0	0	0	0
71-31	5	S	5.0000	74	147	Y	9	5	0	0	0	0	9	5
71-31	5	S	5.0000	74	148	Y	6	8	0	0	0	0	6	8
71-31	5	S	5.0000	75	149	Y	6	7	0	0	0	0	7	7
71-31	5	S	5.0000	75	150	Y	4	8	0	1	0	0	5	8
71-31	5	S	5.0000	76	151	Y	5	9	0	0	0	0	6	9
71-31	5	S	5.0000	76	152	N	0	0	0	0	0	0	0	0
71-31	5	S	5.0000	77	153	Y	7	5	0	0	0	0	7	5
71-31	5	S	5.0000	77	154	Y	9	3	0	0	0	0	9	4
71-31	5	S	5.0000	78	155	Y	8	5	0	0	0	0	8	5
71-31	5	S	5.0000	78	156	N	0	0	0	0	0	0	0	0
71-31	5	S	5.0000	79	157	N	0	0	0	0	0	0	0	0
71-31	5	S	5.0000	79	158	Y	5	6	0	1	0	0	5	8
71-31	5	S	5.0000	80	159	Y	5	6	0	0	0	0	5	7
71-31	5	S	5.0000	80	160	Y	7	5	0	1	0	0	7	5

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	5	S	.0002	11	21	Y	7	9	0	0	0	0	7	9
TEM31	5	S	.0002	11	22	Y	6	5	1	1	0	0	6	5
TEM31	5	S	.0002	12	23	Y	5	5	0	0	1	1	5	6
TEM31	5	S	.0002	12	24	Y	3	2	2	2	0	0	6	7
TEM31	5	S	.0002	13	25	Y	2	0	2	0	0	0	9	3
TEM31	5	S	.0002	13	26	Y	5	4	0	0	1	0	6	4
TEM31	5	S	.0002	14	27	Y	2	4	0	0	0	1	3	9
TEM31	5	S	.0002	14	28	Y	5	5	0	3	0	0	5	6
TEM31	5	S	.0002	15	29	Y	7	3	0	0	2	2	7	3
TEM31	5	S	.0002	15	30	Y	8	5	0	0	1	1	8	5
TEM31	5	S	.0002	16	31	Y	6	4	2	3	0	0	6	6
TEM31	5	S	.0002	16	32	N	0	0	0	0	0	0	0	0
TEM31	5	S	.0002	17	33	Y	7	4	3	3	1	1	8	6
TEM31	5	S	.0002	17	34	Y	4	7	2	4	0	0	7	8
TEM31	5	S	.0002	18	35	Y	5	3	2	0	0	1	7	4
TEM31	5	S	.0002	18	36	Y	6	5	0	1	3	1	7	5
TEM31	5	S	.0002	19	37	Y	4	6	1	1	0	0	5	7
TEM31	5	S	.0002	19	38	Y	4	8	0	1	2	4	4	8
TEM31	5	S	.0002	20	39	Y	5	6	1	0	0	1	5	7
TEM31	5	S	.0002	20	40	Y	5	10	1	2	0	0	5	10
CNTRL31	5	M	0.0000	1	1	Y	5	7	0	0	0	0	7	7
CNTRL31	5	M	0.0000	1	2	Y	11	4	0	0	1	0	11	4
CNTRL31	5	M	0.0000	2	3	Y	5	6	0	0	0	0	5	6
CNTRL31	5	M	0.0000	2	4	Y	1	2	0	0	0	2	1	13
CNTRL31	5	M	0.0000	3	5	Y	5	6	0	1	0	0	5	6
CNTRL31	5	M	0.0000	3	6	Y	7	3	0	0	0	0	8	3
CNTRL31	5	M	0.0000	4	7	Y	6	6	0	1	1	0	6	7
CNTRL31	5	M	0.0000	4	8	Y	2	7	0	0	0	1	2	10
CNTRL31	5	M	0.0000	5	9	Y	8	2	0	1	0	0	8	4
CNTRL31	5	M	0.0000	5	10	Y	5	8	0	1	0	1	5	8
CNTRL31	5	M	0.0000	6	11	Y	4	6	0	0	0	0	5	6
CNTRL31	5	M	0.0000	6	12	Y	2	6	0	2	0	0	3	9
CNTRL31	5	M	0.0000	7	13	Y	6	5	0	0	0	0	6	5
CNTRL31	5	M	0.0000	7	14	Y	8	3	0	0	1	0	9	3
CNTRL31	5	M	0.0000	8	15	Y	4	10	0	0	0	0	4	10
CNTRL31	5	M	0.0000	8	16	Y	5	7	0	0	0	0	5	7
CNTRL31	5	M	0.0000	9	17	Y	3	7	0	0	0	0	3	7
CNTRL31	5	M	0.0000	9	18	Y	4	5	0	0	0	0	4	7
CNTRL31	5	M	0.0000	10	19	Y	9	5	0	0	1	0	9	5
CNTRL31	5	M	0.0000	10	20	Y	3	6	0	0	0	1	5	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-31 SORBITOL

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	5	M	.0300	41	81	Y	8	5	0	0	4	1	8	6
71-31	5	M	.0300	41	82	Y	6	5	0	0	0	0	6	5
71-31	5	M	.0300	42	83	Y	9	5	0	0	2	1	9	5
71-31	5	M	.0300	42	84	N	0	0	0	0	0	0	0	0
71-31	5	M	.0300	43	85	Y	6	9	0	0	0	0	6	9
71-31	5	M	.0300	43	86	Y	6	10	1	0	0	0	6	10
71-31	5	M	.0300	44	87	Y	6	9	0	0	0	0	8	9
71-31	5	M	.0300	44	88	Y	5	9	0	0	0	0	8	9
71-31	5	M	.0300	45	89	Y	5	8	1	0	0	0	5	8
71-31	5	M	.0300	45	90	Y	6	8	0	0	0	0	6	9
71-31	5	M	.0300	46	91	Y	5	8	0	0	0	0	5	8
71-31	5	M	.0300	46	92	Y	7	5	0	0	1	2	7	5
71-31	5	M	.0300	47	93	Y	5	10	0	0	1	1	5	10
71-31	5	M	.0300	47	94	Y	6	5	0	0	0	0	6	5
71-31	5	M	.0300	48	95	Y	6	7	0	0	0	0	6	7
71-31	5	M	.0300	48	96	N	0	0	0	0	0	0	0	0
71-31	5	M	.0300	49	97	Y	7	3	0	0	0	0	8	3
71-31	5	M	.0300	49	98	Y	7	4	1	0	0	0	7	4
71-31	5	M	.0300	50	99	Y	5	7	0	0	0	1	5	10
71-31	5	M	.0300	50	100	Y	8	6	0	0	0	0	8	6
71-31	5	M	2.5000	51	101	Y	6	8	0	0	0	0	6	8
71-31	5	M	2.5000	51	102	Y	7	4	0	0	0	0	8	4
71-31	5	M	2.5000	52	103	Y	4	7	0	0	1	0	4	7
71-31	5	M	2.5000	52	104	Y	3	9	1	0	0	2	3	12
71-31	5	M	2.5000	53	105	Y	9	7	1	0	0	0	13	9
71-31	5	M	2.5000	53	106	Y	6	6	0	0	0	0	9	8
71-31	5	M	2.5000	54	107	Y	7	6	0	0	0	0	7	6
71-31	5	M	2.5000	54	108	N	0	0	0	0	0	0	0	0
71-31	5	M	2.5000	55	109	Y	7	6	0	0	0	0	7	7
71-31	5	M	2.5000	55	110	Y	6	10	0	0	0	0	9	11
71-31	5	M	2.5000	56	111	Y	6	7	0	0	1	0	6	7
71-31	5	M	2.5000	56	112	Y	10	1	1	0	0	0	10	3
71-31	5	M	2.5000	57	113	Y	7	10	0	0	0	0	7	10
71-31	5	M	2.5000	57	114	Y	8	8	0	0	0	0	10	8
71-31	5	M	2.5000	58	115	Y	7	7	2	2	0	0	7	7
71-31	5	M	2.5000	58	116	Y	5	8	0	0	0	0	7	8
71-31	5	M	2.5000	59	117	Y	7	5	0	0	0	0	7	5
71-31	5	M	2.5000	59	118	Y	5	8	0	0	0	0	5	8
71-31	5	M	2.5000	60	119	Y	7	8	0	0	0	0	7	8
71-31	5	M	2.5000	60	120	Y	7	5	0	0	0	0	7	5

