Study of Mutagenic Effects of **Guar Gum** (71-16) #24 6/72

June 1972

Compound Report No. 8

STUDY OF MUTAGENIC EFFECTS OF GUAR GUM (71-16)

Prepared for:

DHEW/PUBLIC HEALTH SERVICE
Food and Drug Administration
Rockville, Maryland

Contract No. FDA 71-267

SRI Project LSU-1348

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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 guar gum (71-16).

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

Guar gum (71-16) did not produce any measureable mutagenic response or alteration in the recombination frequency for *Saccharomyces cerevisiae* in either the host-mediated assay or the associated *in vitro* tests on *S. typhimurium*. An increased mitotic recombination frequency was observed for *S. cerevisiae* exposed to guar gum.

Cytogenetic Assay

Guar gum (71-16) exhibits no adverse effect on metaphase chromosomes from rat bone marrow at any of the dose levels or time periods tested.

It causes a high increase in the number of aberrant anaphase cells in WI-38 (human embryonic lung) cells grown in culture and tested *in vitro*.

Dominant Lethal Gene Test

No consistent responses occurred to suggest that Guar Gum (71-16) 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 Guar Gum.

RESULTS AND DISCUSSION

Oral Toxicity

Single and multiple dose toxicity data are presented in Table 1. Guar gum (71-16) given orally as a suspension in corn oil 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 orally 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 guar gum (71-16). Table 3 contains the data obtained on each indivudal 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 not affected. Similarly, Table 4 shows no positive mutagenic response was detected in the *in vitro* tests on *S. typhimurium*. However, *S. cerevisiae* showed an increased mitotic recombination frequency for cells exposed to both 1% and 5% guar gum. Guar gum at these concentrations was quite toxic to the cells.

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 71-16 (guar gum). The low value for the positive control may be attributed to the fact that the dose was reduced from 0.5 mg/kg administered in previous tests to 0.4 mg/kg in an effort to increase the number of metaphases available for scoring. Furthermore, TEM treatment, for 6 hours only, results in highly variable percentages of aberrant cells.

Table 6, however, reveals a severe adverse effect on the WI-38 cells in anaphase which were grown in culture and tested with guar gum

in vitro. Extremely high percentages of aberrant cells result at all of the dose levels used. In vitro administration of the compound appears to completely disrupt nuclear division. At anaphase, a great increase in the number of cells exhibiting acentric fragments occurs. The fragments are usually small and too numerous to count, indicating severe damage to many chromosomes. The majority of aberrant cells appear as multipolar, or with the two sets of chromosomes broken up into numerous small clusters with no particular polar orientation (scored as "other"). Such a result could indicate an affect on the spindle apparatus. The number of cells with anaphase bridges approximates that found in the negative control. The positive control cells were exposed to TEM for 24 hours. Cells being exposed to the test compound were exposed for 42 hours. Cells exposed to TEM for periods longer than 24 hours have a very low percentage of anaphase figures.

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 gum-dosed groups, but these were random occurrances without any suggestion of a time or dose-response effect. For example, in Table 7, summary data of the average implantations per pregnant female, the number of implants for the low (30 mg/kg) dose group in the multiple-treated guar gum rats during the fifth and sixth weeks and the intermediate dose(2.5 g/kg) at the fifth week were significantly less than those of the control, but comparable to the controls throughout the remainder of the experiment.

Similar types of scattered responses were obtained in statistical treatment of: dead implants per pregnant female (see Table 8), dead implants per total implants (see Table 9), corpora lutea per pregnant female (see Table 10), and pre-implantation loss per pregnant female (see Table 11).

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 guar gum to be a mutagen in the rat by the dominant lethal gene test.

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ORAL TOXICITY - RAT

Table 1

Compound: Guar Gum
FDA NO: 71-16

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 corn oil.

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

Table 2

HOST MEDIATED ASSAY
SUMMARY OF DATA

Compound No.: 71-16 (Guar Gum)

A. Acute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	9.56×10^{-9}	2.41	2.97×10^{-8}	1.81	9.90×10^{-5}	0.87
Intermediate	9.92×10^{-9}	2.51	2.85×10^{-8}	1.74	8.10×10^{-5}	0.71
Low Level	9.81×10^{-9}	2.48	2.06×10^{-7}	1.26	1.06×10^{-4}	0.93
Control (+)	8.90×10^{-7} ✓	224.74	6.88×10^{-7} ✓	41.95	8.04×10^{-4} ✓	7.05
Control (-)	3.96×10^{-9} ✓	1.00	1.64×10^{-8} ✓	1.00	1.14×10^{-4} ✓	1.00

B. Subacute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	3.14×10^{-9}	0.80	1.02×10^{-8}	0.56	1.95×10^{-4}	1.81
Intermediate	3.56×10^{-9}	0.91	1.53×10^{-8}	0.84	1.49×10^{-4}	1.38
Low Level	3.49×10^{-9}	0.89	3.02×10^{-8}	1.66	1.74×10^{-4}	1.61
Control (-)	3.93×10^{-9} ✓	1.00	1.82×10^{-8} ✓	1.00	1.08×10^{-4} ✓	1.00

Table 3

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.833333333330ex 01	.873333333330ex 09	.954198473282ex-08
2	.146833333333ex 04	.978333333330ex 09	.150085178875ex-05
3	.304166666666ex 03	.858333333330ex 09	.354368932039ex-06
4	.459166666666ex 03	.293333333333ex 09	.156534090909ex-05
5	.542500000000ex 03	.370000000000ex 09	.146621621621ex-05
6	.486666666666ex 03	.102500000000ex 10	.474796747966ex-06
7	.503333333330ex 03	.585000000000ex 09	.860398860393ex-06
			.890216491308ex-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.: 71-16 (Guar Gum)

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	.500000000000ex 01	.881666666665ex 09	.567107750473ex-08
2	.750000000000ex 01	.171000000000ex 10	.438596491228ex-08
3	.500000000000ex 01	.113500000000ex 10	.440528634361ex-08
4	.250000000000ex 01	.112000000000ex 10	.223214285714ex-08
5	.416666666666ex 01	.153333333333ex 10	.271739130434ex-08
6	.333333333333ex 01	.646666666665ex 09	.515463917526ex-08
7	.416666666666ex 01	.131333333333ex 10	.316055625790ex-08
			.396100833644ex-08

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 01	.223166666666ex 10	.746825989543ex-09
2	.166666666666ex 01	.154000000000ex 10	.108225108224ex-08
3	.166666666666ex 01	.125333333333ex 10	.132978723404ex-08
4	.500000000000ex 01	.119500000000ex 10	.418410041841ex-08
5	.666666666665ex 01	.760000000000ex 09	.877192982453ex-08
6	.833333333330ex 01	.111333333333ex 10	.748502994011ex-08
			.393332074813ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.583333333330ex 01	.103166666666ex 10	.565428109855ex-08
2	.100000000000ex 02	.576666666665ex 09	.173410404624ex-07
3	.916666666665ex 01	.196666666666ex 10	.466101694915ex-08
4	.583333333330ex 01	.721666666665ex 09	.808314087757ex-08
5	.583333333330ex 01	.785000000000ex 09	.743099787681ex-08
6	.416666666666ex 01	.460000000000ex 09	.905797101447ex-08
7	.100000000000ex 02	.411666666666ex 09	.242914979757ex-07
			.956499328180ex-08

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 01	.660000000000ex 09	.252525252524ex-08
2	.333333333333ex 01	.695000000000ex 09	.479616306953ex-08
3	.166666666666ex 01	.415000000000ex 09	.401606425701ex-08
4	.333333333333ex 01	.120000000000ex 10	.277777777777ex-08
5	.166666666666ex 01	.103833333333ex 10	.160513643659ex-08
			.314407881318ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.833333333330ex 01	.700000000000ex 09	.119047619047ex-07
2	.750000000000ex 01	.743333333330ex 09	.100896860986ex-07
3	.500000000000ex 01	.118166666666ex 10	.423131170665ex-08
4	.583333333330ex 01	.143333333333ex 10	.406976744184ex-08
5	.666666666665ex 01	.156666666666ex 10	.425531914894ex-08
6	.250000000000ex 01	.570000000000ex 09	.438596491228ex-08
7	.750000000000ex 01	.475000000000ex 09	.157894736842ex-07
8	.125000000000ex 02	.613333333330ex 09	.203804347827ex-07
9	.916666666665ex 01	.645000000000ex 09	.142118863048ex-07
			.992428955383ex-08

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 01	.112833333333ex 10	.147710487444ex-08
2	.133333333333ex 02	.120000000000ex 10	.111111111110ex-07
3	.166666666666ex 01	.211000000000ex 10	.789889415478ex-09
4	.166666666666ex 01	.109666666666ex 10	.151975683890ex-08
5	.166666666666ex 01	.895000000000ex 09	.186219739291ex-08
6	.833333333330ex 01	.182333333333ex 10	.457038391223ex-08
			.355507392413ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.116666666666ex 02	.102566666666ex 10	.113636363636ex-07
2	.833333333330ex 01	.993333333330ex 09	.838926174496ex-08
3	.500000000000ex 01	.683333333330ex 09	.731707317076ex-08
4	.250000000000ex 01	.445000000000ex 09	.561797752808ex-08
5	.416666666666ex 01	.576666666665ex 09	.722543352602ex-08
6	.141666666666ex 02	.956666666665ex 09	.148083623692ex-07
7	.108333333333ex 02	.778333333330ex 09	.139186295503ex-07
			.980576775038ex-08

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 01	.206000000000ex 10	.809061488669ex-09
2	.166666666666ex 01	.145166666666ex 10	.114810562571ex-08
3	.333333333333ex 01	.127500000000ex 10	.261437908496ex-08
4	.500000000000ex 01	.935000000000ex 09	.534759358288ex-08
5	.166666666666ex 01	.103166666666ex 10	.161550888530ex-08
6	.166666666666ex 01	.656666666665ex 09	.253807106598ex-08
7	.166666666666ex 01	.113666666666ex 10	.146627565982ex-08
8	.133333333333ex 02	.107833333333ex 10	.123647604327ex-07
			.348796947823ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.390000000000ex 03	.788333333330ex 09	.494714587739ex-06
2	.186666666666ex 03	.124500000000ex 10	.149933065595ex-06
3	.138333333333ex 03	.608333333330ex 09	.227397260274ex-06
4	.285000000000ex 03	.718333333330ex 09	.396751740141ex-06
5	.358333333333ex 03	.511666666665ex 09	.700325732900ex-06
6	.860833333330ex 03	.580000000000ex 09	.148419540229ex-05
7	.381666666666ex 03	.473333333333ex 09	.806338028168ex-06
8	.628333333330ex 03	.595000000000ex 09	.105602240895ex-05
9	.490833333333ex 03	.556666666665ex 09	.881736526948ex-06
			.688601639220ex-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.: 71-16 (Guar Gum)

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	.130000000000ex 02	.805000000000ex 09	.161490683229ex-07
2	.116666666666ex 02	.718333333330ex 09	.162412993039ex-07
3	.183333333333ex 02	.138666666666ex 10	.132211538461ex-07
4	.108333333333ex 02	.668333333330ex 09	.162094763092ex-07
5	.116666666666ex 02	.640000000000ex 09	.182291666665ex-07
6	.416666666666ex 01	.670000000000ex 09	.621890547262ex-08
7	.191666666666ex 02	.773333333330ex 09	.247844827586ex-07
8	.175000000000ex 02	.858333333330ex 09	.203883495146ex-07
			.164302377741ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.116666666666ex 02	.433333333333ex 09	.269230769229ex-07
2	.100000000000ex 02	.622500000000ex 09	.160642570281ex-07
3	.166666666666ex 02	.636666666665ex 09	.261780104711ex-07
4	.166666666666ex 01	.905000000000ex 09	.184162062614ex-08
5	.500000000000ex 01	.701666666665ex 09	.712589073635ex-08
6	.666666666665ex 01	.176666666666ex 09	.377358490566ex-07
7	.166666666666ex 01	.110000000000ex 09	.151515151514ex-07
8	.500000000000ex 01	.325000000000ex 09	.153846153846ex-07
9	.133333333333ex 02	.755000000000ex 09	.176600441500ex-07
			.182294310584ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.208333333333ex 02	.761666666665ex 09	.273522975930ex-07
2	.350000000000ex 02	.946666666665ex 09	.369718309859ex-07
3	.190000000000ex 02	.956666666665ex 09	.198606271777ex-07
4	.183333333333ex 02	.480000000000ex 09	.381944444443ex-07
5	.116666666666ex 02	.475000000000ex 09	.245614035086ex-07
6	.183333333333ex 02	.450000000000ex 09	.407407407406ex-07
7	.166666666666ex 02	.750000000000ex 09	.222222222221ex-07
8	.100000000000ex 02	.361666666666ex 09	.276497695853ex-07
			.296941670318ex-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	.746666666665ex 09	.133928571428ex-07
2	.333333333333ex 01	.365000000000ex 09	.913242009131ex-08
3	.333333333333ex 01	.486666666666ex 09	.684931506849ex-08
4	.166666666666ex 01	.413333333333ex 09	.403225806450ex-08
5	.666666666665ex 01	.385000000000ex 09	.173160173159ex-07
6	.666666666665ex 01	.406666666666ex 09	.163934426229ex-07
7	.166666666666ex 01	.415000000000ex 09	.401606425701ex-08
			.101617677946ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

Organism: TA-1530

Treatment: INTERMEDIATE

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.108333333333ex 02	.176666666666ex 09	.613207547170ex-07
2	.150000000000ex 02	.723333333330ex 09	.207373271890ex-07
3	.100000000000ex 02	.673333333330ex 09	.148514851485ex-07
4	.916666666665ex 01	.668333333330ex 09	.137157107232ex-07
5	.916666666665ex 01	.501666666665ex 09	.182724252491ex-07
6	.141666666666ex 02	.450000000000ex 09	.314814814813ex-07
7	.100000000000ex 02	.413333333333ex 09	.241935483871ex-07
8	.208333333333ex 02	.425000000000ex 09	.490196078430ex-07
9	.833333333330ex 01	.361666666666ex 09	.230414746543ex-07
			.285148683767ex-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	.540000000000ex 09	.154320987653ex-07
2	.833333333330ex 01	.771666666665ex 09	.107991360690ex-07
3	.333333333333ex 01	.190000000000ex 09	.175438596491ex-07
4	.666666666665ex 01	.119666666666ex 10	.557103064068ex-08
5	.833333333330ex 01	.544444444440ex 09	.153061224490ex-07
6	.666666666665ex 01	.320000000000ex 09	.208333333332ex-07
7	.750000000000ex 01	.345000000000ex 09	.217391304347ex-07
			.153178159057ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.200000000000ex 02	.551666666665ex 09	.362537764351ex-07
2	.108333333333ex 02	.711666666665ex 09	.152224824355ex-07
3	.750000000000ex 01	.126666666666ex 10	.592105263161ex-08
4	.125000000000ex 02	.116833333333ex 10	.106990014265ex-07
5	.125000000000ex 02	.756666666665ex 09	.165198237885ex-07
6	.200000000000ex 02	.638333333330ex 09	.313315926894ex-07
7	.108333333333ex 02	.476666666666ex 09	.227272727272ex-07
8	.108333333333ex 02	.451666666666ex 09	.239852398523ex-07
9	.150000000000ex 02	.658333333330ex 09	.227848101266ex-07
			.206050057901ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.200000000000ex 02	.605000000000ex 09	.330578512396ex-07
2	.100000000000ex 02	.981666666665ex 09	.101867572156ex-07
3	.100000000000ex 02	.386666666666ex 09	.258620689655ex-07
4	.183333333333ex 02	.465000000000ex 09	.394265232974ex-07
5	.200000000000ex 02	.406666666666ex 09	.491803278689ex-07
6	.100000000000ex 02	.430000000000ex 09	.232558139534ex-07
			.301615570898ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.155000000000ex 05	.258333333333ex 08	.600000000000ex-03
2	.280000000000ex 05	.176666666666ex 08	.158490566038ex-02
3	.160000000000ex 05	.154750000000ex 08	.103392568659ex-02
4	.165000000000ex 05	.228333333333ex 08	.722627737227ex-03
5	.100000000000ex 05	.393333333333ex 08	.254237288135ex-03
6	.650000000000ex 04	.512500000000ex 07	.126829268292ex-02
7	.450000000000ex 04	.273333333333ex 08	.164634146341ex-03
			.804089028797ex-03

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.: 71-16 (Guar Gum)

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	.500000000000ex 04	.283333333333ex 08	.176470588235ex-03
2	.250000000000ex 04	.298333333333ex 08	.837988826816ex-04
3	.500000000000ex 03	.153333333333ex 08	.326086956522ex-04
4	.350000000000ex 04	.210000000000ex 08	.166666666666ex-03
5	.150000000000ex 04	.158333333333ex 08	.947368421054ex-04
6	.300000000000ex 04	.235000000000ex 08	.127659574468ex-03
7	.250000000000ex 04	.203333333333ex 08	.122950819672ex-03
8	.400000000000ex 04	.378333333333ex 08	.105726872246ex-03
			.113827367715ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.300000000000ex 04	.300000000000ex 08	.100000000000ex-03
2	.400000000000ex 04	.420000000000ex 08	.952380952380ex-04
3	.250000000000ex 04	.250000000000ex 08	.100000000000ex-03
4	.300000000000ex 04	.405000000000ex 08	.740740740740ex-04
5	.450000000000ex 04	.333333333333ex 08	.135000000000ex-03
6	.300000000000ex 04	.210000000000ex 08	.142857142857ex-03
7	.450000000000ex 04	.228333333333ex 08	.197080291971ex-03
8	.400000000000ex 04	.563333333330ex 08	.710059171601ex-04
9	.400000000000ex 04	.683333333330ex 08	.585365853661ex-04
			.108199122962ex-03

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.450000000000ex 04	.438333333333ex 08	.102661596958ex-03
2	.350000000000ex 04	.403333333333ex 08	.867768595042ex-04
3	.450000000000ex 04	.215000000000ex 08	.209302325581ex-03
4	.250000000000ex 04	.241666666666ex 08	.103448275862ex-03
5	.150000000000ex 04	.193333333333ex 08	.775862068966ex-04
6	.350000000000ex 04	.511666666665ex 08	.684039087950ex-04
7	.300000000000ex 04	.558333333330ex 08	.537313432839ex-04
8	.350000000000ex 04	.355000000000ex 08	.985915492957ex-04
9	.300000000000ex 04	.373333333333ex 08	.803571428572ex-04
10	.166666666666ex 04	.152500000000ex 08	.109289617485ex-03
			.990148826516ex-04

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.650000000000ex 04	.318333333333ex 08	.204188481675ex-03
2	.550000000000ex 04	.183333333333ex 08	.300000000000ex-03
3	.400000000000ex 04	.746666666665ex 08	.535714285715ex-04
4	.200000000000ex 04	.267500000000ex 07	.747663551401ex-03
5	.550000000000ex 04	.373333333333ex 08	.147321428571ex-03
6	.450000000000ex 04	.435000000000ex 08	.103448275862ex-03
7	.450000000000ex 04	.366666666666ex 08	.122727272727ex-03
8	.550000000000ex 04	.398333333333ex 08	.138075313807ex-03
9	.300000000000ex 04	.291666666666ex 08	.102857142857ex-03
10	.500000000000ex 03	.175000000000ex 08	.285714285714ex-04
			.194842432401ex-03

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.571428571425ex 04	.726666666665ex 08	.786369593705ex-04
2	.600000000000ex 04	.328333333333ex 08	.182741116751ex-03
3	.200000000000ex 04	.201666666666ex 08	.991735537193ex-04
4	.250000000000ex 04	.240000000000ex 08	.104166666666ex-03
5	.300000000000ex 04	.193333333333ex 08	.155172413793ex-03
6	.444444444444ex 04	.936666666665ex 08	.474495848161ex-04
7	.300000000000ex 04	.826666666665ex 08	.362903225807ex-04
8	.400000000000ex 04	.783333333330ex 08	.510638297874ex-04
9	.150000000000ex 04	.122333333333ex 09	.122615803815ex-04
10	.150000000000ex 04	.351666666666ex 08	.426540284360ex-04
			.809610056299ex-04

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.200000000000ex 04	.181666666666ex 08	.110091743119ex-03
2	.500000000000ex 03	.138500000000ex 08	.361010830324ex-04
3	.350000000000ex 04	.306666666666ex 08	.114130434782ex-03
4	.450000000000ex 04	.765000000000ex 07	.588235294117ex-03
5	.150000000000ex 04	.230000000000ex 08	.652173913043ex-04
6	.200000000000ex 04	.296666666666ex 08	.674157303372ex-04
7	.150000000000ex 04	.336666666666ex 08	.445544554456ex-04
8	.300000000000ex 04	.261666666666ex 08	.114649681528ex-03
9	.350000000000ex 04	.130500000000ex 08	.268199233716ex-03
10	.222222222222ex 04	.263333333333ex 08	.843881856540ex-04
			.149298323301ex-03

Table 3 (concluded)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-16 (Guar Gum)

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	.500000000000ex 03	.375000000000ex 07	.133333333333ex-03
2	.150000000000ex 04	.231666666666ex 08	.647482014390ex-04
3	.450000000000ex 04	.223333333333ex 08	.201492537313ex-03
4	.250000000000ex 04	.441666666666ex 08	.566037735849ex-04
5	.350000000000ex 04	.336666666666ex 08	.103960396039ex-03
6	.250000000000ex 04	.271666666666ex 08	.920245398775ex-04
7	.400000000000ex 04	.438333333333ex 08	.912547528517ex-04
8	.650000000000ex 04	.478333333333ex 08	.135888501742ex-03
9	.350000000000ex 04	.460000000000ex 08	.760869565217ex-04
10	.300000000000ex 04	.293333333333ex 08	.102272727272ex-03
			.105766571997ex-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	.142250000000ex 08	.105448154657ex-03
2	.350000000000ex 04	.134500000000ex 08	.260223048327ex-03
3	.200000000000ex 04	.271666666666ex 08	.736196319020ex-04
4	.500000000000ex 04	.290000000000ex 08	.172413793103ex-03
5	.150000000000ex 04	.171666666666ex 08	.873786407770ex-04
6	.450000000000ex 04	.326666666666ex 08	.137755102041ex-03
7	.200000000000ex 04	.150000000000ex 08	.133333333333ex-03
8	.300000000000ex 04	.286666666666ex 08	.104651162790ex-03
9	.500000000000ex 04	.293333333333ex 08	.170454545454ex-03
10	.100000000000ex 04	.202500000000ex 07	.493827160493ex-03
			.173910457287ex-03

TABLE 4

HOST-MEDIATED ASSAY -
IN VITRO MUTAGENICITY OF COMPOUND 71-16 (Guar Gum)

Salmonella typhimurium G-46

5% w/v 71-16	EMS
negative	positive

Salmonella typhimurium TA-1530

5% w/v 71-16	EMS
negative	positive

Saccharomyces cerevisiae D-3

Compound	Concentration	Survival (%)	Recombinants/10^5 Survivors	RFt/RFc
71-16	5% w/v	11	94	6.58
71-16	1% w/v	26	45.68	3.20
EMS	0.1% w/v	86	289.79	20.29
Control (-)	--	100	14.28	1.00