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	5	M	5.0000	61	121	Y	8	8	0	0	0	0	8	8
71-31	5	M	5.0000	61	122	Y	7	4	0	0	0	0	7	4
71-31	5	M	5.0000	62	123	Y	6	8	0	0	0	1	6	8
71-31	5	M	5.0000	62	124	Y	8	7	0	0	0	0	8	7
71-31	5	M	5.0000	63	125	Y	7	8	2	2	0	1	7	9
71-31	5	M	5.0000	63	126	Y	3	8	0	0	0	0	3	11
71-31	5	M	5.0000	64	127	Y	6	9	0	0	0	0	6	9
71-31	5	M	5.0000	64	128	Y	4	8	0	0	0	1	4	8
71-31	5	M	5.0000	65	129	Y	4	5	0	1	0	1	4	5
71-31	5	M	5.0000	65	130	Y	4	10	0	1	0	0	5	10
71-31	5	M	5.0000	66	131	Y	4	8	0	0	0	0	4	8
71-31	5	M	5.0000	66	132	Y	5	4	0	0	0	0	6	4
71-31	5	M	5.0000	67	133	Y	8	5	1	0	1	0	11	5
71-31	5	M	5.0000	67	134	Y	7	5	1	0	0	1	7	6
71-31	5	M	5.0000	68	135	Y	7	7	0	0	0	0	7	8
71-31	5	M	5.0000	68	136	Y	6	8	0	4	0	0	6	8
71-31	5	M	5.0000	69	137	Y	2	8	2	0	0	0	2	8
71-31	5	M	5.0000	69	138	Y	7	6	0	0	0	0	7	7
71-31	5	M	5.0000	70	139	Y	7	6	0	0	0	0	7	6
71-31	5	M	5.0000	70	140	Y	6	7	0	0	1	2	7	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	6	S	0.0000	1	1	Y	6	5	0	0	0	0	7	5
CNTRL31	6	S	0.0000	1	2	Y	3	9	0	1	0	0	3	10
CNTRL31	6	S	0.0000	2	3	Y	4	11	0	1	0	1	4	11
CNTRL31	6	S	0.0000	2	4	Y	1	2	1	0	0	1	6	7
CNTRL31	6	S	0.0000	3	5	Y	5	8	0	0	0	0	7	8
CNTRL31	6	S	0.0000	3	6	Y	5	4	0	0	2	0	6	6
CNTRL31	6	S	0.0000	4	7	Y	5	3	0	0	0	0	5	9
CNTRL31	6	S	0.0000	4	8	Y	7	5	0	0	0	0	7	5
CNTRL31	6	S	0.0000	5	9	Y	6	10	0	1	0	0	7	10
CNTRL31	6	S	0.0000	5	10	Y	7	4	0	0	1	1	7	5
CNTRL31	6	S	0.0000	6	11	Y	6	6	0	0	3	1	6	6
CNTRL31	6	S	0.0000	6	12	Y	4	8	0	1	0	2	4	8
CNTRL31	6	S	0.0000	7	13	Y	3	9	0	0	0	0	3	10
CNTRL31	6	S	0.0000	7	14	Y	5	8	0	0	0	0	6	9
CNTRL31	6	S	0.0000	8	15	Y	8	6	0	0	0	0	8	6
CNTRL31	6	S	0.0000	8	16	Y	6	8	0	0	1	2	6	8
CNTRL31	6	S	0.0000	9	17	Y	6	6	0	0	0	0	6	7
CNTRL31	6	S	0.0000	9	18	Y	7	5	0	0	0	0	7	5
CNTRL31	6	S	0.0000	10	19	Y	6	6	1	0	0	0	6	6
CNTRL31	6	S	0.0000	10	20	Y	9	4	0	1	0	0	9	4
71-31	6	S	.0300	51	101	Y	2	1	0	0	0	0	3	6
71-31	6	S	.0300	51	102	Y	7	3	0	1	0	0	7	3
71-31	6	S	.0300	52	103	Y	6	3	0	1	0	0	7	3
71-31	6	S	.0300	52	104	Y	8	4	0	0	0	0	8	4
71-31	6	S	.0300	53	105	Y	7	5	1	0	0	0	9	5
71-31	6	S	.0300	53	106	Y	7	6	1	0	0	0	7	6
71-31	6	S	.0300	54	107	Y	5	9	0	0	0	0	5	9
71-31	6	S	.0300	54	108	Y	2	3	1	0	0	0	10	3
71-31	6	S	.0300	55	109	Y	5	6	0	0	2	0	6	7
71-31	6	S	.0300	55	110	Y	4	9	0	1	2	2	4	9
71-31	6	S	.0300	56	111	Y	6	7	0	0	0	0	7	7
71-31	6	S	.0300	56	112	Y	1	10	0	0	0	0	1	10
71-31	6	S	.0300	57	113	Y	5	10	0	0	0	0	6	10
71-31	6	S	.0300	57	114	Y	4	8	0	0	0	0	5	8
71-31	6	S	.0300	58	115	Y	8	4	0	0	0	1	8	4
71-31	6	S	.0300	58	116	Y	5	6	0	1	0	1	5	6
71-31	6	S	.0300	59	117	Y	6	5	0	0	0	0	6	5
71-31	6	S	.0300	59	118	Y	3	8	0	0	0	0	3	9
71-31	6	S	.0300	60	119	Y	7	6	0	0	0	0	7	7
71-31	6	S	.0300	60	120	Y	5	6	0	1	0	0	5	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	6	S	2.5000	61	121	Y	7	6	0	0	0	1	7	6
71-31	6	S	2.5000	61	122	Y	5	7	0	0	0	0	5	7
71-31	6	S	2.5000	62	123	Y	3	9	0	0	0	1	3	10
71-31	6	S	2.5000	62	124	Y	8	6	0	0	0	0	9	9
71-31	6	S	2.5000	63	125	Y	4	7	0	0	0	0	4	8
71-31	6	S	2.5000	63	126	Y	3	7	0	0	0	0	3	10
71-31	6	S	2.5000	64	127	Y	6	7	0	0	0	0	10	7
71-31	6	S	2.5000	64	128	Y	4	2	0	0	0	0	6	7
71-31	6	S	2.5000	65	129	Y	9	5	0	0	0	0	9	5
71-31	6	S	2.5000	65	130	Y	6	7	0	0	0	0	6	7
71-31	6	S	2.5000	66	131	Y	4	8	0	0	0	0	4	8
71-31	6	S	2.5000	66	132	Y	0	5	0	0	0	0	7	5
71-31	6	S	2.5000	67	133	Y	5	6	0	0	0	0	5	8
71-31	6	S	2.5000	67	134	Y	2	8	0	0	0	0	3	9
71-31	6	S	2.5000	68	135	Y	8	6	0	0	1	0	8	7
71-31	6	S	2.5000	68	136	Y	9	5	0	0	0	0	9	5
71-31	6	S	2.5000	69	137	Y	3	10	0	0	0	1	3	10
71-31	6	S	2.5000	69	138	Y	7	4	0	0	0	0	7	5
71-31	6	S	2.5000	70	139	Y	5	7	1	0	0	0	7	7
71-31	6	S	2.5000	70	140	Y	6	8	0	0	2	2	6	9
71-31	6	S	5.0000	71	141	Y	6	7	0	0	0	0	6	7
71-31	6	S	5.0000	71	142	Y	5	8	1	0	0	0	5	8
71-31	6	S	5.0000	72	143	Y	5	7	0	0	0	0	5	7
71-31	6	S	5.0000	72	144	Y	6	3	0	0	0	0	7	3
71-31	6	S	5.0000	73	145	Y	5	9	0	0	0	1	5	9
71-31	6	S	5.0000	73	146	Y	6	6	0	0	0	0	6	6
71-31	6	S	5.0000	74	147	Y	5	7	0	0	0	0	5	7
71-31	6	S	5.0000	74	148	Y	4	5	0	0	0	0	4	6
71-31	6	S	5.0000	75	149	Y	4	7	2	1	0	0	4	8
71-31	6	S	5.0000	75	150	Y	6	6	0	0	0	0	6	6
71-31	6	S	5.0000	76	151	Y	7	6	1	0	0	0	7	6
71-31	6	S	5.0000	76	152	Y	6	8	0	0	0	0	6	9
71-31	6	S	5.0000	77	153	Y	8	5	0	0	1	0	8	5
71-31	6	S	5.0000	77	154	Y	8	6	0	0	2	0	8	6
71-31	6	S	5.0000	78	155	Y	4	7	0	0	1	0	4	9
71-31	6	S	5.0000	78	156	Y	6	7	1	0	0	0	6	10
71-31	6	S	5.0000	79	157	Y	6	4	0	0	0	0	8	4
71-31	6	S	5.0000	79	158	Y	6	2	0	0	0	0	9	4
71-31	6	S	5.0000	80	159	Y	6	4	0	0	0	0	6	4
71-31	6	S	5.0000	80	160	Y	6	6	0	0	0	0	8	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	6	S	.0002	11	21	Y	7	6	0	0	0	0	7	7
TEM31	6	S	.0002	11	22	Y	6	5	0	1	0	0	6	6
TEM31	6	S	.0002	12	23	Y	6	6	0	1	0	1	8	6
TEM31	6	S	.0002	12	24	Y	7	7	0	0	1	0	9	7
TEM31	6	S	.0002	13	25	Y	6	5	0	2	1	0	6	7
TEM31	6	S	.0002	13	26	Y	3	7	0	0	0	0	3	7
TEM31	6	S	.0002	14	27	Y	5	5	0	1	0	0	6	5
TEM31	6	S	.0002	14	28	Y	6	9	4	3	0	0	7	9
TEM31	6	S	.0002	15	29	Y	6	4	0	0	1	0	6	4
TEM31	6	S	.0002	15	30	Y	8	3	0	0	1	0	10	3
TEM31	6	S	.0002	16	31	Y	7	4	2	2	0	0	9	4
TEM31	6	S	.0002	16	32	Y	6	5	1	1	0	0	6	5
TEM31	6	S	.0002	17	33	Y	8	5	3	1	2	1	8	5
TEM31	6	S	.0002	17	34	Y	3	10	0	1	1	1	3	11
TEM31	6	S	.0002	18	35	Y	4	4	1	0	0	0	5	7
TEM31	6	S	.0002	18	36	Y	6	6	1	2	0	0	7	8
TEM31	6	S	.0002	19	37	Y	5	7	0	0	0	0	5	7
TEM31	6	S	.0002	19	38	Y	4	7	0	2	0	0	5	7
TEM31	6	S	.0002	20	39	Y	7	3	0	1	0	0	7	5
TEM31	6	S	.0002	20	40	Y	7	4	0	1	0	0	7	4
CNTRL31	6	M	0.0000	1	1	Y	6	5	0	0	0	0	7	5
CNTRL31	6	M	0.0000	1	2	Y	3	9	0	1	0	0	3	10
CNTRL31	6	M	0.0000	2	3	Y	4	11	0	1	0	1	4	11
CNTRL31	6	M	0.0000	2	4	Y	1	2	1	0	0	1	6	7
CNTRL31	6	M	0.0000	3	5	Y	5	8	0	0	0	0	7	8
CNTRL31	6	M	0.0000	3	6	Y	5	4	0	0	2	0	6	6
CNTRL31	6	M	0.0000	4	7	Y	5	3	0	0	0	0	5	9
CNTRL31	6	M	0.0000	4	8	Y	7	5	0	0	0	0	7	5
CNTRL31	6	M	0.0000	5	9	Y	6	10	0	1	0	0	7	10
CNTRL31	6	M	0.0000	5	10	Y	7	4	0	0	1	1	7	5
CNTRL31	6	M	0.0000	6	11	Y	6	6	0	0	3	1	6	6
CNTRL31	6	M	0.0000	6	12	Y	4	8	0	1	0	2	4	8
CNTRL31	6	M	0.0000	7	13	Y	3	9	0	0	0	0	3	10
CNTRL31	6	M	0.0000	7	14	Y	5	8	0	0	0	0	6	9
CNTRL31	6	M	0.0000	8	15	Y	8	6	0	0	0	0	8	6
CNTRL31	6	M	0.0000	8	16	Y	6	8	0	0	1	2	6	8
CNTRL31	6	M	0.0000	9	17	Y	6	6	0	0	0	0	6	7
CNTRL31	6	M	0.0000	9	18	Y	7	5	0	0	0	0	7	5
CNTRL31	6	M	0.0000	10	19	Y	6	6	1	0	0	0	6	6
CNTRL31	6	M	0.0000	10	20	Y	9	4	0	1	0	0	9	4

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	6	M	.0300	41	81	Y	6	7	0	0	0	0	6	9
71-31	6	M	.0300	41	82	Y	7	5	0	0	3	2	7	5
71-31	6	M	.0300	42	83	Y	6	5	0	0	0	2	7	5
71-31	6	M	.0300	42	84	N	0	0	0	0	0	0	0	0
71-31	6	M	.0300	43	85	Y	8	3	0	0	0	0	9	3
71-31	6	M	.0300	43	86	Y	5	7	0	0	0	0	5	7
71-31	6	M	.0300	44	87	Y	1	6	0	0	0	0	1	8
71-31	6	M	.0300	44	88	Y	6	6	0	0	0	0	6	6
71-31	6	M	.0300	45	89	Y	6	5	1	0	0	0	6	5
71-31	6	M	.0300	45	90	Y	4	8	0	0	0	0	4	9
71-31	6	M	.0300	46	91	Y	3	7	0	0	0	0	3	7
71-31	6	M	.0300	46	92	Y	5	6	0	0	0	0	6	8
71-31	6	M	.0300	47	93	Y	4	8	0	0	0	1	4	10
71-31	6	M	.0300	47	94	Y	6	7	1	1	2	0	6	7
71-31	6	M	.0300	48	95	N	0	0	0	0	0	0	0	0
71-31	6	M	.0300	48	96	N	0	0	0	0	0	0	0	0
71-31	6	M	.0300	49	97	Y	3	6	0	0	1	4	3	6
71-31	6	M	.0300	49	98	Y	6	4	0	0	0	0	8	4
71-31	6	M	.0300	50	99	Y	8	5	0	0	0	0	8	5
71-31	6	M	.0300	50	100	Y	6	6	0	1	0	0	7	6
71-31	6	M	2.5000	51	101	Y	8	5	0	0	1	1	9	5
71-31	6	M	2.5000	51	102	Y	6	7	0	0	0	0	6	7
71-31	6	M	2.5000	52	103	Y	5	8	0	0	0	0	5	9
71-31	6	M	2.5000	52	104	Y	8	4	0	0	0	0	8	4
71-31	6	M	2.5000	53	105	Y	8	5	0	0	1	0	8	5
71-31	6	M	2.5000	53	106	Y	6	7	1	0	0	0	6	7
71-31	6	M	2.5000	54	107	Y	3	10	0	0	0	0	3	11
71-31	6	M	2.5000	54	108	Y	3	6	0	3	0	0	8	7
71-31	6	M	2.5000	55	109	Y	7	6	0	0	0	0	7	6
71-31	6	M	2.5000	55	110	Y	5	5	0	0	0	0	5	5
71-31	6	M	2.5000	56	111	Y	8	5	0	0	0	0	8	5
71-31	6	M	2.5000	56	112	Y	6	6	0	0	0	0	7	6
71-31	6	M	2.5000	57	113	Y	7	8	0	0	0	0	7	8
71-31	6	M	2.5000	57	114	Y	6	8	0	0	1	0	6	8
71-31	6	M	2.5000	58	115	Y	5	6	1	2	0	0	6	8
71-31	6	M	2.5000	58	116	Y	5	8	0	0	1	0	5	8
71-31	6	M	2.5000	59	117	Y	5	7	0	0	0	0	7	7
71-31	6	M	2.5000	59	118	Y	5	4	0	0	0	0	5	4
71-31	6	M	2.5000	60	119	Y	6	6	0	0	0	0	6	6
71-31	6	M	2.5000	60	120	Y	9	4	0	1	0	0	10	4