Table 5

CYTOGENETIC ASSAY
METAPHASE SUMMARY SHEET BY TIME OF SACRIFICE
Guar Gum (71-16)

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	1.15	5	250	7.2	0.4	0.4	7.2
Negative Control	6	2.50	3	150	0	0	0	0
30 mg/kg	6	2.25	5	246	2.0	0	0	2.0
2500 mg/kg	6	2.00	5	250	2.0	0	0	2.0
5000 mg/kg	6	2.10	5	250	2.0	0	0	2.0
Negative Control	24	1.45	3	150	0	0	0	0
30 mg/kg	24	1.70	5	250	0	0	0	0
2500 mg/kg	24	1.50	5	250	0.4	0	0	0.4
5000 mg/kg	24	2.05	5	250	0	0	0	0
Negative Control	48	2.10	3	144	2.8	0	0	2.8
30 mg/kg	48	2.10	5	250	0	0	0	0
2500 mg/kg	48	2.30	5	240	0.8	0	0	0.8
5000 mg/kg	48	2.40	5	250	0	0.4	0	0.4
Negative Control	SA**	1.95	3	150	0	0	0	0
30 mg/kg	SA	1.70	5	250	0.4	0	0	0.4
2500 mg/kg	SA	1.70	5	250	0.4	0	0	0.4
5000 mg/kg	SA	2.10	3	150	0	0	0	0

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

Table 6

CYTOGENETIC ASSAY
ANAPHASE SUMMARY SHEET
Guar Gum (71-16)

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 Abe (%)
Negative Control	42	112	3.6	5.4	1.8	0	0	10.7
10 µg/ml	42	197	67.0	2.0	18.3	25.9	31.5	81.7
100 µg/ml	42	152	69.1	3.3	12.5	35.5	38.8	79.6
1000 µg/ml	42	226	61.5	1.8	19.5	31.4	34.1	80.1
TEM (0.05 µg/ml)	24	55	34.5	9.1	7.3	41.8	25.5	65.5

* Time of harvest after treatment (hours)

DOMINANT LETHAL GENE-RAT

Table 7

AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

Compound: Guar Gum
FDA No: 71-16

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-16 (30 mg/kg)	71-16 (2.5 g/kg)	71-16 (5 g/kg)
Acute-Single Dose					
1	244/20=12.2	213/18=11.8	182/16=11.4	202/17=11.9	211/18=11.7
2	257/20=12.9	180/19= 9.5 **	234/19=12.3	226/18=12.6	215/18=11.9
3	247/20=12.4	166/18= 9.2 **	247/20=12.4	255/20=12.8	239/20=12.0
4	232/19=12.2	103/20= 5.2 **	235/20=11.8	249/20=12.5	249/20=12.5
5	272/20=13.6	222/20=11.1 **	247/19=13.0	226/17=13.3	252/20=12.6
6	255/20=12.8	237/20=11.9	199/17=11.7	245/20=12.3	253/20=12.7
7	209/20=10.5	225/20=11.3	221/20=11.1	241/20=12.1	189/20= 9.5
8	241/20=12.1	213/19=11.2	260/20=13.0	244/20=12.2	228/19=12.0
Subacute-Multiple Dose					
1			188/17=11.1	254/20=12.7	184/15=12.3
2			229/19=12.1	204/16=12.8	212/18=11.8
3			217/20=10.9	247/20=12.4	228/19=12.0
4			245/20=12.3	215/20=10.8	249/19=13.1
5			222/20=11.1**	221/20=11.1 **	232/18=12.9
6			211/20=10.6 **	215/19=11.3	214/19=11.3
7			228/20=11.4	217/20=10.9	213/19=11.2

* Significant at $P < 0.05$
** Significant at $P < 0.01$

DOMINANT LETHAL GENE-RAT

Table 8

AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

Compound: Guar Gum
FDA No: 71-16

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-16 (30 mg/kg)	71-16 (2.5 g/kg)	71-16 (5 g/kg)
Acute-Single Dose					
1	7/20=0.35	80/18=4.44 **	16/16=1.00 **	5/17=0.29	8/18=0.44
2	17/20=0.85	131/19=6.89 **	16/19=0.84	15/18=0.83	8/18=0.44
3	14/20=0.70	136/18=7.56 **	17/20=0.85	14/20=0.70	6/20=0.30
4	16/19=0.84	99/20=4.95 **	23/20=1.15	18/20=0.90	15/20=0.75
5	27/20=1.35	50/20=2.50 *	14/19=0.74	27/17=1.59	11/20=0.55 *D
6	19/20=0.95	29/20=1.45	7/17=0.41	14/20=0.70	22/20=1.10
7	20/20=1.00	15/20=0.75	21/20=1.05	14/20=0.70	16/20=0.80
8	13/20=0.65	25/19=1.32	28/20=1.40	25/20=1.25	15/19=0.79
Subacute-Multiple Dose					
1			9/17=0.53	15/20=0.75	13/15=0.87
2			6/19=0.32	11/16=0.69	13/18=0.72
3			8/20=0.40	9/20=0.45	19/19=1.00
4			13/20=0.65	17/20=0.85	8/19=0.42
5			15/20=0.75	11/20=0.55 *D	8/18=0.44
6			20/20=1.00	10/19=0.53	18/19=0.95
7			12/20=0.60	12/20=0.60	17/19 0.89

* 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: Guar Gum
FDA No: 71-16

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-16 (30 mg/kg)	71-16 (2.5 g/kg)	71-16 (5 g/kg)
Acute-Single Dose					
1	7/244=0.03	80/213=0.38 **	16/182=0.09 **	5/202=0.02	8/211=0.04
2	17/257=0.07	131/180=0.73 **	16/234=0.07	15/226=0.07	8/215=0.04
3	14/247=0.06	136/166=0.82 **	17/247=0.07	14/255=0.05	6/239=0.03
4	16/232=0.07	99/103=0.96 **	23/235=0.10	18/249=0.07	15/249=0.06
5	27/272=0.10	50/222=0.23 *	14/247=0.06	27/226=0.12	11/252=0.04 *D
6	19/255=0.07	29/237=0.12	7/199=0.04	14/245=0.06	22/253=0.09
7	20/209=0.10	15/225=0.07	21/221=0.10	14/241=0.06	16/189=0.08
8	13/241=0.05	25/213=0.12	28/260=0.11	25/244=0.10	15/228=0.07
Subacute-Multiple Dose					
1			9/188=0.05 *	15/254=0.06	13/184=0.07 **
2			6/229=0.03	11/204=0.05	13/212=0.06
3			8/217=0.04	9/247=0.04	19/228=0.08
4			13/245=0.05	17/215=0.08	8/249=0.03
5			15/222=0.07	11/221=0.05 *D	8/232=0.03
6			20/211=0.09	10/215=0.05	18/214=0.08
7			12/228=0.05	12/217=0.06	17/213=0.08

* 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: Guar Gum
FDA No: 71-16

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-16 (30 mg/kg)	71-16 (2.5 g/kg)	71-16 (5 g/kg)
Acute-Single Dose					
1	260/20=13.0	248/18=13.8	196/16=12.3	216/17=12.7	230/18=12.8
2	282/20=14.1	237/19=12.5	246/19=12.9	250/18=13.9	241/18=13.4
3	271/20=13.6	218/18=12.1**	268/20=13.4	276/20=13.8	255/20=12.8
4	255/19=13.4	268/20=13.4	267/20=13.4	278/20=13.9	276/20=13.8
5	283/20=14.2	257/20=12.9*	257/19=13.5	237/17=13.9	266/20=13.3
6	267/20=13.4	269/20=13.5	220/17=12.9	269/20=13.5	274/20=13.7
7	243/20=12.2	235/20=11.8	238/20=11.9	266/20=13.3	245/20=12.3
8	253/20=12.7	240/19=12.6	280/20=14.0**I	266/20=13.3	252/19=13.3
Subacute-Multiple Dose					
1			214/17=12.6	275/20=13.8	203/15=13.5
2			259/19=13.6	217/16=13.6	229/18=12.7
3			240/20=12.0*	260/20=13.0	259/19=13.6
4			261/20=13.1	255/20=12.8	260/19=13.7
5			267/20=13.4	256/20=12.8**	245/18=13.6
6			247/20=12.4*	237/19=12.5	240/19=12.6
7			264/20=13.2	256/20=12.8	234/19=12.3

* 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: Guar Gum
FDA No: 71-16

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-16 (30 mg/kg)	71-16 (2.5 g/kg)	71-16 (5 g/kg)
Acute-Single Dose					
1	16/20=0.80	35/18=1.94 *	14/16=0.88	14/17=0.82	19/18=1.06
2	25/20=1.25	57/19=3.00 **	12/19=0.63	24/18=1.33	26/18=1.44
3	24/20=1.20	52/20=2.60 **	21/20=1.05	21/20=1.05	16/20=0.80
4	23/19=1.21	165/20=8.25 **	32/20=1.60	29/20=1.45	27/20=1.35
5	11/20=0.55	35/20=1.75	10/19=0.53	11/17=0.65	14/20=0.70
6	12/20=0.60	32/20=1.60 *	21/17=1.24	24/20=1.20	21/20=1.05
7	34/20=1.70	10/20=0.50	17/20=0.85	25/20=1.25	56/20=2.80
8	12/20=0.60	27/19=1.42	20/20=1.00	22/20=1.10	24/19=1.26
Subacute-Multiple Dose					
1			26/17=1.53	21/20=1.05	19/15=1.27
2			30/19=1.58	13/16=0.81	17/18=0.94
3			23/20=1.15	13/20=0.65	31/19=1.63
4			16/20=0.80	40/20=2.00	11/19=0.58
5			45/20=2.25 **	35/20=1.75 **	13/18=0.72
6			36/20=1.80	22/19=1.16	26/19=1.37
7			36/20=1.80	39/20=1.95	21/19=1.11

* Significant at $P < 0.05$
** Significant at $P < 0.01$

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:

$$X_i^2 = \frac{(N_o+N_i)(|n_o(N_i-n_i)-n_i(N_o-n_o)|-(N_o+N_i)/2)^2}{(n_o+n_i)(N_o-n_o+N_i-n_i)(N_o)(N_i)}$$ (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 <u>absolute value</u> of T and the degrees of freedom (DF) are given for each treatment group and for TEM.