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	6	M	5.0000	61	121	Y	2	8	0	0	0	0	2	9
71-31	6	M	5.0000	61	122	Y	3	7	0	0	0	0	3	10
71-31	6	M	5.0000	62	123	Y	0	1	0	0	0	0	5	8
71-31	6	M	5.0000	62	124	Y	2	0	0	0	0	0	8	5
71-31	6	M	5.0000	63	125	Y	5	4	0	0	2	1	5	4
71-31	6	M	5.0000	63	126	Y	4	8	0	0	0	0	4	8
71-31	6	M	5.0000	64	127	Y	7	6	0	0	0	0	7	6
71-31	6	M	5.0000	64	128	Y	7	6	0	0	0	0	7	6
71-31	6	M	5.0000	65	129	Y	6	6	0	0	0	1	7	6
71-31	6	M	5.0000	65	130	Y	5	5	0	0	0	0	5	5
71-31	6	M	5.0000	66	131	Y	5	5	0	0	1	1	5	5
71-31	6	M	5.0000	66	132	Y	7	4	0	0	0	0	9	4
71-31	6	M	5.0000	67	133	Y	6	5	1	0	0	0	7	5
71-31	6	M	5.0000	67	134	Y	5	7	0	0	0	0	5	7
71-31	6	M	5.0000	68	135	Y	4	8	0	0	0	0	4	8
71-31	6	M	5.0000	68	136	Y	7	6	0	0	0	0	7	6
71-31	6	M	5.0000	69	137	Y	10	1	0	0	0	0	10	1
71-31	6	M	5.0000	69	138	Y	0	3	0	0	0	1	6	5
71-31	6	M	5.0000	70	139	Y	4	7	0	0	0	0	4	7
71-31	6	M	5.0000	70	140	N	0	0	0	0	0	0	0	0

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	7	S	0.0000	1	1	Y	7	7	0	1	0	0	7	7
CNTRL31	7	S	0.0000	1	2	Y	4	9	0	2	0	0	4	9
CNTRL31	7	S	0.0000	2	3	Y	6	6	0	0	0	0	8	6
CNTRL31	7	S	0.0000	2	4	Y	4	7	1	1	0	0	4	7
CNTRL31	7	S	0.0000	3	5	Y	4	8	0	0	0	0	4	9
CNTRL31	7	S	0.0000	3	6	Y	8	5	1	2	1	1	8	5
CNTRL31	7	S	0.0000	4	7	Y	6	5	0	0	0	0	6	5
CNTRL31	7	S	0.0000	4	8	Y	2	11	0	0	0	0	3	11
CNTRL31	7	S	0.0000	5	9	Y	7	6	0	0	0	0	7	6
CNTRL31	7	S	0.0000	5	10	Y	6	8	0	0	0	1	6	8
CNTRL31	7	S	0.0000	6	11	Y	9	4	0	0	1	0	9	4
CNTRL31	7	S	0.0000	6	12	Y	3	10	0	0	0	0	3	10
CNTRL31	7	S	0.0000	7	13	Y	0	2	0	0	0	0	4	7
CNTRL31	7	S	0.0000	7	14	Y	8	7	1	1	0	0	8	7
CNTRL31	7	S	0.0000	8	15	Y	4	7	2	0	0	1	4	8
CNTRL31	7	S	0.0000	8	16	Y	6	3	1	0	1	2	8	5
CNTRL31	7	S	0.0000	9	17	Y	5	9	0	0	0	1	5	9
CNTRL31	7	S	0.0000	9	18	Y	5	5	0	0	0	0	7	5
CNTRL31	7	S	0.0000	10	19	Y	8	7	1	1	0	0	8	7
CNTRL31	7	S	0.0000	10	20	Y	3	7	0	0	0	0	3	8
71-31	7	S	.0300	51	101	Y	5	6	0	1	0	1	5	6
71-31	7	S	.0300	51	102	Y	3	7	0	0	0	0	5	7
71-31	7	S	.0300	52	103	Y	7	8	0	0	0	1	7	8
71-31	7	S	.0300	52	104	Y	3	6	0	0	0	0	3	6
71-31	7	S	.0300	53	105	Y	6	7	0	0	0	0	7	7
71-31	7	S	.0300	53	106	Y	8	6	0	0	1	0	8	6
71-31	7	S	.0300	54	107	Y	5	8	0	0	0	0	5	8
71-31	7	S	.0300	54	108	Y	7	5	0	0	0	0	7	5
71-31	7	S	.0300	55	109	Y	6	5	0	0	0	0	6	6
71-31	7	S	.0300	55	110	Y	6	4	0	0	1	1	7	5
71-31	7	S	.0300	56	111	Y	5	8	0	1	0	0	5	8
71-31	7	S	.0300	56	112	Y	6	6	0	0	2	4	6	6
71-31	7	S	.0300	57	113	Y	8	2	0	0	2	0	8	3
71-31	7	S	.0300	57	114	Y	5	6	0	0	0	0	5	6
71-31	7	S	.0300	58	115	Y	4	7	0	1	0	0	5	7
71-31	7	S	.0300	58	116	Y	8	4	0	0	0	0	8	4
71-31	7	S	.0300	59	117	Y	7	4	1	0	0	2	7	6
71-31	7	S	.0300	59	118	Y	4	8	0	0	0	0	5	8
71-31	7	S	.0300	60	119	Y	6	6	0	0	0	0	6	7
71-31	7	S	.0300	60	120	Y	7	7	2	1	1	1	7	7

TEST-MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	7	S	2.5000	61	121	Y	3	8	0	0	2	1	4	8
71-31	7	S	2.5000	61	122	Y	4	4	1	0	0	0	4	5
71-31	7	S	2.5000	62	123	Y	2	12	0	0	0	2	2	12
71-31	7	S	2.5000	62	124	Y	3	8	0	0	0	0	3	8
71-31	7	S	2.5000	63	125	Y	10	8	0	0	1	0	11	8
71-31	7	S	2.5000	63	126	Y	8	4	0	0	0	1	9	6
71-31	7	S	2.5000	64	127	Y	9	4	0	0	0	0	10	4
71-31	7	S	2.5000	64	128	Y	7	4	0	0	0	0	7	7
71-31	7	S	2.5000	65	129	Y	2	11	0	0	0	0	3	11
71-31	7	S	2.5000	65	130	Y	5	9	0	1	0	0	5	9
71-31	7	S	2.5000	66	131	Y	1	1	0	0	0	0	7	5
71-31	7	S	2.5000	66	132	Y	6	5	0	0	0	0	7	5
71-31	7	S	2.5000	67	133	Y	5	9	1	0	0	0	5	9
71-31	7	S	2.5000	67	134	Y	7	7	0	0	0	0	7	7
71-31	7	S	2.5000	68	135	Y	8	3	0	0	0	0	9	6
71-31	7	S	2.5000	68	136	Y	5	8	0	0	0	0	5	8
71-31	7	S	2.5000	69	137	Y	6	6	0	0	0	0	6	6
71-31	7	S	2.5000	69	138	Y	7	6	0	1	0	0	7	6
71-31	7	S	2.5000	70	139	Y	2	10	0	0	0	0	2	10
71-31	7	S	2.5000	70	140	Y	6	7	0	0	1	0	9	9
71-31	7	S	5.0000	71	141	Y	6	8	1	0	0	0	6	8
71-31	7	S	5.0000	71	142	Y	4	8	0	0	0	0	4	9
71-31	7	S	5.0000	71	143	Y	5	6	0	1	0	0	5	8
71-31	7	S	5.0000	71	144	Y	5	6	1	0	0	0	5	6
71-31	7	S	5.0000	72	145	Y	2	9	0	0	0	0	7	9
71-31	7	S	5.0000	72	146	Y	0	3	0	0	0	0	8	5
71-31	7	S	5.0000	73	147	Y	7	4	0	1	0	0	8	4
71-31	7	S	5.0000	73	148	Y	3	8	0	0	0	0	3	8
71-31	7	S	5.0000	74	149	Y	6	6	0	0	0	1	6	6
71-31	7	S	5.0000	74	150	Y	4	11	0	2	0	0	4	11
71-31	7	S	5.0000	75	151	Y	2	8	0	1	0	0	3	9
71-31	7	S	5.0000	75	152	Y	7	7	0	0	0	0	7	7
71-31	7	S	5.0000	76	153	Y	9	7	0	0	0	1	9	7
71-31	7	S	5.0000	76	154	Y	7	9	0	0	0	0	8	9
71-31	7	S	5.0000	77	155	Y	4	8	0	0	0	0	6	9
71-31	7	S	5.0000	77	156	Y	6	5	0	0	0	0	6	5
71-31	7	S	5.0000	78	157	Y	9	5	0	0	1	1	9	5
71-31	7	S	5.0000	78	158	Y	9	6	0	0	1	0	9	6
71-31	7	S	5.0000	80	159	Y	6	3	1	0	1	0	9	4
71-31	7	S	5.0000	80	160	Y	6	4	0	0	1	0	8	5