APPENDIX B

Raw Data and Statistical Analysis

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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
CNTRL16	1	S	0.0000	1	1	Y	5	6	0	0	0	0	5	6
CNTRL16	1	S	0.0000	1	2	Y	3	10	0	0	1	1	3	10
CNTRL16	1	S	0.0000	2	3	Y	4	8	1	0	0	0	4	9
CNTRL16	1	S	0.0000	2	4	Y	5	6	0	0	0	0	5	6
CNTRL16	1	S	0.0000	3	5	Y	3	9	0	0	0	1	3	9
CNTRL16	1	S	0.0000	3	6	Y	6	8	0	0	0	0	6	9
CNTRL16	1	S	0.0000	4	7	Y	6	6	0	0	0	0	6	6
CNTRL16	1	S	0.0000	4	8	Y	3	10	1	0	0	0	3	10
CNTRL16	1	S	0.0000	5	9	Y	6	5	0	0	0	0	7	7
CNTRL16	1	S	0.0000	5	10	Y	5	6	0	0	0	0	6	6
CNTRL16	1	S	0.0000	6	11	Y	7	5	0	0	0	0	7	5
CNTRL16	1	S	0.0000	6	12	Y	9	3	0	0	0	0	9	3
CNTRL16	1	S	0.0000	7	13	Y	5	7	0	0	0	0	5	7
CNTRL16	1	S	0.0000	7	14	Y	9	5	0	0	0	0	9	5
CNTRL16	1	S	0.0000	8	15	Y	7	5	0	0	0	0	7	6
CNTRL16	1	S	0.0000	8	16	Y	7	4	0	0	0	0	9	4
CNTRL16	1	S	0.0000	9	17	Y	6	9	0	0	0	0	6	9
CNTRL16	1	S	0.0000	9	18	Y	7	8	0	0	0	0	7	8
CNTRL16	1	S	0.0000	10	19	Y	0	10	0	0	0	0	6	11
CNTRL16	1	S	0.0000	10	20	Y	5	6	0	0	1	1	5	6
71-16	1	S	.0300	21	41	Y	10	3	0	0	1	0	10	3
71-16	1	S	.0300	21	42	Y	8	4	0	0	0	0	8	4
71-16	1	S	.0300	22	43	Y	4	10	0	0	2	1	4	11
71-16	1	S	.0300	22	44	Y	5	7	0	0	0	0	6	7
71-16	1	S	.0300	23	45	Y	8	6	0	0	0	1	9	6
71-16	1	S	.0300	23	46	Y	5	8	0	0	3	2	5	9
71-16	1	S	.0300	24	47	Y	4	7	0	0	0	1	5	7
71-16	1	S	.0300	24	48	Y	3	7	1	0	0	0	3	8
71-16	1	S	.0300	25	49	N	0	0	0	0	0	0	0	0
71-16	1	S	.0300	25	50	Y	7	3	0	0	0	0	7	3
71-16	1	S	.0300	26	51	Y	0	1	0	1	0	0	2	7
71-16	1	S	.0300	26	52	N	0	0	0	0	0	0	0	0
71-16	1	S	.0300	27	53	Y	4	7	0	0	0	2	4	7
71-16	1	S	.0300	27	54	Y	5	8	0	0	0	0	5	8
71-16	1	S	.0300	28	55	N	0	0	0	0	0	0	0	0
71-16	1	S	.0300	28	56	Y	5	6	0	1	0	0	5	6
71-16	1	S	.0300	29	57	Y	5	7	0	0	0	0	5	7
71-16	1	S	.0300	29	58	Y	8	6	0	0	0	0	8	6
71-16	1	S	.0300	30	59	N	0	0	0	0	0	0	0	0
71-16	1	S	.0300	30	60	Y	4	7	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
71-16	1	S	2.5000	31	61	Y	10	2	0	0	1	0	10	2
71-16	1	S	2.5000	31	62	Y	5	7	0	0	1	0	5	7
71-16	1	S	2.5000	32	63	Y	5	8	1	0	0	0	5	9
71-16	1	S	2.5000	32	64	N	0	0	0	0	0	0	0	0
71-16	1	S	2.5000	33	65	Y	8	4	0	0	0	0	8	4
71-16	1	S	2.5000	33	66	Y	4	6	0	0	0	0	6	6
71-16	1	S	2.5000	34	67	Y	2	12	0	1	0	0	2	12
71-16	1	S	2.5000	34	68	N	0	0	0	0	0	0	0	0
71-16	1	S	2.5000	35	69	Y	10	3	0	0	0	0	12	3
71-16	1	S	2.5000	35	70	Y	7	5	0	0	0	0	8	6
71-16	1	S	2.5000	36	71	Y	9	4	0	0	0	0	9	4
71-16	1	S	2.5000	36	72	Y	5	4	0	0	0	0	5	4
71-16	1	S	2.5000	37	73	Y	6	4	0	0	0	0	6	6
71-16	1	S	2.5000	37	74	Y	7	5	0	0	0	0	8	5
71-16	1	S	2.5000	38	75	Y	7	4	0	0	0	0	7	4
71-16	1	S	2.5000	38	76	Y	6	5	0	0	0	1	7	5
71-16	1	S	2.5000	39	77	Y	1	9	0	0	0	0	1	12
71-16	1	S	2.5000	39	78	Y	5	8	0	0	0	0	5	8
71-16	1	S	2.5000	40	79	N	0	0	0	0	0	0	0	0
71-16	1	S	2.5000	40	80	Y	5	10	0	0	0	0	5	10
71-16	1	S	5.0000	41	81	Y	6	3	0	0	0	0	7	4
71-16	1	S	5.0000	41	82	N	0	0	0	0	0	0	0	0
71-16	1	S	5.0000	42	83	Y	3	10	0	0	0	0	3	10
71-16	1	S	5.0000	42	84	Y	6	5	0	0	0	0	7	6
71-16	1	S	5.0000	43	85	Y	9	3	0	0	0	0	11	3
71-16	1	S	5.0000	43	86	Y	5	7	0	0	0	0	5	7
71-16	1	S	5.0000	44	87	N	0	0	0	0	0	0	0	0
71-16	1	S	5.0000	44	88	Y	6	7	0	0	0	0	6	8
71-16	1	S	5.0000	45	89	Y	5	8	0	0	0	1	5	8
71-16	1	S	5.0000	45	90	Y	3	8	0	0	0	0	6	9
71-16	1	S	5.0000	46	91	Y	4	8	0	0	0	0	4	8
71-16	1	S	5.0000	46	92	Y	4	8	0	0	0	0	4	8
71-16	1	S	5.0000	47	93	Y	5	7	0	0	0	0	5	7
71-16	1	S	5.0000	47	94	Y	7	3	0	0	0	0	7	4
71-16	1	S	5.0000	48	95	Y	8	3	0	0	1	0	8	3
71-16	1	S	5.0000	48	96	Y	6	7	0	0	0	1	6	7
71-16	1	S	5.0000	49	97	Y	1	5	0	0	0	0	5	5
71-16	1	S	5.0000	49	98	Y	8	5	0	0	0	0	9	5
71-16	1	S	5.0000	50	99	Y	3	12	0	1	1	2	5	12
71-16	1	S	5.0000	50	100	Y	9	4	0	0	0	1	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
TEM16	1	S	.0002	11	21	Y	8	6	0	0	2	0	8	6
TEM16	1	S	.0002	11	22	Y	6	8	0	0	3	3	6	8
TEM16	1	S	.0002	12	23	Y	6	1	2	0	1	0	7	6
TEM16	1	S	.0002	12	24	Y	1	4	0	1	0	0	7	4
TEM16	1	S	.0002	13	25	Y	6	8	0	0	4	5	7	8
TEM16	1	S	.0002	13	26	Y	7	7	0	0	1	4	8	9
TEM16	1	S	.0002	14	27	N	0	0	0	0	0	0	0	0
TEM16	1	S	.0002	14	28	Y	4	9	1	2	0	0	4	10
TEM16	1	S	.0002	15	29	Y	4	9	1	1	0	3	5	9
TEM16	1	S	.0002	15	30	Y	4	9	3	3	0	1	4	11
TEM16	1	S	.0002	16	31	Y	8	4	0	0	6	3	9	6
TEM16	1	S	.0002	16	32	Y	4	2	0	0	0	0	4	9
TEM16	1	S	.0002	17	33	Y	9	4	0	0	8	3	9	4
TEM16	1	S	.0002	17	34	Y	6	8	0	0	0	1	6	8
TEM16	1	S	.0002	18	35	Y	5	5	0	0	3	2	5	7
TEM16	1	S	.0002	18	36	Y	7	6	2	2	0	0	7	6
TEM16	1	S	.0002	19	37	Y	5	7	0	0	2	2	7	7
TEM16	1	S	.0002	19	38	Y	7	5	3	1	0	0	7	6
TEM16	1	S	.0002	20	39	N	0	0	0	0	0	0	0	0
TEM16	1	S	.0002	20	40	Y	5	9	0	1	0	0	5	9
CNTRL16	1	M	0.0000	1	1	Y	5	6	0	0	0	0	5	6
CNTRL16	1	M	0.0000	1	2	Y	3	10	0	0	1	1	3	10
CNTRL16	1	M	0.0000	2	3	Y	4	8	1	0	0	0	4	9
CNTRL16	1	M	0.0000	2	4	Y	5	6	0	0	0	0	5	6
CNTRL16	1	M	0.0000	3	5	Y	3	9	0	0	0	1	3	9
CNTRL16	1	M	0.0000	3	6	Y	6	8	0	0	0	0	6	9
CNTRL16	1	M	0.0000	4	7	Y	6	6	0	0	0	0	6	6
CNTRL16	1	M	0.0000	4	8	Y	3	10	1	0	0	0	3	10
CNTRL16	1	M	0.0000	5	9	Y	6	5	0	0	0	0	7	7
CNTRL16	1	M	0.0000	5	10	Y	5	6	0	0	0	0	6	6
CNTRL16	1	M	0.0000	6	11	Y	7	5	0	0	0	0	7	5
CNTRL16	1	M	0.0000	6	12	Y	9	3	0	0	0	0	9	3
CNTRL16	1	M	0.0000	7	13	Y	5	7	0	0	0	0	5	7
CNTRL16	1	M	0.0000	7	14	Y	9	5	0	0	0	0	9	5
CNTRL16	1	M	0.0000	8	15	Y	7	5	0	0	0	0	7	6
CNTRL16	1	M	0.0000	8	16	Y	7	4	0	0	0	0	9	4
CNTRL16	1	M	0.0000	9	17	Y	6	9	0	0	0	0	6	9
CNTRL16	1	M	0.0000	9	18	Y	7	8	0	0	0	0	7	8
CNTRL16	1	M	0.0000	10	19	Y	0	10	0	0	0	0	6	11
CNTRL16	1	M	0.0000	10	20	Y	5	6	0	0	1	1	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
71-16	1	M	.0300	11	21	Y	2	0	0	0	1	0	6	5
71-16	1	M	.0300	11	22	Y	5	6	0	0	0	0	5	6
71-16	1	M	.0300	12	23	N	0	0	0	0	0	0	0	0
71-16	1	M	.0300	12	24	N	0	0	0	0	0	0	0	0
71-16	1	M	.0300	13	25	N	0	0	0	0	0	0	0	0
71-16	1	M	.0300	13	26	Y	7	7	0	0	0	0	7	7
71-16	1	M	.0300	14	27	Y	11	4	0	0	0	0	11	4
71-16	1	M	.0300	14	28	Y	6	4	1	0	0	0	8	4
71-16	1	M	.0300	15	29	Y	6	7	0	0	0	0	6	7
71-16	1	M	.0300	15	30	Y	7	5	0	0	1	0	8	6
71-16	1	M	.0300	16	31	Y	3	6	0	0	0	0	5	6
71-16	1	M	.0300	16	32	Y	6	11	0	0	0	0	6	11
71-16	1	M	.0300	17	33	Y	5	4	0	0	0	0	6	5
71-16	1	M	.0300	17	34	Y	7	7	0	0	0	0	7	7
71-16	1	M	.0300	18	35	Y	8	3	2	0	0	0	8	3
71-16	1	M	.0300	18	36	Y	5	5	1	0	0	0	5	5
71-16	1	M	.0300	19	37	Y	0	9	0	0	0	0	4	9
71-16	1	M	.0300	19	38	Y	7	7	0	0	1	0	7	8
71-16	1	M	.0300	20	39	Y	3	5	1	0	0	0	4	6
71-16	1	M	.0300	20	40	Y	9	1	0	0	0	1	9	1
71-16	1	M	2.5000	21	41	Y	9	4	0	0	0	0	9	5
71-16	1	M	2.5000	21	42	Y	7	7	0	0	0	0	7	7
71-16	1	M	2.5000	22	43	Y	8	4	0	0	0	0	11	5
71-16	1	M	2.5000	22	44	Y	9	6	0	0	1	0	9	7
71-16	1	M	2.5000	23	45	Y	7	3	0	0	1	1	8	3
71-16	1	M	2.5000	23	46	Y	4	6	0	0	0	1	4	6
71-16	1	M	2.5000	24	47	Y	4	10	0	0	0	1	4	10
71-16	1	M	2.5000	24	48	Y	4	10	0	0	0	0	6	10
71-16	1	M	2.5000	25	49	Y	8	5	0	0	0	0	8	5