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	7	S	.0002	11	21	Y	7	4	0	0	0	0	7	4
TEM31	7	S	.0002	11	22	Y	4	6	0	0	0	0	4	6
TEM31	7	S	.0002	12	23	Y	5	7	1	0	0	0	8	10
TEM31	7	S	.0002	12	24	Y	7	6	1	0	0	0	9	6
TEM31	7	S	.0002	13	25	Y	6	6	1	0	0	0	6	6
TEM31	7	S	.0002	13	26	Y	5	8	0	0	0	0	5	8
TEM31	7	S	.0002	14	27	Y	5	4	0	0	1	1	9	4
TEM31	7	S	.0002	14	28	Y	7	6	0	0	0	0	8	6
TEM31	7	S	.0002	15	29	Y	4	8	0	0	1	0	4	8
TEM31	7	S	.0002	15	30	Y	4	7	0	0	0	0	4	7
TEM31	7	S	.0002	16	31	Y	5	6	0	2	0	0	5	7
TEM31	7	S	.0002	16	32	Y	3	6	0	0	0	0	3	6
TEM31	7	S	.0002	17	33	Y	7	5	0	0	1	1	7	5
TEM31	7	S	.0002	17	34	Y	4	6	0	0	0	0	4	7
TEM31	7	S	.0002	18	35	Y	5	6	0	0	0	1	7	8
TEM31	7	S	.0002	18	36	Y	5	7	0	0	0	2	5	7
TEM31	7	S	.0002	19	37	Y	7	6	0	0	0	0	7	6
TEM31	7	S	.0002	19	38	Y	6	6	0	0	0	0	6	6
TEM31	7	S	.0002	20	39	Y	7	5	0	0	7	5	8	5
TEM31	7	S	.0002	20	40	Y	2	10	0	1	0	0	2	10
CNTRL31	7	M	0.0000	1	1	Y	7	7	0	1	0	0	7	7
CNTRL31	7	M	0.0000	1	2	Y	4	9	0	2	0	0	4	9
CNTRL31	7	M	0.0000	2	3	Y	6	6	0	0	0	0	8	6
CNTRL31	7	M	0.0000	2	4	Y	4	7	1	1	0	0	4	7
CNTRL31	7	M	0.0000	3	5	Y	4	8	0	0	0	0	4	9
CNTRL31	7	M	0.0000	3	6	Y	8	5	1	2	1	1	8	5
CNTRL31	7	M	0.0000	4	7	Y	6	5	0	0	0	0	6	5
CNTRL31	7	M	0.0000	4	8	Y	2	11	0	0	0	0	3	11
CNTRL31	7	M	0.0000	5	9	Y	7	6	0	0	0	0	7	6
CNTRL31	7	M	0.0000	5	10	Y	6	8	0	0	0	1	6	8
CNTRL31	7	M	0.0000	6	11	Y	9	4	0	0	1	0	9	4
CNTRL31	7	M	0.0000	6	12	Y	3	10	0	0	0	0	3	10
CNTRL31	7	M	0.0000	7	13	Y	0	2	0	0	0	0	4	7
CNTRL31	7	M	0.0000	7	14	Y	8	7	1	1	0	0	8	7
CNTRL31	7	M	0.0000	8	15	Y	4	7	2	0	0	1	4	8
CNTRL31	7	M	0.0000	8	16	Y	6	3	1	0	1	2	8	5
CNTRL31	7	M	0.0000	9	17	Y	5	9	0	0	0	1	5	9
CNTRL31	7	M	0.0000	9	18	Y	6	5	0	0	0	0	7	5
CNTRL31	7	M	0.0000	10	19	Y	8	7	1	1	0	0	8	7
CNTRL31	7	M	0.0000	10	20	Y	3	7	0	0	0	0	3	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	7	M	.0300	41	81	Y	4	8	0	0	1	3	4	8
71-31	7	M	.0300	41	82	Y	6	3	0	0	0	0	7	4
71-31	7	M	.0300	42	83	Y	6	7	0	0	0	0	6	7
71-31	7	M	.0300	42	84	Y	4	8	0	0	0	1	4	10
71-31	7	M	.0300	43	85	Y	6	5	0	0	0	0	6	5
71-31	7	M	.0300	43	86	Y	4	7	0	0	0	0	4	8
71-31	7	M	.0300	44	87	Y	5	4	2	1	1	0	6	5
71-31	7	M	.0300	44	88	Y	5	8	0	0	0	0	5	8
71-31	7	M	.0300	45	89	Y	9	4	0	0	0	0	10	5
71-31	7	M	.0300	45	90	Y	6	7	0	0	0	0	6	7
71-31	7	M	.0300	46	91	Y	6	3	1	0	0	0	6	3
71-31	7	M	.0300	46	92	Y	4	8	0	1	0	1	5	10
71-31	7	M	.0300	47	93	Y	3	10	0	0	0	0	3	10
71-31	7	M	.0300	47	94	Y	6	6	0	0	1	2	6	8
71-31	7	M	.0300	48	95	Y	1	0	0	0	0	0	6	9
71-31	7	M	.0300	48	96	Y	2	1	2	1	0	0	3	7
71-31	7	M	.0300	49	97	Y	10	5	0	0	1	0	10	8
71-31	7	M	.0300	49	98	Y	4	8	0	0	0	0	4	8
71-31	7	M	.0300	50	99	Y	2	9	0	1	0	0	3	9
71-31	7	M	.0300	50	100	Y	5	6	0	0	0	0	6	8
71-31	7	M	2.5000	51	101	Y	5	7	0	0	0	1	5	7
71-31	7	M	2.5000	51	102	Y	7	5	0	0	2	0	7	5
71-31	7	M	2.5000	52	103	Y	9	5	0	0	2	0	9	5
71-31	7	M	2.5000	52	104	Y	6	6	0	0	0	0	6	6
71-31	7	M	2.5000	53	105	Y	5	7	0	0	0	2	6	7
71-31	7	M	2.5000	53	106	Y	7	4	0	1	0	0	8	4
71-31	7	M	2.5000	54	107	Y	0	4	0	0	0	0	5	8
71-31	7	M	2.5000	54	108	N	0	0	0	0	0	0	0	0
71-31	7	M	2.5000	55	109	Y	8	6	0	0	0	0	9	6
71-31	7	M	2.5000	55	110	Y	9	4	0	0	0	0	10	4
71-31	7	M	2.5000	56	111	Y	6	6	0	1	0	0	6	8
71-31	7	M	2.5000	56	112	Y	9	4	0	0	0	0	11	4
71-31	7	M	2.5000	57	113	Y	6	6	1	0	0	0	6	8
71-31	7	M	2.5000	57	114	Y	9	3	0	0	0	0	9	3
71-31	7	M	2.5000	58	115	N	0	0	0	0	0	0	0	0
71-31	7	M	2.5000	58	116	Y	7	5	0	1	0	0	7	6
71-31	7	M	2.5000	59	117	Y	5	7	0	0	0	0	5	7
71-31	7	M	2.5000	59	118	Y	6	5	0	0	0	0	6	6
71-31	7	M	2.5000	60	119	Y	5	8	0	0	0	0	5	9
71-31	7	M	2.5000	60	120	Y	3	7	0	0	0	0	3	10

							IMPLANTS		WEANS		LOATHS		COLOR	
				NO.	NO.	PREG.	L	R	L	R	L	R	L	R
71-31	7	M	5.0000	61	121	Y	7	7	1	0	0	0	7	7
71-31	7	M	5.0000	61	122	Y	3	10	0	0	0	0	3	10
71-31	7	M	5.0000	62	123	Y	7	7	0	0	0	0	7	7
71-31	7	M	5.0000	62	124	Y	5	8	1	0	0	0	5	9
71-31	7	M	5.0000	63	125	Y	5	5	0	0	0	0	5	5
71-31	7	M	5.0000	63	126	Y	7	7	0	0	0	0	7	7
71-31	7	M	5.0000	64	127	Y	7	4	0	0	0	0	7	4
71-31	7	M	5.0000	64	128	Y	6	7	1	0	0	0	6	7
71-31	7	M	5.0000	65	129	Y	5	7	1	0	0	1	5	7
71-31	7	M	5.0000	65	130	Y	5	6	0	0	0	0	5	6
71-31	7	M	5.0000	66	131	Y	7	6	0	0	0	0	7	6
71-31	7	M	5.0000	66	132	Y	5	9	0	0	1	0	5	9
71-31	7	M	5.0000	67	133	Y	5	7	0	0	0	0	5	7
71-31	7	M	5.0000	67	134	Y	4	8	0	0	1	0	4	8
71-31	7	M	5.0000	68	135	N	0	0	0	0	0	0	0	0
71-31	7	M	5.0000	68	136	Y	4	6	0	0	0	0	5	7
71-31	7	M	5.0000	69	137	Y	8	5	0	0	0	0	8	6
71-31	7	M	5.0000	69	138	Y	4	8	0	0	1	0	5	8
71-31	7	M	5.0000	70	139	Y	7	6	0	2	0	0	8	6
71-31	7	M	5.0000	70	140	Y	7	6	0	0	0	1	7	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL31	8	S	0.0000	1	1	Y	7	6	0	0	0	0	7	6
CNTRL31	8	S	0.0000	1	2	Y	9	4	0	0	0	0	10	4
CNTRL31	8	S	0.0000	2	3	Y	7	5	0	0	0	0	7	5
CNTRL31	8	S	0.0000	2	4	Y	2	8	0	0	0	0	3	8
CNTRL31	8	S	0.0000	3	5	Y	7	6	0	0	0	1	7	6
CNTRL31	8	S	0.0000	3	6	Y	1	3	0	0	0	0	6	5
CNTRL31	8	S	0.0000	4	7	Y	6	5	0	0	0	0	6	5
CNTRL31	8	S	0.0000	4	8	Y	3	8	0	0	0	0	3	8
CNTRL31	8	S	0.0000	5	9	Y	6	5	0	0	0	0	6	7
CNTRL31	8	S	0.0000	5	10	Y	5	8	0	0	1	1	5	8
CNTRL31	8	S	0.0000	6	11	Y	6	5	0	1	0	0	6	5
CNTRL31	8	S	0.0000	6	12	Y	4	7	0	0	0	0	4	7
CNTRL31	8	S	0.0000	7	13	Y	4	7	0	0	0	0	4	7
CNTRL31	8	S	0.0000	7	14	Y	6	5	0	0	0	0	6	5
CNTRL31	8	S	0.0000	8	15	Y	5	10	0	1	0	0	5	10
CNTRL31	8	S	0.0000	8	16	Y	4	6	0	0	1	3	4	6
CNTRL31	8	S	0.0000	9	17	Y	6	6	0	0	1	0	8	6
CNTRL31	8	S	0.0000	9	18	Y	3	7	0	0	0	0	3	9
CNTRL31	8	S	0.0000	10	19	Y	8	5	1	0	0	0	8	5
CNTRL31	8	S	0.0000	10	20	Y	3	6	0	0	0	0	5	7
71-31	8	S	.0300	51	101	Y	2	7	0	0	0	0	4	7
71-31	8	S	.0300	51	102	Y	9	4	0	0	0	0	10	4
71-31	8	S	.0300	52	103	Y	6	6	0	0	0	0	6	6
71-31	8	S	.0300	52	104	Y	8	6	0	2	5	3	8	6
71-31	8	S	.0300	53	105	Y	4	9	0	0	0	0	4	9
71-31	8	S	.0300	53	106	Y	7	5	0	0	0	0	7	5
71-31	8	S	.0300	54	107	Y	4	8	0	0	0	0	4	8
71-31	8	S	.0300	54	108	Y	7	7	0	0	2	1	7	7
71-31	8	S	.0300	55	109	Y	4	9	0	0	0	0	4	9
71-31	8	S	.0300	55	110	Y	8	4	2	0	0	0	8	4
71-31	8	S	.0300	56	111	Y	3	9	0	0	0	4	3	10
71-31	8	S	.0300	56	112	Y	5	8	0	0	4	1	5	9
71-31	8	S	.0300	57	113	Y	8	7	0	0	0	0	8	7
71-31	8	S	.0300	57	114	Y	5	7	0	0	0	0	5	8
71-31	8	S	.0300	58	115	Y	6	7	1	0	0	0	6	7
71-31	8	S	.0300	58	116	Y	5	8	0	0	0	0	5	9
71-31	8	S	.0300	59	117	Y	7	7	0	0	0	0	7	7
71-31	8	S	.0300	59	118	Y	4	9	1	1	0	0	4	9
71-31	8	S	.0300	60	119	Y	1	9	0	1	0	0	2	9
71-31	8	S	.0300	60	120	Y	5	8	0	0	0	0	5	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-31	8	S	2.5000	61	121	Y	4	9	0	0	0	0	4	9
71-31	8	S	2.5000	61	122	Y	7	6	0	0	0	0	8	6
71-31	8	S	2.5000	62	123	N	0	0	0	0	0	0	0	0
71-31	8	S	2.5000	62	124	Y	6	6	1	1	0	0	6	6
71-31	8	S	2.5000	63	125	Y	6	6	0	0	0	0	7	6
71-31	8	S	2.5000	63	126	Y	4	9	0	0	1	3	4	9
71-31	8	S	2.5000	64	127	Y	4	7	1	0	0	0	5	7
71-31	8	S	2.5000	64	128	Y	6	4	0	0	0	0	7	4
71-31	8	S	2.5000	65	129	Y	6	6	0	0	0	0	7	6
71-31	8	S	2.5000	65	130	Y	9	2	1	0	0	0	9	2
71-31	8	S	2.5000	66	131	Y	7	6	1	0	0	0	7	6
71-31	8	S	2.5000	66	132	Y	8	5	0	0	0	0	8	7
71-31	8	S	2.5000	67	133	Y	8	4	0	0	2	2	9	6
71-31	8	S	2.5000	67	134	Y	1	1	1	1	0	0	8	5
71-31	8	S	2.5000	68	135	N	0	0	0	0	0	0	0	0
71-31	8	S	2.5000	68	136	Y	4	6	0	0	0	0	4	7
71-31	8	S	2.5000	69	137	Y	2	2	0	0	0	0	8	3
71-31	8	S	2.5000	69	138	N	0	0	0	0	0	0	0	0
71-31	8	S	2.5000	70	139	Y	6	7	1	1	0	0	6	7
71-31	8	S	2.5000	70	140	N	0	0	0	0	0	0	0	0
71-31	8	S	5.0000	71	141	Y	4	5	0	0	0	0	4	7
71-31	8	S	5.0000	71	142	Y	6	7	0	0	0	0	6	7
71-31	8	S	5.0000	72	143	Y	7	4	0	0	0	0	7	4
71-31	8	S	5.0000	72	144	Y	6	6	3	1	0	0	6	6
71-31	8	S	5.0000	73	145	Y	3	4	0	0	0	1	6	5
71-31	8	S	5.0000	73	146	Y	8	2	0	0	0	0	8	3
71-31	8	S	5.0000	74	147	Y	5	7	0	0	0	0	5	7
71-31	8	S	5.0000	74	148	Y	4	7	0	1	0	0	4	7
71-31	8	S	5.0000	75	149	Y	6	6	0	0	0	0	6	6
71-31	8	S	5.0000	75	150	Y	7	5	1	0	0	0	8	5
71-31	8	S	5.0000	76	151	Y	6	4	0	0	0	0	6	4
71-31	8	S	5.0000	76	152	Y	8	5	0	0	0	0	8	5
71-31	8	S	5.0000	77	153	Y	7	5	0	0	1	0	11	4
71-31	8	S	5.0000	77	154	Y	6	6	2	0	0	0	8	6
71-31	8	S	5.0000	78	155	Y	5	8	0	0	0	0	5	9
71-31	8	S	5.0000	78	156	N	0	0	0	0	0	0	0	0
71-31	8	S	5.0000	79	157	Y	9	5	0	0	0	0	9	6
71-31	8	S	5.0000	79	158	Y	9	4	0	0	0	0	9	6
71-31	8	S	5.0000	80	159	Y	8	3	1	0	0	0	8	3
71-31	8	S	5.0000	80	160	Y	8	4	0	0	0	0	9	4