71-16	1	M	2.5000	25	50	Y	7	6	0	0	0	0	9	6
71-16	1	M	2.5000	26	51	Y	6	8	0	0	0	0	10	10
71-16	1	M	2.5000	26	52	Y	6	7	0	0	0	0	7	7
71-16	1	M	2.5000	27	53	Y	5	8	0	0	0	1	5	8
71-16	1	M	2.5000	27	54	Y	6	6	0	0	0	0	6	8
71-16	1	M	2.5000	28	55	Y	8	5	2	1	0	1	8	5
71-16	1	M	2.5000	28	56	Y	7	5	0	0	0	0	7	5
71-16	1	M	2.5000	29	57	Y	7	4	0	0	0	0	8	4
71-16	1	M	2.5000	29	58	Y	6	6	0	0	0	1	6	6
71-16	1	M	2.5000	30	59	Y	9	6	2	1	0	1	9	6
71-16	1	M	2.5000	30	60	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
71-16	1	M	5.0000	31	61	Y	4	7	0	0	0	0	4	7
71-16	1	M	5.0000	31	62	Y	2	9	1	0	0	0	7	9
71-16	1	M	5.0000	32	63	Y	9	4	0	0	0	0	9	4
71-16	1	M	5.0000	32	64	N	0	0	0	0	0	0	0	0
71-16	1	M	5.0000	33	65	Y	5	9	0	0	0	0	5	9
71-16	1	M	5.0000	33	66	N	0	0	0	0	0	0	0	0
71-16	1	M	5.0000	34	67	Y	5	9	0	0	0	0	5	9
71-16	1	M	5.0000	34	68	Y	6	4	0	0	0	0	6	4
71-16	1	M	5.0000	35	69	Y	9	5	0	0	1	0	9	5
71-16	1	M	5.0000	35	70	Y	5	7	0	0	1	1	5	8
71-16	1	M	5.0000	36	71	Y	6	4	0	0	1	1	6	4
71-16	1	M	5.0000	36	72	Y	6	5	0	0	0	0	6	5
71-16	1	M	5.0000	37	73	Y	2	12	0	0	0	4	2	12
71-16	1	M	5.0000	37	74	Y	10	4	0	0	0	0	10	4
71-16	1	M	5.0000	38	75	N	0	0	0	0	0	0	0	0
71-16	1	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-16	1	M	5.0000	39	77	Y	5	12	0	0	0	1	5	12
71-16	1	M	5.0000	39	78	Y	1	7	0	0	0	0	5	8
71-16	1	M	5.0000	40	79	Y	7	4	0	0	2	0	10	9
71-16	1	M	5.0000	40	80	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
CNTRL16	2	S	0.0000	1	1	Y	3	9	0	0	0	0	4	9
CNTRL16	2	S	0.0000	1	2	Y	6	7	1	0	0	0	6	7
CNTRL16	2	S	0.0000	2	3	Y	6	5	0	0	0	0	7	5
CNTRL16	2	S	0.0000	2	4	Y	8	5	0	0	0	0	8	6
CNTRL16	2	S	0.0000	3	5	Y	5	6	0	0	0	0	6	6
CNTRL16	2	S	0.0000	3	6	Y	0	4	0	0	0	0	9	4
CNTRL16	2	S	0.0000	4	7	Y	8	7	0	0	0	0	8	7
CNTRL16	2	S	0.0000	4	8	Y	8	5	0	0	0	0	8	5
CNTRL16	2	S	0.0000	5	9	Y	7	6	0	0	1	0	7	6
CNTRL16	2	S	0.0000	5	10	Y	12	3	0	0	1	0	17	9
CNTRL16	2	S	0.0000	6	11	Y	5	7	0	0	0	1	5	7
CNTRL16	2	S	0.0000	6	12	Y	6	7	1	0	0	0	6	7
CNTRL16	2	S	0.0000	7	13	Y	11	6	0	0	2	1	11	6
CNTRL16	2	S	0.0000	7	14	Y	8	5	0	1	0	0	8	5
CNTRL16	2	S	0.0000	8	15	Y	5	10	0	0	0	1	5	10
CNTRL16	2	S	0.0000	8	16	Y	6	8	0	1	0	0	6	8
CNTRL16	2	S	0.0000	9	17	Y	6	6	0	0	0	0	6	6
CNTRL16	2	S	0.0000	9	18	Y	2	12	0	0	0	0	2	12
CNTRL16	2	S	0.0000	10	19	Y	7	10	0	0	0	0	7	10
CNTRL16	2	S	0.0000	10	20	Y	6	4	0	0	4	2	7	4
71-16	2	S	.0300	21	41	Y	6	6	1	0	0	0	6	6
71-16	2	S	.0300	21	42	Y	3	8	0	0	0	0	3	8
71-16	2	S	.0300	22	43	Y	4	7	0	0	0	0	4	7
71-16	2	S	.0300	22	44	Y	5	9	0	2	2	2	5	9
71-16	2	S	.0300	23	45	Y	6	7	0	0	1	0	6	7
71-16	2	S	.0300	23	46	Y	3	7	0	0	0	0	3	7
71-16	2	S	.0300	24	47	Y	9	4	1	0	0	0	9	4
71-16	2	S	.0300	24	48	Y	3	10	0	1	0	0	3	10
71-16	2	S	.0300	25	49	Y	9	5	0	0	0	0	9	5
71-16	2	S	.0300	25	50	Y	6	6	0	0	0	0	6	7
71-16	2	S	.0300	26	51	Y	7	7	0	0	1	0	7	7
71-16	2	S	.0300	26	52	Y	3	9	0	0	0	0	3	9
71-16	2	S	.0300	27	53	Y	4	8	0	0	0	0	6	8
71-16	2	S	.0300	27	54	Y	6	4	0	0	0	0	7	4
71-16	2	S	.0300	28	55	Y	9	8	0	0	0	0	9	8
71-16	2	S	.0300	28	56	Y	5	6	1	1	0	0	5	7
71-16	2	S	.0300	29	57	Y	4	6	0	0	0	2	9	8
71-16	2	S	.0300	29	58	Y	6	7	0	0	0	0	6	7
71-16	2	S	.0300	30	59	Y	8	4	0	0	1	0	8	4
71-16	2	S	.0300	30	60	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
71-16	2	S	2.5000	31	61	Y	5	7	0	0	0	0	5	7
71-16	2	S	2.5000	31	62	Y	7	6	0	0	2	0	8	6
71-16	2	S	2.5000	32	63	Y	8	4	0	0	2	2	8	5
71-16	2	S	2.5000	32	64	N	0	0	0	0	0	0	0	0
71-16	2	S	2.5000	33	65	Y	6	7	0	0	0	0	7	8
71-16	2	S	2.5000	33	66	Y	7	6	0	0	0	0	7	6
71-16	2	S	2.5000	34	67	Y	4	11	0	1	0	0	4	11
71-16	2	S	2.5000	34	68	Y	6	7	0	1	0	0	9	7
71-16	2	S	2.5000	35	69	Y	6	5	0	0	0	0	7	5
71-16	2	S	2.5000	35	70	Y	5	7	0	0	1	0	5	7
71-16	2	S	2.5000	36	71	N	0	0	0	0	0	0	0	0
71-16	2	S	2.5000	36	72	Y	8	5	2	1	0	0	13	6
71-16	2	S	2.5000	37	73	Y	5	8	0	0	0	0	5	8
71-16	2	S	2.5000	37	74	Y	6	4	0	0	0	0	9	5
71-16	2	S	2.5000	38	75	Y	5	7	0	0	0	0	5	7
71-16	2	S	2.5000	38	76	Y	10	4	0	0	0	0	12	5
71-16	2	S	2.5000	39	77	Y	6	6	0	0	0	1	6	6
71-16	2	S	2.5000	39	78	Y	5	8	0	0	0	1	6	9
71-16	2	S	2.5000	40	79	Y	6	4	0	0	0	0	6	5
71-16	2	S	2.5000	40	80	Y	8	7	0	1	0	0	8	7
71-16	2	S	5.0000	41	81	Y	6	5	0	0	0	0	6	5
71-16	2	S	5.0000	41	82	Y	0	9	0	0	0	0	5	9
71-16	2	S	5.0000	42	83	Y	3	9	0	0	0	1	3	9
71-16	2	S	5.0000	42	84	Y	3	8	0	0	0	0	4	8
71-16	2	S	5.0000	43	85	Y	1	0	0	0	0	0	6	5
71-16	2	S	5.0000	43	86	Y	8	6	0	0	0	0	10	7
71-16	2	S	5.0000	44	87	Y	8	5	0	0	1	0	8	5
71-16	2	S	5.0000	44	88	Y	5	9	1	0	0	1	5	9
71-16	2	S	5.0000	45	89	Y	4	8	0	0	0	0	4	8
71-16	2	S	5.0000	45	90	Y	3	12	0	0	0	0	3	12
71-16	2	S	5.0000	46	91	Y	5	7	0	0	0	0	5	7
71-16	2	S	5.0000	46	92	Y	5	8	0	0	0	0	5	9
71-16	2	S	5.0000	47	93	Y	5	11	0	0	0	0	5	11
71-16	2	S	5.0000	47	94	Y	6	7	0	0	0	0	7	8
71-16	2	S	5.0000	48	95	Y	6	6	0	0	2	1	6	6
71-16	2	S	5.0000	48	96	N	0	0	0	0	0	0	0	0
71-16	2	S	5.0000	49	97	Y	7	6	0	0	1	0	7	7
71-16	2	S	5.0000	49	98	Y	7	5	0	0	0	0	9	5
71-16	2	S	5.0000	50	99	Y	7	5	0	0	0	0	7	6
71-16	2	S	5.0000	50	100	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
TEM16	2	S	.0002	11	21	Y	5	2	0	0	5	2	5	2
TEM16	2	S	.0002	11	22	Y	4	2	0	0	0	0	7	6
TEM16	2	S	.0002	12	23	Y	2	9	2	8	0	0	3	9
TEM16	2	S	.0002	12	24	N	0	0	0	0	0	0	0	0
TEM16	2	S	.0002	13	25	Y	7	3	0	0	5	0	8	6
TEM16	2	S	.0002	13	26	Y	8	5	0	0	6	5	8	6
TEM16	2	S	.0002	14	27	Y	3	2	3	2	0	0	4	6
TEM16	2	S	.0002	14	28	Y	1	5	1	5	0	0	6	7
TEM16	2	S	.0002	15	29	Y	2	3	0	0	0	0	6	6
TEM16	2	S	.0002	15	30	Y	3	6	3	6	0	0	4	6
TEM16	2	S	.0002	16	31	Y	3	5	3	5	0	0	4	7
TEM16	2	S	.0002	16	32	Y	4	8	3	5	0	0	5	8
TEM16	2	S	.0002	17	33	Y	5	6	0	0	0	1	11	7
TEM16	2	S	.0002	17	34	Y	4	8	0	0	4	7	5	8
TEM16	2	S	.0002	18	35	Y	8	4	8	3	0	0	9	4
TEM16	2	S	.0002	18	36	Y	6	4	5	4	0	0	7	4
TEM16	2	S	.0002	19	37	Y	6	5	1	0	1	1	8	7
TEM16	2	S	.0002	19	38	Y	3	5	3	5	0	0	4	6
TEM16	2	S	.0002	20	39	Y	5	8	4	7	0	0	6	8
TEM16	2	S	.0002	20	40	Y	2	9	2	6	0	0	2	12
CNTRL16	2	M	0.0000	1	1	Y	3	9	0	0	0	0	4	9
CNTRL16	2	M	0.0000	1	2	Y	6	7	1	0	0	0	6	7
CNTRL16	2	M	0.0000	2	3	Y	6	5	0	0	0	0	7	5
CNTRL16	2	M	0.0000	2	4	Y	8	5	0	0	0	0	8	6
CNTRL16	2	M	0.0000	3	5	Y	5	6	0	0	0	0	6	6
CNTRL16	2	M	0.0000	3	6	Y	0	4	0	0	0	0	9	4
CNTRL16	2	M	0.0000	4	7	Y	8	7	0	0	0	0	8	7
CNTRL16	2	M	0.0000	4	8	Y	8	5	0	0	0	0	8	5
CNTRL16	2	M	0.0000	5	9	Y	7	6	0	0	1	0	7	6
CNTRL16	2	M	0.0000	5	10	Y	12	3	0	0	1	0	17	9
CNTRL16	2	M	0.0000	6	11	Y	5	7	0	0	0	1	5	7
CNTRL16	2	M	0.0000	6	12	Y	6	7	1	0	0	0	6	7
CNTRL16	2	M	0.0000	7	13	Y	11	6	0	0	2	1	11	6
CNTRL16	2	M	0.0000	7	14	Y	8	5	0	1	0	0	8	5
CNTRL16	2	M	0.0000	8	15	Y	5	10	0	0	0	1	5	10
CNTRL16	2	M	0.0000	8	16	Y	6	8	0	1	0	0	6	8
CNTRL16	2	M	0.0000	9	17	Y	6	6	0	0	0	0	6	6
CNTRL16	2	M	0.0000	9	18	Y	2	12	0	0	0	0	2	12
CNTRL16	2	M	0.0000	10	19	Y	7	10	0	0	0	0	7	10
CNTRL16	2	M	0.0000	10	20	Y	6	4	0	0	4	2	7	4

TEST MATERIAL	WEEKS	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
71-16	2	M	.0300	11	21	Y	8	5	0	0	0	0	9	5
71-16	2	M	.0300	11	22	Y	7	7	1	0	0	0	7	7
71-16	2	M	.0300	12	23	Y	2	2	0	0	0	0	8	4
71-16	2	M	.0300	12	24	Y	2	2	0	0	0	0	7	8
71-16	2	M	.0300	13	25	Y	9	3	0	0	1	0	9	3
71-16	2	M	.0300	13	26	Y	8	5	1	1	0	0	8	5
71-16	2	M	.0300	14	27	Y	8	7	1	0	0	0	8	7
71-16	2	M	.0300	14	28	Y	6	7	0	0	0	0	6	7
71-16	2	M	.0300	15	29	Y	6	9	0	0	1	0	6	9
71-16	2	M	.0300	15	30	Y	9	5	0	0	0	0	9	5
71-16	2	M	.0300	16	31	Y	2	9	0	0	0	0	4	10
71-16	2	M	.0300	16	32	Y	5	6	0	0	0	0	7	6
71-16	2	M	.0300	17	33	Y	8	5	0	0	0	0	8	5
71-16	2	M	.0300	17	34	Y	5	4	0	0	0	0	7	6
71-16	2	M	.0300	18	35	Y	4	7	0	0	0	0	4	8
71-16	2	M	.0300	18	36	Y	6	8	0	0	0	0	6	8
71-16	2	M	.0300	19	37	Y	6	8	0	0	0	0	6	8
71-16	2	M	.0300	19	38	Y	9	6	0	0	0	0	9	6
71-16	2	M	.0300	20	39	Y	6	8	0	0	0	0	6	8
71-16	2	M	.0300	20	40	N	0	0	0	0	0	0	0	0
71-16	2	M	2.5000	21	41	Y	2	10	0	0	0	3	3	10
71-16	2	M	2.5000	21	42	Y	10	5	0	0	0	0	12	5
71-16	2	M	2.5000	22	43	Y	6	6	2	0	0	0	7	6
71-16	2	M	2.5000	22	44	N	0	0	0	0	0	0	0	0
71-16	2	M	2.5000	23	45	Y	8	4	0	0	0	0	9	4
71-16	2	M	2.5000	23	46	Y	6	7	0	0	0	0	7	9
71-16	2	M	2.5000	24	47	Y	4	9	1	0	0	0	4	10
71-16	2	M	2.5000	24	48	Y	5	5	0	0	0	0	6	5
71-16	2	M	2.5000	25	49	Y	7	6	0	0	0	0	7	6
71-16	2	M	2.5000	25	50	Y	7	7	1	0	0	0	8	8
71-16	2	M	2.5000	26	51	Y	9	4	0	0	0	0	9	4
71-16	2	M	2.5000	26	52	N	0	0	0	0	0	0	0	0
71-16	2	M	2.5000	27	53	N	0	0	0	0	0	0	0	0
71-16	2	M	2.5000	27	54	Y	3	9	0	0	0	0	3	9
71-16	2	M	2.5000	28	55	Y	7	5	0	0	0	0	8	5
71-16	2	M	2.5000	28	56	Y	7	6	0	0	0	0	7	6
71-16	2	M	2.5000	29	57	Y	5	8	0	0	0	0	5	8
71-16	2	M	2.5000	29	58	Y	8	7	0	1	1	1	8	7
71-16	2	M	2.5000	30	59	N	0	0	0	0	0	0	0	0
71-16	2	M	2.5000	30	60	Y	9	3	0	0	1	0	9	3