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-31 SORBITOL

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM31	8	S	.0002	11	21	Y	3	7	0	0	0	1	3	8
TEM31	8	S	.0002	11	22	Y	2	11	0	0	0	0	3	12
TEM31	8	S	.0002	12	23	Y	7	5	0	0	2	0	7	6
TEM31	8	S	.0002	12	24	Y	7	7	0	0	0	0	7	7
TEM31	8	S	.0002	13	25	Y	5	5	0	0	1	0	8	5
TEM31	8	S	.0002	13	26	Y	6	5	3	3	0	0	6	6
TEM31	8	S	.0002	14	27	Y	7	6	0	0	0	0	7	6
TEM31	8	S	.0002	14	28	Y	4	8	0	0	0	0	4	8
TEM31	8	S	.0002	15	29	Y	8	4	0	0	0	0	8	6
TEM31	8	S	.0002	15	30	Y	0	3	0	0	0	0	9	3
TEM31	8	S	.0002	16	31	Y	5	8	0	1	0	1	5	8
TEM31	8	S	.0002	16	32	Y	5	6	0	0	0	0	5	6
TEM31	8	S	.0002	17	33	Y	2	1	0	0	0	0	13	2
TEM31	8	S	.0002	17	34	Y	3	10	0	0	0	0	4	11
TEM31	8	S	.0002	18	35	Y	6	8	0	0	0	0	6	8
TEM31	8	S	.0002	18	36	Y	9	3	1	0	0	0	9	3
TEM31	8	S	.0002	19	37	Y	5	7	0	0	0	0	7	7
TEM31	8	S	.0002	19	38	Y	7	5	0	0	1	1	7	5
TEM31	8	S	.0002	20	39	Y	7	4	2	0	0	0	7	5
TEM31	8	S	.0002	20	40	Y	6	4	0	1	0	0	7	4

CHI-SQUARE TEST OF THE FERTILITY INDEX (1 DEGREE OF FREEDOM)

WEEK	VEHICLE CONTROL				71-31 .03 G/KG				71-31 2.5 G/KG				71-31 5.0 G/KG				TEM .2 MG/KG			
	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ
SINGLE TREATMENT																				
1	19	20	.95	0.00	16	20	.80	.91	17	20	.85	.28	19	20	.95	.53	19	20	.95	.53
2	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	19	20	.95	0.00	19	20	.95	0.00
3	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	18	20	.90	.53	20	20	1.00	0.00
4	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	19	20	.95	0.00	18	20	.90	.53
5	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	16	20	.80	2.50	19	20	.95	0.00
6	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00
7	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00
8	20	20	1.00	0.00	20	20	1.00	0.00	16	20	.80	2.50	19	20	.95	0.00	20	20	1.00	0.00
MULTIPLE TREATMENT																				
1	19	20	.95	0.00	19	20	.95	.53	17	20	.85	.28	18	20	.90	0.00				
2	20	20	1.00	0.00	17	20	.85	1.44	19	20	.95	0.00	20	20	1.00	0.00				
3	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00				
4	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	17	20	.85	1.44				
5	20	20	1.00	0.00	18	20	.90	.53	19	20	.95	0.00	20	20	1.00	0.00				
6	20	20	1.00	0.00	17	20	.85	1.44	20	20	1.00	0.00	19	20	.95	0.00				
7	20	20	1.00	0.00	20	20	1.00	0.00	18	20	.90	.53	19	20	.95	0.00				

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX
(1 DEGREE OF FREEDOM) BASED ON THE DOSE LEVELS

	.03 G/KG		2.5 G/KG		5.0 G/KG				
WEEK	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
								SINGLE TREATMENT	
1	16	20	17	20	19	20	2.02	1.95	.07
2	20	20	20	20	19	20	2.03	1.53	.50
3	20	20	20	20	18	20	4.14	3.12	1.02
4	20	20	20	20	19	20	2.03	1.53	.50
5	20	20	20	20	16	20	8.57	6.45	2.12
6	20	20	20	20	20	20	0.00	0.00	0.00
7	20	20	20	20	20	20	0.00	0.00	0.00
8	20	20	16	20	19	20	5.67	.32	5.35
								MULTIPLE TREATMENT	
1	19	20	17	20	18	20	1.11	.27	.84
2	17	20	19	20	20	20	3.75	3.61	.14
3	20	20	20	20	20	20	0.00	0.00	0.00
4	20	20	20	20	17	20	6.32	4.76	1.56
5	18	20	19	20	20	20	2.11	2.11	.00
6	17	20	20	20	19	20	3.75	1.59	2.16
7	20	20	18	20	19	20	2.11	.52	1.59

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX
(1 DEGREE OF FREEDOM) BASED ON THE LOGARITHMS OF THE DOSE LEVELS

	.03 G/KG		2.5 G/KG		5.0 G/KG				
WEEK	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
								SINGLE TREATMENT	
1	16	20	17	20	19	20	2.02	1.40	.62
2	20	20	20	20	19	20	2.03	.74	1.29
3	20	20	20	20	18	20	4.14	1.51	2.63
4	20	20	20	20	19	20	2.03	.74	1.29
5	20	20	20	20	16	20	8.57	3.13	5.44
6	20	20	20	20	20	20	0.00	0.00	0.00
7	20	20	20	20	20	20	0.00	0.00	0.00
8	20	20	16	20	19	20	5.67	2.03	3.64
								MULTIPLE TREATMENT	
1	19	20	17	20	18	20	1.11	.71	.41
2	17	20	19	20	20	20	3.75	3.59	.16
3	20	20	20	20	20	20	0.00	0.00	0.00
4	20	20	20	20	17	20	6.32	2.31	4.01
5	18	20	19	20	20	20	2.11	1.79	.32
6	17	20	20	20	19	20	3.75	3.01	.74
7	20	20	18	20	19	20	2.11	1.34	.77

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX
(2 DEGREES OF FREEDOM) BASED ON THE DOSE LEVELS AND INCLUDING THE CONTROL GROUP

	CONTROL		.03 G/KG		2.5 G/KG		5.0 G/KG				
WEEK	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
							SINGLE TREATMENT				
1	19	20	16	20	17	20	19	20	3.38	.95	2.43
2	20	20	20	20	20	20	19	20	3.04	2.99	.04
3	20	20	20	20	20	20	18	20	6.15	6.06	.09
4	20	20	20	20	20	20	19	20	3.04	2.99	.04
5	20	20	20	20	20	20	16	20	12.63	12.45	.19
6	20	20	20	20	20	20	20	20	0.00	0.00	0.00
7	20	20	20	20	20	20	20	20	0.00	0.00	0.00
8	20	20	20	20	16	20	19	20	9.17	.01	9.16
							MULTIPLE TREATMENT				
1	19	20	19	20	17	20	18	20	1.72	.15	1.57
2	20	20	17	20	19	20	20	20	6.32	1.50	4.82
3	20	20	20	20	20	20	20	20	0.00	0.00	0.00
4	20	20	20	20	20	20	17	20	9.35	9.21	.14
5	20	20	18	20	19	20	20	20	3.81	1.02	2.79
6	20	20	17	20	20	20	19	20	6.32	.02	6.29
7	20	20	20	20	18	20	19	20	3.81	.33	3.48

T-TEST OF THE NUMBER OF IMPLANTATIONS IN PREGNANT FEMALES.

WEEK	CONTROL			71-31 .03 G/KG					71-31 2.5 G/KG					71-31 5.0 G/KG					TEM .2 MG/KG				
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
											SINGLE TREATMENT												
1	19	12.42	1.80	16	12.31	2.73	33	.141	17	12.59	2.03	34	.261	19	12.32	1.92	36	.174	19	10.16	4.18	36	2.167
2	20	11.00	3.91	20	11.70	2.30	38	.691	20	12.50	2.50	38	1.446	19	11.95	1.39	37	.998	19	8.37	2.19	37	2.575
3	20	10.45	2.58	20	10.60	3.47	38	.155	20	12.70	1.69	38	3.259	18	11.67	2.06	36	1.593	20	8.50	3.35	38	2.062
4	20	11.50	2.95	20	9.95	3.36	38	1.550	20	11.95	3.55	38	.436	19	11.21	3.22	37	.293	18	3.33	1.91	36	10.010
5	20	10.70	2.60	20	13.35	1.69	38	3.821	20	11.55	2.74	38	1.006	16	12.62	1.15	34	2.751	19	10.05	3.24	37	.690
6	20	11.80	2.75	20	11.10	2.81	38	.797	20	11.70	2.49	38	.121	20	11.75	1.77	38	.068	20	11.35	1.69	38	.626
7	20	11.95	2.84	20	11.80	1.54	38	.208	20	12.00	3.06	38	.054	20	11.90	2.95	38	.055	20	11.50	1.24	38	.650
8	20	11.20	2.21	20	12.60	1.35	38	2.412	16	10.87	3.26	34	.355	19	11.53	1.65	37	.520	20	11.10	3.02	38	.119
											MULTIPLE TREATMENT												
1	19	12.53	1.90	19	12.74	1.10	36	.419	17	12.65	1.80	34	.195	18	11.50	2.79	35	1.314					
2	20	11.00	3.91	17	11.47	2.27	35	.437	19	10.00	3.94	37	.795	20	11.20	3.58	38	.169					
3	20	10.45	2.58	20	10.45	3.00	38	0.000	20	11.80	1.99	38	1.851	20	11.95	2.95	38	1.711					
4	20	11.50	2.95	20	12.35	2.85	38	.927	20	11.80	2.19	38	.365	17	12.41	1.00	35	1.215					
5	20	10.70	2.60	18	13.11	1.68	36	3.357	19	13.37	1.86	37	3.670	20	12.75	2.00	38	2.798					
6	20	11.80	2.75	17	11.24	1.56	35	.750	20	12.30	1.53	38	.712	19	9.79	3.66	37	1.947					
7	20	11.95	2.84	20	10.75	3.37	38	1.218	18	11.78	2.18	36	.208	19	12.47	1.26	37	.738					

REGRESSION FITS OF THE NUMBER, U, OF IMPLANTATIONS ON 1) DOSE, AND 2) LOG DOSE.
(PREDICTED U = A + B*X) CONTROL GROUP EXCLUDED

WEEK	X	N	XBAR	SD X	UBAR	SD U	B	A	TB	DF	VARU.X	CV U	VARB	VARA	VARUBAR
							SINGLE TREATMENT								
1	DOSE	52	2.65	2.05	12.40	2.19	-.003	12.411	-.018	50	4.8904	.1783	.0227	.2541	.0940
	LOG DOSE	52	-.19	2.25	12.40	2.19	.021	12.408	.149	50	4.8882	.1782	.0189	.0947	.0940
2	DOSE	59	2.47	2.04	12.05	2.12	.052	11.924	.375	57	4.5650	.1773	.0190	.1929	.0774
	LOG DOSE	59	-.36	2.29	12.05	2.12	.098	12.086	.800	57	4.5255	.1765	.0149	.0706	.0767
3	DOSE	58	2.42	2.03	11.66	2.65	.225	11.110	1.308	56	6.9155	.2256	.0293	.2928	.1192
	LOG DOSE	58	-.39	2.30	11.66	2.65	.311	11.778	2.098	56	6.6073	.2205	.0220	.1173	.1139
4	DOSE	59	2.47	2.04	11.03	3.43	.257	10.399	1.168	57	11.6841	.3098	.0485	.4937	.1960
	LOG DOSE	59	-.36	2.29	11.03	3.43	.323	11.150	1.667	57	11.4077	.3061	.0375	.1952	.1938
5	DOSE	56	2.33	2.00	12.50	2.13	-.168	12.891	-1.173	54	4.5147	.1700	.0205	.1920	.0806
	LOG DOSE	56	-.47	2.30	12.50	2.13	-.253	12.382	-2.086	54	4.2842	.1656	.0147	.0797	.0765
6	DOSE	60	2.51	2.05	11.52	2.38	.131	11.189	.862	58	5.6685	.2067	.0229	.2391	.0945
	LOG DOSE	60	-.33	2.29	11.52	2.38	.130	11.559	.961	58	5.6511	.2064	.0183	.0961	.0942
7	DOSE	60	2.51	2.05	11.90	2.57	.020	11.850	.121	58	6.7121	.2177	.0272	.2831	.1119
	LOG DOSE	60	-.33	2.29	11.90	2.57	.029	11.909	.195	58	6.7094	.2177	.0218	.1142	.1119
8	DOSE	55	2.47	2.11	11.73	2.24	-.219	12.267	-1.534	53	4.8941	.1886	.0203	.2125	.0690
	LOG DOSE	55	-.45	2.35	11.73	2.24	-.269	11.606	-2.134	53	4.7069	.1850	.0158	.0988	.0656
							MULTIPLE TREATMENTS								
1	DOSE	54	2.46	2.08	12.30	2.05	-.247	12.906	-1.864	52	4.0245	.1631	.0176	.1816	.0745
	LOG DOSE	54	-.41	2.32	12.30	2.05	-.164	12.229	-1.365	52	4.1449	.1656	.0145	.0792	.0768
2	DOSE	56	2.64	2.03	10.87	3.38	-.038	10.977	-.170	54	11.6257	.3135	.0511	.5645	.2076
	LOG DOSE	56	-.18	2.24	10.87	3.38	-.146	10.849	-.715	54	11.5227	.3121	.0419	.2071	.2038
3	DOSE	60	2.51	2.05	11.40	2.73	.301	10.644	1.768	58	7.1719	.2349	.0290	.3023	.1195
	LOG DOSE	60	-.33	2.29	11.40	2.73	.297	11.497	1.961	58	7.0885	.2335	.0230	.1206	.1181
4	DOSE	57	2.38	2.02	12.18	2.18	.006	12.161	.043	55	4.8407	.1807	.0213	.2054	.0849
	LOG DOSE	57	-.43	2.30	12.18	2.18	-.043	12.157	-.335	55	4.8310	.1805	.0163	.0878	.0848
5	DOSE	57	2.60	2.05	13.07	1.84	-.076	13.268	-.629	55	3.4248	.1416	.0146	.1537	.0601
	LOG DOSE	57	-.24	2.26	13.07	1.84	-.027	13.064	-.245	55	3.4457	.1420	.0121	.0611	.0603
6	DOSE	56	2.60	2.01	11.12	2.65	-.307	11.922	-1.757	54	5.7638	.2338	.0305	.3256	.1203
	LOG DOSE	56	-.19	2.23	11.12	2.65	-.095	11.107	-.588	54	7.1050	.2396	.0260	.1278	.1269
7	DOSE	57	2.47	2.07	11.65	2.52	.347	10.793	2.213	55	5.9265	.2090	.0246	.2538	.1040
	LOG DOSE	57	-.40	2.32	11.65	2.52	.300	11.771	2.134	55	5.9605	.2096	.0198	.1078	.1046

REGRESSION FITS OF THE NUMBER, U, OF IMPLANTATIONS ON DOSE.
(PREDICTED U = A + B*X) CONTROL GROUP INCLUDED

WEEK	X	N	XBAR	SD X	UBAR	SD U	B	A	TB	DF	VARU.X	CV U	VARB	VARA	VARUBAR
							SINGLE TREATMENT								
1	DOSE	71	1.94	2.11	12.41	2.08	-.004	12.416	-.033	69	4.3935	.1689	.0140	.1149	.0619
2	DOSE	79	1.84	2.06	11.78	2.70	.154	11.501	1.042	77	7.2656	.2287	.0219	.1664	.0920
3	DOSE	78	1.80	2.04	11.35	2.67	.299	10.808	2.051	76	6.8282	.2303	.0212	.1565	.0875
4	DOSE	79	1.84	2.06	11.15	3.30	.135	10.903	.742	77	10.9628	.2969	.0331	.2510	.1388
5	DOSE	76	1.72	2.00	12.03	2.38	.083	11.884	.599	74	5.7282	.1990	.0191	.1316	.0754
6	DOSE	80	1.88	2.08	11.59	2.46	.063	11.469	.473	78	6.1029	.2132	.0179	.1396	.0763
7	DOSE	80	1.88	2.08	11.91	2.62	.009	11.896	.063	78	6.9533	.2214	.0204	.1591	.0869
8	DOSE	75	1.81	2.11	11.59	2.23	-.102	11.771	-.827	73	4.9968	.1929	.0151	.1161	.0666
							MULTIPLE TREATMENTS								
1	DOSE	73	1.82	2.09	12.36	2.00	-.206	12.731	-1.848	71	3.8801	.1594	.0124	.0963	.0532
2	DOSE	76	1.95	2.10	10.91	3.50	-.041	10.988	-.213	74	12.4026	.3229	.0375	.3055	.1632
3	DOSE	80	1.88	2.08	11.16	2.71	.323	10.555	2.259	78	6.9658	.2364	.0204	.1594	.0871
4	DOSE	77	1.76	2.02	12.00	2.40	.081	11.857	.593	75	5.8128	.2009	.0187	.1334	.0755
5	DOSE	77	1.92	2.10	12.45	2.30	.219	12.033	1.770	75	5.1334	.1819	.0154	.1235	.0667
6	DOSE	76	1.91	2.07	11.30	2.67	-.292	11.862	-1.998	74	6.8729	.2319	.0214	.1688	.0904
7	DOSE	77	1.83	2.09	11.73	2.59	.219	11.327	1.556	75	6.5779	.2187	.0199	.1517	.0854

T-TEST TEST OF THE (TRANSFORMED) PRE-IMPLANTATION LOSSES IN PREGNANT FEMALES.
(LOSSES TAKEN AS A SUBSET OF THE SET OF CORPORA LUTEA)

WEEK	CONTROL			71-31 .03 G/KG					71-31 2.5 G/KG					71-31 5.0 G/KG					TEM .2 MG/KG				
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	19	.52	.27	16	.60	.38	33	.722	17	.58	.33	34	.609	19	.62	.31	36	1.085	19	.95	.68	36	2.552
2	20	.65	.65	20	.58	.42	38	.432	20	.63	.39	38	.137	19	.44	.36	37	1.233	19	1.05	.49	37	2.169
3	20	.73	.47	20	.89	.53	38	1.044	20	.48	.33	38	1.921	18	.59	.36	36	1.035	20	1.15	.57	38	2.879
4	20	.65	.51	20	.70	.67	38	.262	20	.61	.59	38	.232	19	.76	.52	37	.694	18	2.01	.38	36	9.219
5	20	.67	.47	20	.41	.25	38	2.124	20	.56	.47	38	.714	16	.45	.22	34	1.691	19	.83	.56	37	.997
6	20	.63	.47	20	.63	.46	38	.018	20	.71	.44	36	.563	20	.54	.33	38	.732	20	.66	.30	38	.272
7	20	.54	.47	20	.49	.25	38	.445	20	.64	.49	38	.670	20	.65	.49	38	.681	20	.53	.34	38	.127
8	20	.53	.41	20	.42	.22	38	1.042	16	.72	.57	34	1.206	19	.56	.31	37	.316	20	.69	.55	38	1.065
MULTIPLE TREATMENT																							
1	19	.49	.26	19	.42	.20	36	.904	17	.61	.30	34	1.249	18	.69	.46	35	1.629					
2	20	.65	.65	17	.53	.39	35	.682	19	.90	.71	37	1.167	20	.73	.58	38	.421					
3	20	.73	.47	20	.76	.51	38	.211	20	.67	.36	38	.454	20	.60	.52	38	.827					
4	20	.65	.51	20	.61	.54	38	.256	20	.59	.39	38	.430	17	.53	.32	35	.823					
5	20	.67	.47	18	.44	.25	36	1.859	19	.56	.34	37	.825	20	.47	.25	38	1.639					
6	20	.63	.47	17	.56	.29	35	.505	20	.49	.31	38	1.131	19	.73	.72	37	.521					
7	20	.54	.47	20	.77	.59	38	1.331	18	.63	.41	36	.598	19	.39	.20	37	1.333					