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-16 GUAR GUM

TEST MATERIAL	WEEK	S/N	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
71-16	2	M	5.0000	31	61	Y	7	6	0	0	0	0	7	7
71-16	2	M	5.0000	31	62	Y	2	9	0	0	1	0	2	9
71-16	2	M	5.0000	32	63	Y	8	4	0	0	0	0	8	4
71-16	2	M	5.0000	32	64	Y	10	5	0	0	0	1	10	5
71-16	2	M	5.0000	33	65	Y	4	7	0	0	0	0	5	8
71-16	2	M	5.0000	33	66	Y	6	8	0	0	0	0	6	8
71-16	2	M	5.0000	34	67	Y	1	11	0	0	0	0	1	11
71-16	2	M	5.0000	34	68	Y	4	9	0	0	0	0	4	10
71-16	2	M	5.0000	35	69	Y	0	3	0	0	0	0	4	7
71-16	2	M	5.0000	35	70	Y	6	7	0	0	1	0	6	7
71-16	2	M	5.0000	36	71	Y	3	6	0	0	0	0	3	7
71-16	2	M	5.0000	36	72	Y	6	7	1	0	1	2	7	7
71-16	2	M	5.0000	37	73	Y	5	8	0	0	0	0	5	8
71-16	2	M	5.0000	37	74	Y	6	5	0	0	0	0	6	5
71-16	2	M	5.0000	38	75	N	0	0	0	0	0	0	0	0
71-16	2	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-16	2	M	5.0000	39	77	Y	6	5	0	0	0	0	6	5
71-16	2	M	5.0000	39	78	Y	5	7	0	0	1	0	7	8
71-16	2	M	5.0000	40	79	Y	7	4	0	1	3	1	7	4
71-16	2	M	5.0000	40	80	Y	10	5	0	0	0	0	10	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
CNTRL16	3	S	0.0000	1	1	Y	6	7	0	0	0	0	6	7
CNTRL16	3	S	0.0000	1	2	Y	11	4	0	0	0	0	11	4
CNTRL16	3	S	0.0000	2	3	Y	3	9	0	0	0	0	3	9
CNTRL16	3	S	0.0000	2	4	Y	7	6	0	0	0	0	10	6
CNTRL16	3	S	0.0000	3	5	Y	6	7	0	0	0	0	6	7
CNTRL16	3	S	0.0000	3	6	Y	5	9	0	0	1	2	5	9
CNTRL16	3	S	0.0000	4	7	Y	6	7	0	0	1	0	7	7
CNTRL16	3	S	0.0000	4	8	Y	4	4	0	0	0	0	6	9
CNTRL16	3	S	0.0000	5	9	Y	7	5	0	0	1	0	8	5
CNTRL16	3	S	0.0000	5	10	Y	9	5	1	1	0	0	9	6
CNTRL16	3	S	0.0000	6	11	Y	6	8	0	0	1	0	6	8
CNTRL16	3	S	0.0000	6	12	Y	4	8	0	0	0	0	5	8
CNTRL16	3	S	0.0000	7	13	Y	5	7	0	0	1	0	5	7
CNTRL16	3	S	0.0000	7	14	Y	5	7	0	0	1	0	5	7
CNTRL16	3	S	0.0000	8	15	Y	6	8	0	0	0	0	6	8
CNTRL16	3	S	0.0000	8	16	Y	2	11	0	0	0	0	2	14
CNTRL16	3	S	0.0000	9	17	Y	6	3	0	0	0	0	6	7
CNTRL16	3	S	0.0000	9	18	Y	8	3	0	0	3	1	9	4
CNTRL16	3	S	0.0000	10	19	Y	5	7	0	0	0	0	5	7
CNTRL16	3	S	0.0000	10	20	Y	6	5	0	0	0	0	7	5
71-16	3	S	.0300	21	41	Y	0	8	0	0	0	0	5	8
71-16	3	S	.0300	21	42	Y	11	3	0	0	0	0	13	3
71-16	3	S	.0300	22	23	Y	8	4	0	0	1	0	8	6
71-16	3	S	.0300	22	24	Y	8	4	0	0	3	1	8	4
71-16	3	S	.0300	23	25	Y	5	7	0	0	0	0	5	7
71-16	3	S	.0300	23	26	Y	4	9	0	0	0	0	4	9
71-16	3	S	.0300	24	27	Y	6	8	1	0	0	0	6	8
71-16	3	S	.0300	24	28	Y	9	6	0	0	0	0	9	6
71-16	3	S	.0300	25	29	Y	5	9	0	0	0	0	5	9
71-16	3	S	.0300	25	30	Y	6	6	0	0	0	0	6	8
71-16	3	S	.0300	26	31	Y	8	6	0	1	0	0	8	6
71-16	3	S	.0300	26	32	Y	4	7	0	0	0	0	6	7
71-16	3	S	.0300	27	33	Y	7	7	0	0	0	0	7	7
71-16	3	S	.0300	27	34	Y	7	5	0	0	0	0	8	5
71-16	3	S	.0300	28	35	Y	6	7	0	0	0	0	6	7
71-16	3	S	.0300	28	36	Y	5	5	0	0	2	2	8	5
71-16	3	S	.0300	29	37	Y	4	7	0	0	0	1	4	7
71-16	3	S	.0300	29	38	Y	5	8	0	0	0	0	5	8
71-16	3	S	.0300	30	39	Y	7	5	0	0	0	2	8	6
71-16	3	S	.0300	30	60	Y	5	6	0	1	1	1	6	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
71-16	3	S	2.5000	31	61	Y	4	8	0	0	0	0	5	9
71-16	3	S	2.5000	31	62	Y	6	8	0	0	0	0	6	8
71-16	3	S	2.5000	32	43	Y	6	7	0	0	0	0	7	7
71-16	3	S	2.5000	32	44	Y	2	2	0	0	0	0	7	5
71-16	3	S	2.5000	33	45	Y	4	7	0	0	0	0	4	7
71-16	3	S	2.5000	33	46	Y	9	8	0	0	0	2	9	8
71-16	3	S	2.5000	34	47	Y	8	6	0	0	0	0	9	6
71-16	3	S	2.5000	34	48	Y	4	10	0	1	0	0	4	10
71-16	3	S	2.5000	35	49	Y	7	7	0	0	0	0	7	7
71-16	3	S	2.5000	35	50	Y	5	8	0	0	1	0	5	8
71-16	3	S	2.5000	36	51	Y	6	7	5	2	0	0	7	9
71-16	3	S	2.5000	36	52	Y	7	6	1	0	0	0	7	6
71-16	3	S	2.5000	37	53	Y	7	4	0	0	0	0	7	5
71-16	3	S	2.5000	37	54	Y	6	7	0	0	0	1	7	8
71-16	3	S	2.5000	38	55	Y	6	7	0	0	0	0	6	7
71-16	3	S	2.5000	38	56	Y	3	11	0	0	0	0	4	11
71-16	3	S	2.5000	39	57	Y	5	8	0	0	0	0	5	8
71-16	3	S	2.5000	39	58	Y	7	6	0	0	1	0	7	6
71-16	3	S	2.5000	40	69	Y	10	3	0	0	0	0	10	4
71-16	3	S	2.5000	40	80	Y	8	5	0	0	0	0	9	5
71-16	3	S	5.0000	41	81	Y	7	5	0	0	2	0	7	5
71-16	3	S	5.0000	41	82	Y	4	9	0	0	0	0	4	9
71-16	3	S	5.0000	42	63	Y	5	6	0	0	0	0	5	8
71-16	3	S	5.0000	42	64	Y	5	6	1	0	0	0	5	6
71-16	3	S	5.0000	43	65	Y	7	8	0	0	0	0	7	8
71-16	3	S	5.0000	43	66	Y	8	5	0	0	0	0	8	5
71-16	3	S	5.0000	44	67	Y	7	4	1	0	0	1	7	5
71-16	3	S	5.0000	44	68	Y	4	7	0	0	0	0	4	7
71-16	3	S	5.0000	45	69	Y	8	4	0	0	0	0	8	4
71-16	3	S	5.0000	45	70	Y	8	6	0	0	0	0	9	6
71-16	3	S	5.0000	46	71	Y	8	5	0	0	0	0	8	5
71-16	3	S	5.0000	46	72	Y	5	7	0	0	0	0	5	7
71-16	3	S	5.0000	47	73	Y	4	6	0	0	0	0	4	8
71-16	3	S	5.0000	47	74	Y	9	2	0	0	0	0	10	2
71-16	3	S	5.0000	48	75	Y	7	4	0	0	0	0	9	4
71-16	3	S	5.0000	48	76	Y	4	7	0	0	0	0	4	7
71-16	3	S	5.0000	49	77	Y	10	3	0	0	0	0	10	3
71-16	3	S	5.0000	49	78	Y	3	9	0	0	0	0	3	9
71-16	3	S	5.0000	50	79	Y	6	4	0	0	0	0	6	7
71-16	3	S	5.0000	50	100	Y	5	8	0	1	0	0	7	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
TEM16	3	S	.0200	11	21	Y	5	3	0	0	4	3	5	8
TEM16	3	S	.0200	11	22	Y	2	6	2	6	0	0	6	6
TEM16	3	S	.0200	12	23	Y	7	4	5	4	0	0	6	5
TEM16	3	S	.0200	12	24	Y	4	2	2	1	2	1	5	5
TEM16	3	S	.0200	13	25	Y	6	7	5	7	0	0	8	7
TEM16	3	S	.0200	13	26	Y	4	2	0	1	3	1	8	6
TEM16	3	S	.0200	14	27	Y	4	3	4	3	0	0	5	8
TEM16	3	S	.0200	14	28	Y	5	5	4	4	0	0	5	6
TEM16	3	S	.0200	15	29	Y	2	6	1	3	0	0	3	8
TEM16	3	S	.0200	15	30	Y	3	4	0	0	3	3	5	6
TEM16	3	S	.0200	16	31	Y	2	4	2	4	0	0	5	6
TEM16	3	S	.0200	16	32	Y	5	5	3	3	1	1	6	6
TEM16	3	S	.0200	17	33	Y	5	5	0	0	0	1	5	5
TEM16	3	S	.0200	17	34	Y	2	10	2	7	0	0	2	10
TEM16	3	S	.0200	18	35	Y	7	4	7	4	0	0	8	5
TEM16	3	S	.0200	18	36	N	0	0	0	0	0	0	0	0
TEM16	3	S	.0200	19	37	Y	5	7	3	5	0	1	6	7
TEM16	3	S	.0200	19	38	Y	4	5	0	0	4	5	6	6
TEM16	3	S	.0200	20	39	Y	5	7	4	7	0	0	5	7
TEM16	3	S	.0200	20	40	N	0	0	0	0	0	0	0	0
CNTRL16	3	M	0.0000	1	1	Y	6	7	0	0	0	0	6	7
CNTRL16	3	M	0.0000	1	2	Y	11	4	0	0	0	0	11	4
CNTRL16	3	M	0.0000	2	3	Y	3	9	0	0	0	0	3	9
CNTRL16	3	M	0.0000	2	4	Y	7	6	0	0	0	0	10	6
CNTRL16	3	M	0.0000	3	5	Y	6	7	0	0	0	0	6	7
CNTRL16	3	M	0.0000	3	6	Y	5	9	0	0	1	2	5	9
CNTRL16	3	M	0.0000	4	7	Y	6	7	0	0	1	0	7	7
CNTRL16	3	M	0.0000	4	8	Y	4	4	0	0	0	0	6	9
CNTRL16	3	M	0.0000	5	9	Y	7	5	0	0	1	0	8	5
CNTRL16	3	M	0.0000	5	10	Y	9	5	1	1	0	0	9	6
CNTRL16	3	M	0.0000	6	11	Y	6	8	0	0	1	0	6	8
CNTRL16	3	M	0.0000	6	12	Y	4	8	0	0	0	0	5	8
CNTRL16	3	M	0.0000	7	13	Y	5	7	0	0	1	0	5	7
CNTRL16	3	M	0.0000	7	14	Y	5	7	0	0	1	0	5	7
CNTRL16	3	M	0.0000	8	15	Y	6	8	0	0	0	0	6	8
CNTRL16	3	M	0.0000	8	16	Y	2	11	0	0	0	0	2	14
CNTRL16	3	M	0.0000	9	17	Y	6	3	0	0	0	0	6	7
CNTRL16	3	M	0.0000	9	18	Y	8	3	0	0	3	1	9	4
CNTRL16	3	M	0.0000	10	19	Y	5	7	0	0	0	0	5	7
CNTRL16	3	M	0.0000	10	20	Y	6	5	0	0	0	0	7	5

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-16 GUAR GUM

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
71-16	3	M	.0300	11	21	Y	4	7	0	0	0	0	4	7
71-16	3	M	.0300	11	22	Y	3	5	0	0	0	0	4	5
71-16	3	M	.0300	12	23	Y	1	0	0	0	0	0	3	2
71-16	3	M	.0300	12	24	Y	0	5	0	0	0	0	4	6
71-16	3	M	.0300	13	25	Y	4	6	0	0	0	0	4	7
71-16	3	M	.0300	13	26	Y	7	6	0	1	0	0	7	6
71-16	3	M	.0300	14	27	Y	4	8	1	0	0	0	4	8
71-16	3	M	.0300	14	28	Y	7	5	0	0	0	0	7	6
71-16	3	M	.0300	15	29	Y	7	5	0	0	0	0	8	5
71-16	3	M	.0300	15	30	Y	4	5	0	0	0	0	4	5
71-16	3	M	.0300	16	31	Y	3	11	0	0	0	0	3	11
71-16	3	M	.0300	16	32	Y	8	4	0	0	1	0	8	4
71-16	3	M	.0300	17	33	Y	9	5	0	0	0	0	9	5
71-16	3	M	.0300	17	34	Y	7	6	1	0	0	0	7	6
71-16	3	M	.0300	18	35	Y	7	6	0	0	2	1	7	6
71-16	3	M	.0300	18	36	Y	7	9	0	0	0	0	7	9
71-16	3	M	.0300	19	37	Y	7	5	0	0	0	0	7	5
71-16	3	M	.0300	19	38	Y	7	5	0	1	0	0	8	5
71-16	3	M	.0300	20	39	Y	4	2	0	0	0	0	4	10
71-16	3	M	.0300	20	40	Y	5	7	0	0	0	0	5	8
71-16	3	M	2.5000	21	41	Y	9	4	0	0	0	0	9	4
71-16	3	M	2.5000	21	42	Y	5	7	0	0	0	0	5	7
71-16	3	M	2.5000	22	43	Y	3	8	0	0	0	0	3	9
71-16	3	M	2.5000	22	44	Y	6	6	0	0	0	0	6	6
71-16	3	M	2.5000	23	45	Y	6	9	0	0	0	0	6	9
71-16	3	M	2.5000	23	46	Y	5	9	0	0	0	0	5	9
71-16	3	M	2.5000	24	47	Y	3	7	0	0	0	0	5	7
71-16	3	M	2.5000	24	48	Y	3	10	0	0	0	0	3	10
71-16	3	M	2.5000	25	49	Y	5	7	0	0	0	0	6	8
71-16	3	M	2.5000	25	50	Y	5	11	0	0	1	4	6	11
71-16	3	M	2.5000	26	51	Y	3	6	0	0	0	0	3	7
71-16	3	M	2.5000	26	52	Y	6	8	0	0	0	0	6	8
71-16	3	M	2.5000	27	53	Y	7	5	0	1	1	0	7	6
71-16	3	M	2.5000	27	54	Y	6	5	0	0	0	1	7	5
71-16	3	M	2.5000	28	55	Y	6	6	1	0	0	0	6	6
71-16	3	M	2.5000	28	56	Y	7	5	0	0	0	0	7	5
71-16	3	M	2.5000	29	57	Y	9	2	0	0	0	0	9	3
71-16	3	M	2.5000	29	58	Y	4	9	0	0	0	0	4	9
71-16	3	M	2.5000	30	59	Y	6	8	0	0	0	0	6	8
71-16	3	M	2.5000	30	60	Y	7	4	0	0	0	0	9	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
71-16	3	M	5.0000	31	61	Y	8	7	0	0	0	0	8	7
71-16	3	M	5.0000	31	62	Y	6	7	0	0	0	0	6	7
71-16	3	M	5.0000	32	63	Y	3	1	0	0	0	0	7	6
71-16	3	M	5.0000	32	64	Y	6	6	0	0	0	0	6	6
71-16	3	M	5.0000	33	65	Y	6	6	1	0	0	0	6	8
71-16	3	M	5.0000	33	66	Y	7	4	0	1	0	0	7	5
71-16	3	M	5.0000	34	67	Y	9	5	0	0	0	0	13	11
71-16	3	M	5.0000	34	68	Y	7	6	0	0	1	0	8	7
71-16	3	M	5.0000	35	69	Y	5	7	0	0	0	0	5	8
71-16	3	M	5.0000	35	70	Y	9	3	1	0	1	0	9	3
71-16	3	M	5.0000	36	71	Y	5	5	0	0	0	1	5	5
71-16	3	M	5.0000	36	72	Y	4	10	3	0	0	0	4	10
71-16	3	M	5.0000	37	73	Y	4	7	0	1	0	0	4	8
71-16	3	M	5.0000	37	74	Y	9	4	0	0	0	0	9	6
71-16	3	M	5.0000	38	75	Y	5	6	0	0	1	0	6	6
71-16	3	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-16	3	M	5.0000	39	77	Y	4	10	0	0	0	0	4	11
71-16	3	M	5.0000	39	78	Y	6	6	1	0	0	1	6	6
71-16	3	M	5.0000	40	79	Y	5	5	1	0	0	2	6	5
71-16	3	M	5.0000	40	80	Y	10	5	0	0	3	0	10	5