T-TEST OF THE (TRANSFORMED) NUMBER OF DEAD IMPLANTS.
(DEAD IMPLANTS TAKEN AS A SUBSET OF THE SET OF CORPORA LUTEA)

WEEK	CONTROL			71-31 .03 G/KG					71-31 2.5 G/KG					71-31 5.0 G/KG					TEM .2 MG/KG				
	N FEM	MEAN	STD DEV	N FEM	MEAN	STD DEV	DF	T	N FEM	MEAN	STD DEV	DF	T	N FEM	MEAN	STD DEV	DF	T	N FEM	MEAN	STD DEV	DF	T
											SINGLE TREATMENT												
1	20	.63	.30	20	.61	.52	38	1.318	20	.67	.52	38	.284	20	.45	.34	38	1.798	20	1.12	.50	38	3.705
2	20	.47	.27	20	.46	.26	38	.171	20	.34	.23	38	1.637	20	.49	.43	38	.098	20	1.78	.32	38	14.007
3	20	.58	.31	20	.51	.36	38	.633	20	.52	.35	38	.557	20	.53	.41	38	.381	20	1.74	.46	38	9.437
4	20	.54	.31	20	.53	.28	38	.084	20	.69	.31	38	1.460	20	.60	.40	38	.472	20	1.16	.37	38	5.744
5	20	.54	.25	20	.45	.25	38	1.130	20	.56	.32	38	.263	20	.62	.52	38	.626	20	1.11	.37	38	5.732
6	20	.59	.34	20	.54	.31	38	.530	20	.41	.24	38	2.031	20	.46	.24	38	1.434	20	.82	.35	38	2.076
7	20	.61	.36	20	.61	.40	38	.010	20	.47	.25	38	1.437	20	.53	.23	38	.829	20	.62	.50	38	.131
8	20	.46	.29	20	.59	.48	38	1.056	20	.78	.51	38	2.396	20	.52	.37	38	.556	20	.54	.36	38	.763
											MULTIPLE TREATMENT												
1	20	.63	.30	20	.52	.38	38	1.045	20	.60	.47	38	.238	20	.70	.44	38	.532					
2	20	.47	.27	20	.63	.51	38	1.212	20	.57	.37	38	.902	20	.45	.25	38	.345					
3	20	.58	.31	20	.52	.23	38	.618	20	.48	.29	38	1.055	20	.51	.28	38	.744					
4	20	.54	.31	20	.56	.34	38	.138	20	.39	.17	38	1.974	20	.80	.50	38	1.986					
5	20	.54	.25	20	.63	.46	38	.780	20	.48	.37	38	.600	20	.58	.36	38	.458					
6	20	.59	.34	20	.74	.55	38	1.003	20	.47	.26	38	1.294	20	.49	.38	38	.893					
7	20	.61	.36	20	.56	.38	38	.382	20	.59	.41	38	.162	20	.53	.33	38	.684					

CHI-SQUARE TEST OF THE DEATH INDEX (1 DEGREE OF FREEDOM)

WEEK	VEHICLE CONTROL				71-31 .03 G/KG				71-31 2.5 G/KG				71-31 5.0 G/KG				TEM .2 MG/KG			
	N WDI	N MTD	DEATH INDEX	CHISQ	N WDI	N MTD	DEATH INDEX	CHISQ	N WDI	N MTD	DEATH INDEX	CHISQ	N WDI	N MTD	DEATH INDEX	CHISQ	N WDI	N MTD	DEATH INDEX	CHISQ
SINGLE TREATMENT																				
1	14	20	.70	0.00	9	20	.45	1.64	6	20	.30	4.90	5	20	.25	6.42	16	20	.80	.13
2	8	20	.40	0.00	8	20	.40	.10	3	20	.15	2.01	4	20	.20	1.07	19	20	.95	11.40
3	11	20	.55	0.00	8	20	.40	.40	9	20	.45	.10	6	20	.30	1.64	20	20	1.00	9.18
4	10	20	.50	0.00	10	20	.50	.10	15	20	.75	1.71	10	20	.50	.10	18	20	.90	5.03
5	11	20	.55	0.00	8	20	.40	.40	11	20	.55	.10	4	20	.20	3.84	18	20	.90	4.51
6	11	20	.55	0.00	10	20	.50	0.00	6	20	.30	1.64	8	20	.40	.40	17	20	.85	2.98
7	11	20	.55	0.00	10	20	.50	0.00	9	20	.45	.10	12	20	.60	0.00	11	20	.55	.10
8	7	20	.35	0.00	8	20	.40	0.00	8	20	.40	0.00	7	20	.35	.11	9	20	.45	.10
MULTIPLE TREATMENT																				
1	14	20	.70	0.00	7	20	.35	3.61	6	20	.30	4.90	11	20	.55	.43				
2	8	20	.40	0.00	5	20	.25	.46	9	20	.45	0.00	7	20	.35	0.00				
3	11	20	.55	0.00	11	20	.55	.10	8	20	.40	.40	10	20	.50	0.00				
4	10	20	.50	0.00	11	20	.55	0.00	6	20	.30	.94	10	20	.50	.10				
5	11	20	.55	0.00	8	20	.40	.40	6	20	.30	1.64	10	20	.50	0.00				
6	11	20	.55	0.00	7	20	.35	.91	8	20	.40	.40	5	20	.25	2.60				
7	11	20	.55	0.00	9	20	.45	.10	8	20	.40	.40	9	20	.45	.10				

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX
(1 DEGREE OF FREEDOM) BASED ON THE DOSE LEVELS

	.03 G/KG		2.5 G/KG		5.0 G/KG				
WEEK	N WDI	N MTD	N WDI	N MTD	N WDI	N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
							SINGLE TREATMENT		
1	9	20	6	20	5	20	1.95	1.80	.15
2	8	20	3	20	4	20	3.73	2.12	1.61
3	8	20	9	20	6	20	.99	.43	.56
4	10	20	15	20	10	20	3.43	.00	3.43
5	8	20	11	20	4	20	5.22	1.71	3.51
6	10	20	6	20	8	20	1.67	.41	1.26
7	10	20	9	20	12	20	.93	.40	.53
8	8	20	8	20	7	20	.14	.11	.03
							MULTIPLE TREATMENT		
1	7	20	6	20	11	20	2.92	1.68	1.24
2	5	20	9	20	7	20	1.76	.43	1.32
3	11	20	8	20	10	20	.93	.10	.84
4	11	20	6	20	10	20	2.83	.10	2.73
5	8	20	6	20	10	20	1.67	.42	1.24
6	7	20	8	20	5	20	1.05	.45	.60
7	9	20	8	20	9	20	.14	.00	.14

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX
(1 DEGREE OF FREEDOM) BASED ON THE LOGARITHMS OF THE DOSE LEVELS

WEEK	.03 G/KG N WDI	.03 G/KG N MTD	2.5 G/KG N WDI	2.5 G/KG N MTD	5.0 G/KG N WDI	5.0 G/KG N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
								SINGLE TREATMENT	
1	9	20	6	20	5	20	1.95	1.92	.03
2	8	20	3	20	4	20	3.73	3.37	.36
3	8	20	9	20	6	20	.99	.09	.89
4	10	20	15	20	10	20	3.43	.52	2.91
5	8	20	11	20	4	20	5.22	.22	5.00
6	10	20	6	20	8	20	1.67	1.06	.61
7	10	20	9	20	12	20	.93	.09	.84
8	8	20	8	20	7	20	.14	.05	.09
								MULTIPLE TREATMENT	
1	7	20	6	20	11	20	2.92	.57	2.34
2	5	20	9	20	7	20	1.76	1.12	.64
3	11	20	8	20	10	20	.93	.42	.52
4	11	20	6	20	10	20	2.83	.87	1.96
5	8	20	6	20	10	20	1.67	.03	1.64
6	7	20	8	20	5	20	1.05	.10	.95
7	9	20	8	20	9	20	.14	.02	.12

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX
(2 DEGREES OF FREEDOM) BASED ON THE DOSE LEVELS AND INCLUDING THE CONTROL GROUP

	CONTROL		.03 G/KG		2.5 G/KG		5.0 G/KG				
WEEK	N WDI	N MTD	N WDI	N MTD	N WDI	N MTD	N WDI	N MTD	CHISQ (C-1)	CHISQ (1)	ΔRMTG CHISQ
							SINGLE TREATMENT				
1	14	20	9	20	6	20	5	20	10.03	4.66	5.37
2	8	20	8	20	3	20	4	20	5.06	2.48	2.58
3	11	20	8	20	9	20	6	20	2.66	1.73	.93
4	10	20	10	20	15	20	10	20	3.81	.03	3.78
5	11	20	8	20	11	20	4	20	6.75	4.70	2.05
6	11	20	10	20	6	20	8	20	3.00	.57	2.43
7	11	20	10	20	9	20	12	20	1.00	.40	.60
8	7	20	8	20	8	20	7	20	.21	.03	.18
							MULTIPLE TREATMENT				
1	14	20	7	20	6	20	11	20	8.22	.22	8.00
2	8	20	5	20	9	20	7	20	1.89	.03	1.87
3	11	20	11	20	8	20	10	20	1.20	.06	1.14
4	10	20	11	20	6	20	10	20	2.97	.00	2.97
5	11	20	8	20	6	20	10	20	3.00	.12	2.88
6	11	20	7	20	8	20	5	20	3.95	2.27	1.68
7	11	20	9	20	8	20	9	20	.96	.09	.87

PROBIT ANALYSIS OF THE PROPORTION OF FEMALES WITH 1 OR MORE DEAD IMPLANTS
PROBIT = A + B(LOG DOSE)

WEEK	B	A	CHISQ	DF
	SINGLE TREATMENT			
1	-.232	4.526	.04	1
2	-.316	4.250	.39	1
3	-.051	4.696	.91	1
4	.118	5.228	2.98	1
5	-.079	4.691	5.11	1
6	-.170	4.720	.63	1
7	.049	5.049	.85	1
8	-.038	4.698	.09	1
	MULTIPLE TREATMENT			
1	.127	4.763	2.29	1
2	.185	4.634	.63	1
3	-.106	4.943	.52	1
4	-.154	4.852	2.00	1
5	.027	4.750	1.63	1
6	-.054	4.561	.97	1
7	-.024	4.829	.12	1

T-TEST OF THE (TRANSFORMED) NUMBER OF DEAD IMPLANTS.
(DEAD IMPLANTS TAKEN AS A SUBSET OF THE SET OF IMPLANTS)

WEEK	CONTROL			71-31 .13 G/KG					71-31 2.5 G/KG					71-31 5.0 G/KG					TEM .2 MG/KG				
	N FEM	MEAN	STD DEV	N FEM	MEAN	STD DEV	DF	T	N FEM	MEAN	STD DEV	DF	T	N FEM	MEAN	STD DEV	DF	T	N FEM	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	20	.65	.31	20	.84	.52	38	1.381	20	.71	.55	38	.379	20	.47	.34	38	1.817	20	1.29	.50	38	4.834
2	20	.52	.27	20	.48	.26	38	.467	20	.36	.22	38	2.047	20	.49	.43	38	.261	20	2.35	.48	38	14.795
3	20	.55	.39	20	.62	.46	38	.249	20	.54	.36	38	.907	20	.55	.41	38	.794	20	2.43	.47	38	12.984
4	20	.59	.33	20	.61	.31	38	.119	20	.74	.29	38	1.427	20	.72	.60	38	.841	20	2.44	.34	38	17.401
5	20	.62	.39	20	.46	.26	38	1.516	20	.66	.54	38	.275	20	.63	.52	38	.071	20	1.31	.53	38	4.710
6	20	.66	.43	20	.58	.33	38	.657	20	.43	.24	38	2.036	20	.47	.25	38	1.642	20	.87	.37	38	1.635
7	20	.64	.37	20	.62	.41	38	.164	20	.50	.26	38	1.367	20	.57	.24	38	.762	20	.67	.58	38	.174
8	20	.48	.29	20	.60	.49	38	.998	20	.88	.63	38	2.575	20	.54	.38	38	.595	20	.56	.36	38	1.024
MULTIPLE TREATMENT																							
1	20	.65	.31	20	.53	.38	38	1.145	20	.62	.47	38	.247	20	.74	.44	38	.693					
2	20	.52	.27	20	.66	.54	38	1.036	20	.79	.67	38	1.640	20	.50	.28	38	.271					
3	20	.65	.39	20	.64	.48	38	.093	20	.52	.33	38	1.174	20	.56	.32	38	.803					
4	20	.59	.33	20	.69	.63	38	.607	20	.42	.22	38	1.967	20	.82	.50	38	1.720					
5	20	.62	.39	20	.64	.46	38	.156	20	.50	.38	38	.982	20	.60	.36	38	.167					
6	20	.66	.43	20	.75	.55	38	.582	20	.49	.31	38	1.370	20	.57	.41	38	.664					
7	20	.64	.37	20	.69	.59	38	.294	20	.61	.40	38	.263	20	.54	.33	38	.926					

CONTROL GROUP ANOVA FOR THE NUMBER OF PREGNANT FEMALES

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	F
				SINGLE TREATMENT					
1	.450	9	.050	.500	10	.050	.950	19	1.000
2	0.000	9	0.000	0.000	10	0.000	0.000	19	I
3	0.000	9	0.000	0.000	10	0.000	0.000	19	I
4	0.000	9	0.000	0.000	10	0.000	0.000	19	I
5	0.000	9	0.000	0.000	10	0.000	0.000	19	I
6	0.000	9	0.000	0.000	10	0.000	0.000	19	I
7	0.000	9	0.000	0.000	10	0.000	0.000	19	I
8	0.000	9	0.000	0.000	10	0.000	0.000	19	I
				MULTIPLE TREATMENT					
1	.450	9	.050	.500	10	.050	.950	19	1.000
2	0.000	9	0.000	0.000	10	0.000	0.000	19	I
3	0.000	9	0.000	0.000	10	0.000	0.000	19	I
4	0.000	9	0.000	0.000	10	0.000	0.000	19	I
5	0.000	9	0.000	0.000	10	0.000	0.000	19	I
6	0.000	9	0.000	0.000	10	0.000	0.000	19	I
7	0.000	9	0.000	0.000	10	0.000	0.000	19	I

CONTROL GROUP ANOVA FOR THE NUMBER OF IMPLANTATIONS PER PREGNANT FEMALE

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	FI
				SINGLE TREATMENT					
1	42.147	9	4.683	16.500	9	1.833	58.647	18	2.554
2	154.000	9	17.111	136.000	10	13.600	290.000	19	1.258
3	58.450	9	6.494	68.500	10	6.850	126.950	19	.948
4	43.000	9	4.778	122.000	10	12.200	165.000	19	.392
5	65.200	9	7.244	63.000	10	6.300	128.200	19	1.150
6	41.200	9	4.578	102.000	10	10.200	143.200	19	.449
7	45.450	9	5.050	107.500	10	10.750	152.950	19	.470
8	26.200	9	2.911	67.000	10	6.700	93.200	19	.434
				MULTIPLE TREATMENT					
1	46.247	9	5.139	18.500	9	2.056	64.747	18	2.500
2	154.000	9	17.111	136.000	10	13.600	290.000	19	1.258
3	58.450	9	6.494	68.500	10	6.850	126.950	19	.948
4	43.000	9	4.778	122.000	10	12.200	165.000	19	.392
5	65.200	9	7.244	63.000	10	6.300	128.200	19	1.150
6	41.200	9	4.578	102.000	10	10.200	143.200	19	.449
7	45.450	9	5.050	107.500	10	10.750	152.950	19	.470

CONTROL GROUP ANOVA FOR THE PRE-IMPLANTATION LOSS PER PREGNANT FEMALE

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	F
				SINGLE TREATMENT					
1	7.027	9	.781	11.500	9	1.278	18.527	18	.611
2	72.200	9	8.022	130.000	10	13.000	202.200	19	.617
3	51.250	9	5.694	64.500	10	6.450	115.750	19	.883
4	36.000	9	4.000	63.000	10	6.300	99.000	19	.635
5	45.000	9	5.000	76.000	10	7.600	121.000	19	.658
6	47.450	9	5.272	69.500	10	6.950	116.950	19	.759
7	37.000	9	4.111	49.000	10	4.900	86.000	19	.839
8	23.800	9	2.644	32.000	10	3.200	55.800	19	.826
				MULTIPLE TREATMENT					
1	8.188	9	.910	9.500	9	1.056	17.687	18	.862
2	72.200	9	8.022	130.000	10	13.000	202.200	19	.617
3	51.250	9	5.694	64.500	10	6.450	115.750	19	.883
4	36.000	9	4.000	63.000	10	6.300	99.000	19	.635
5	45.000	9	5.000	76.000	10	7.600	121.000	19	.658
6	47.450	9	5.272	69.500	10	6.950	116.950	19	.759
7	37.000	9	4.111	49.000	10	4.900	86.000	19	.839

CONTROL GROUP ANOVA FOR THE NUMBER OF DEAD IMPLANTS PER FEMALE

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	F
				SINGLE TREATMENT					
1	7.800	9	.867	8.000	10	.800	15.800	19	1.083
2	5.450	9	.606	7.500	10	.750	12.950	19	.807
3	13.800	9	1.533	6.000	10	.600	19.800	19	2.556
4	11.450	9	1.272	21.500	10	2.150	32.950	19	.592
5	5.250	9	.583	6.500	10	.650	11.750	19	.897
6	21.800	9	2.422	8.000	10	.800	29.800	19	3.028
7	20.200	9	2.244	21.000	10	2.100	41.200	19	1.069
8	10.450	9	1.161	8.500	10	.850	18.950	19	1.366
				MULTIPLE TREATMENT					
1	7.800	9	.867	8.000	10	.800	15.800	19	1.083
2	5.450	9	.606	7.500	10	.750	12.950	19	.807
3	13.800	9	1.533	6.000	10	.600	19.800	19	2.556
4	11.450	9	1.272	21.500	10	2.150	32.950	19	.592
5	5.250	9	.583	6.500	10	.650	11.750	19	.897
6	21.800	9	2.422	8.000	10	.800	29.800	19	3.028
7	20.200	9	2.244	21.000	10	2.100	41.200	19	1.069

CONTROL GROUP ANOVA FOR THE RATIO OF DEAD IMPLANTS TO TOTAL IMPLANTS PER FEMALE

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	F
				SINGLE TREATMENT					
1	.041	9	.005	.044	10	.004	.085	19	1.048
2	.041	9	.005	.054	10	.005	.095	19	.836
3	.291	9	.032	.072	10	.007	.362	19	4.512
4	.078	9	.009	.132	10	.013	.210	19	.656
5	.175	9	.019	.268	10	.027	.443	19	.726
6	.318	9	.035	.204	10	.020	.522	19	1.731
7	.200	9	.022	.134	10	.013	.334	19	1.651
8	.089	9	.010	.081	10	.008	.170	19	1.226
				MULTIPLE TREATMENT					
1	.041	9	.005	.044	10	.004	.085	19	1.044
2	.041	9	.005	.054	10	.005	.095	19	.836
3	.291	9	.032	.072	10	.007	.362	19	4.512
4	.078	9	.009	.132	10	.013	.210	19	.656
5	.175	9	.019	.268	10	.027	.443	19	.726
6	.318	9	.035	.204	10	.020	.522	19	1.731
7	.200	9	.022	.134	10	.013	.334	19	1.651

WEEK	CONTROL			71-31 .03 G/KG				71-31 2.5 G/KG				71-31 5.0 G/KG				[illegible]			
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
											SINGLE TREATMENT												
1	19	13.26	2.13	16	13.50	2.53	33	.301	17	13.71	1.76	34	.675	19	13.53	1.54	36	.436	19	13.26	1.69	36	0
2	20	12.70	3.28	20	12.85	1.63	38	.183	20	13.90	2.00	38	1.398	19	12.84	2.43	37	.153	19	11.58	1.92	37	1.293
3	[illegible]	[illegible]	2.14	[illegible]	11.20	1.94	38	1.094	20	13.35	1.67	38	2.223	18	12.78	1.70	35	.914	20	12.35	1.31	38	.257
4	20	13.00	1.49	20	11.85	1.35	38	2.562	20	13.35	1.31	38	.790	19	13.16	1.95	37	.285	18	12.61	2.87	36	.532
5	20	12.20	1.40	20	13.85	1.50	38	3.602	20	12.60	1.31	38	.932	16	13.13	.96	34	2.253	19	12.32	1.67	37	.235
6	20	13.25	1.41	20	12.35	1.69	38	1.826	20	13.50	1.67	38	.512	20	12.65	1.57	38	1.274	20	12.65	1.66	38	1.231
7	20	12.95	1.28	20	12.40	1.35	38	1.322	20	13.55	2.24	38	1.042	20	13.50	1.76	38	1.130	20	12.50	1.96	38	.860
8	20	12.10	1.33	20	13.00	1.08	38	2.349	16	12.69	1.30	34	1.327	19	12.47	1.58	37	.801	20	12.90	1.33	38	1.697
											MULTIPLE TREATMENT												
1	19	13.26	2.13	19	13.16	1.21	36	.187	17	13.82	1.55	34	.893	18	13.06	1.30	35	.355					
2	20	12.70	3.28	17	12.35	1.41	35	.405	19	13.21	2.78	37	.523	20	13.00	1.97	38	.351					
3	20	12.20	2.14	20	12.15	2.28	38	.072	20	13.25	1.45	38	1.817	20	13.45	1.50	38	2.136					
4	20	13.00	1.49	20	13.90	2.29	38	1.473	20	13.00	1.62	38	0.000	17	13.41	1.18	35	.922					
5	20	12.20	1.40	18	13.72	1.99	36	2.746	19	14.74	2.90	37	3.505	20	13.40	2.11	38	2.118					
6	20	13.25	1.41	17	12.12	1.65	35	2.249	20	13.10	1.48	38	.328	19	11.84	1.26	37	3.284					
7	20	12.95	1.28	20	12.85	2.06	38	.185	18	13.11	1.08	36	.418	19	12.79	1.23	37	.400					