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-16 GUAR GUM

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
CNTRL16	4	S	0.0000	1	1	Y	8	4	0	0	0	1	8	5
CNTRL16	4	S	0.0000	1	2	Y	7	4	0	0	0	0	7	4
CNTRL16	4	S	0.0000	2	3	Y	5	8	1	0	1	0	5	9
CNTRL16	4	S	0.0000	2	4	Y	6	4	0	0	0	0	6	8
CNTRL16	4	S	0.0000	3	5	Y	7	8	0	0	0	0	7	8
CNTRL16	4	S	0.0000	3	6	Y	8	7	0	0	1	0	8	7
CNTRL16	4	S	0.0000	4	7	Y	5	8	0	0	1	0	5	8
CNTRL16	4	S	0.0000	4	8	N	0	0	0	0	0	0	0	0
CNTRL16	4	S	0.0000	5	9	Y	1	0	0	0	1	0	6	4
CNTRL16	4	S	0.0000	5	10	Y	7	6	0	0	0	0	8	7
CNTRL16	4	S	0.0000	6	11	Y	6	6	0	0	2	0	6	6
CNTRL16	4	S	0.0000	6	12	Y	5	8	0	0	0	0	5	8
CNTRL16	4	S	0.0000	7	13	Y	7	8	0	1	0	1	7	8
CNTRL16	4	S	0.0000	7	14	Y	10	3	1	0	0	0	11	3
CNTRL16	4	S	0.0000	8	15	Y	5	7	0	0	0	0	6	7
CNTRL16	4	S	0.0000	8	16	Y	5	7	0	0	0	0	6	7
CNTRL16	4	S	0.0000	9	17	Y	8	7	2	0	3	0	8	7
CNTRL16	4	S	0.0000	9	18	Y	3	7	0	0	0	0	4	8
CNTRL16	4	S	0.0000	10	19	Y	4	9	0	0	0	0	4	10
CNTRL16	4	S	0.0000	10	20	Y	6	8	0	0	0	0	6	8
71-16	4	S	.0300	21	41	Y	8	5	0	0	1	0	8	5
71-16	4	S	.0300	21	42	Y	4	5	1	0	0	0	6	5
71-16	4	S	.0300	22	43	Y	5	6	0	0	1	3	8	7
71-16	4	S	.0300	22	44	Y	5	8	1	1	0	0	7	9
71-16	4	S	.0300	23	45	Y	6	7	0	0	1	0	6	12
71-16	4	S	.0300	23	46	Y	2	1	0	1	0	0	2	4
71-16	4	S	.0300	24	47	Y	9	4	0	1	0	0	9	5
71-16	4	S	.0300	24	48	Y	8	7	0	0	0	0	8	7
71-16	4	S	.0300	25	49	Y	8	6	0	0	0	0	8	7
71-16	4	S	.0300	25	50	Y	6	4	0	1	0	0	7	5
71-16	4	S	.0300	26	51	Y	3	11	0	0	0	1	3	12
71-16	4	S	.0300	26	52	Y	3	10	0	0	1	2	3	10
71-16	4	S	.0300	27	53	Y	3	8	0	0	0	0	4	8
71-16	4	S	.0300	27	54	Y	7	6	2	1	0	0	7	6
71-16	4	S	.0300	28	55	Y	0	5	0	0	0	1	8	5
71-16	4	S	.0300	28	56	Y	7	8	0	1	0	0	7	8
71-16	4	S	.0300	29	57	Y	8	3	1	0	0	0	8	3
71-16	4	S	.0300	29	58	Y	6	6	0	0	0	0	6	6
71-16	4	S	.0300	30	59	Y	9	5	0	0	0	0	9	5
71-16	4	S	.0300	30	60	Y	6	7	0	1	0	0	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
71-16	4	S	2.5000	31	61	Y	0	2	0	0	0	1	7	8
71-16	4	S	2.5000	31	62	Y	5	9	1	0	0	0	7	9
71-16	4	S	2.5000	32	63	Y	5	9	0	0	0	0	5	10
71-16	4	S	2.5000	32	64	Y	4	7	1	1	0	0	4	10
71-16	4	S	2.5000	33	65	Y	5	8	0	0	0	0	5	8
71-16	4	S	2.5000	33	66	Y	6	7	0	0	0	0	6	7
71-16	4	S	2.5000	34	67	Y	7	7	0	0	0	0	7	8
71-16	4	S	2.5000	34	68	Y	6	7	1	0	0	0	6	7
71-16	4	S	2.5000	35	69	Y	9	4	0	0	0	0	9	4
71-16	4	S	2.5000	35	70	Y	6	6	0	0	2	1	6	7
71-16	4	S	2.5000	36	71	Y	10	7	0	0	0	0	10	7
71-16	4	S	2.5000	36	72	Y	7	10	0	0	0	0	7	10
71-16	4	S	2.5000	37	73	Y	3	8	0	0	0	1	3	10
71-16	4	S	2.5000	37	74	Y	7	5	0	0	0	0	7	6
71-16	4	S	2.5000	38	75	Y	6	7	1	0	0	0	7	7
71-16	4	S	2.5000	38	76	Y	5	6	0	0	0	1	5	6
71-16	4	S	2.5000	39	77	Y	7	6	0	0	0	0	7	6
71-16	4	S	2.5000	39	78	Y	8	3	0	0	0	0	9	3
71-16	4	S	2.5000	40	79	Y	7	6	1	0	0	0	7	6
71-16	4	S	2.5000	40	80	Y	6	6	2	4	0	0	7	6
71-16	4	S	5.0000	41	81	Y	6	6	0	0	0	0	9	6
71-16	4	S	5.0000	41	82	Y	8	5	0	1	0	0	8	5
71-16	4	S	5.0000	42	83	Y	8	6	0	0	0	1	9	7
71-16	4	S	5.0000	42	84	Y	4	10	0	1	0	0	4	10
71-16	4	S	5.0000	43	85	Y	4	8	0	0	1	0	4	8
71-16	4	S	5.0000	43	86	Y	5	8	0	0	1	0	5	8
71-16	4	S	5.0000	44	87	Y	5	6	0	0	0	0	5	6
71-16	4	S	5.0000	44	88	Y	8	5	1	0	2	1	8	5
71-16	4	S	5.0000	45	89	Y	4	10	0	0	0	1	4	10
71-16	4	S	5.0000	45	90	Y	9	5	0	0	0	0	9	5
71-16	4	S	5.0000	46	91	Y	7	6	0	0	0	0	8	6
71-16	4	S	5.0000	46	92	Y	9	5	0	0	0	0	9	5
71-16	4	S	5.0000	47	93	Y	10	2	0	0	0	0	10	2
71-16	4	S	5.0000	47	94	Y	8	6	0	0	1	0	8	6
71-16	4	S	5.0000	48	95	Y	6	7	0	0	1	0	6	7
71-16	4	S	5.0000	48	96	Y	4	7	0	0	0	0	10	11
71-16	4	S	5.0000	49	97	Y	5	5	0	1	0	0	5	5
71-16	4	S	5.0000	49	98	Y	2	2	0	0	0	1	6	6
71-16	4	S	5.0000	50	99	Y	3	8	0	0	1	0	3	10
71-16	4	S	5.0000	50	100	Y	8	9	0	0	0	0	9	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
TEM16	4	S	.0002	11	21	Y	5	2	4	2	0	0	6	7
TEM16	4	S	.0002	11	22	Y	1	3	0	0	0	3	8	4
TEM16	4	S	.0002	12	23	Y	3	5	3	5	0	0	5	7
TEM16	4	S	.0002	12	24	Y	1	2	1	2	0	0	8	3
TEM16	4	S	.0002	13	25	Y	2	1	2	1	0	0	8	4
TEM16	4	S	.0002	13	26	Y	1	1	1	1	0	0	9	6
TEM16	4	S	.0002	14	27	Y	1	3	1	3	0	0	4	9
TEM16	4	S	.0002	14	28	Y	3	0	3	0	0	0	6	5
TEM16	4	S	.0002	15	29	Y	6	4	6	3	0	1	7	4
TEM16	4	S	.0002	15	30	Y	4	4	1	1	3	2	6	9
TEM16	4	S	.0002	16	31	Y	2	2	2	2	0	0	8	13
TEM16	4	S	.0002	16	32	Y	0	2	0	2	0	0	7	7
TEM16	4	S	.0002	17	33	Y	1	4	1	4	0	0	3	9
TEM16	4	S	.0002	17	34	Y	1	1	1	1	0	0	3	7
TEM16	4	S	.0002	18	35	Y	2	4	2	4	0	0	9	6
TEM16	4	S	.0002	18	36	Y	2	4	2	4	0	0	10	5
TEM16	4	S	.0002	19	37	Y	2	1	1	1	1	0	5	6
TEM16	4	S	.0002	19	38	Y	1	1	1	1	0	0	15	8
TEM16	4	S	.0002	20	39	Y	6	5	6	4	0	0	6	5
TEM16	4	S	.0002	20	40	Y	3	7	3	7	0	0	4	7
CNTRL16	4	M	0.0000	1	1	Y	8	4	0	0	0	1	8	5
CNTRL16	4	M	0.0000	1	2	Y	7	4	0	0	0	0	7	4
CNTRL16	4	M	0.0000	2	3	Y	5	8	1	0	1	0	5	9
CNTRL16	4	M	0.0000	2	4	Y	6	4	0	0	0	0	6	8
CNTRL16	4	M	0.0000	3	5	Y	7	8	0	0	0	0	7	8
CNTRL16	4	M	0.0000	3	6	Y	8	7	0	0	1	0	8	7
CNTRL16	4	M	0.0000	4	7	Y	5	8	0	0	1	0	5	8
CNTRL16	4	M	0.0000	4	8	N	0	0	0	0	0	0	0	0
CNTRL16	4	M	0.0000	5	9	Y	1	0	0	0	1	0	6	4
CNTRL16	4	M	0.0000	5	10	Y	7	6	0	0	0	0	8	7
CNTRL16	4	M	0.0000	6	11	Y	6	6	0	0	2	0	6	6
CNTRL16	4	M	0.0000	6	12	Y	5	8	0	0	0	0	5	8
CNTRL16	4	M	0.0000	7	13	Y	7	8	0	1	0	1	7	8
CNTRL16	4	M	0.0000	7	14	Y	10	3	1	0	0	0	11	3
CNTRL16	4	M	0.0000	8	15	Y	5	7	0	0	0	0	6	7
CNTRL16	4	M	0.0000	8	16	Y	5	7	0	0	0	0	6	7
CNTRL16	4	M	0.0000	9	17	Y	8	7	2	0	3	0	8	7
CNTRL16	4	M	0.0000	9	18	Y	3	7	0	0	0	0	4	8
CNTRL16	4	M	0.0000	10	19	Y	4	9	0	0	0	0	4	10
CNTRL16	4	M	0.0000	10	20	Y	6	8	0	0	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
71-16	4	M	.0300	11	21	Y	8	2	0	0	2	0	11	8
71-16	4	M	.0300	11	22	Y	7	6	0	0	0	0	7	6
71-16	4	M	.0300	12	23	Y	11	3	1	0	0	0	11	4
71-16	4	M	.0300	12	24	Y	6	7	0	0	0	0	6	8
71-16	4	M	.0300	13	25	Y	8	4	0	0	0	0	8	5
71-16	4	M	.0300	13	26	Y	5	8	0	0	0	0	5	9
71-16	4	M	.0300	14	27	Y	7	6	1	1	0	0	7	7
71-16	4	M	.0300	14	28	Y	3	7	0	0	0	0	3	8
71-16	4	M	.0300	15	29	Y	3	5	0	0	0	1	3	5
71-16	4	M	.0300	15	30	Y	5	6	0	0	0	0	6	6
71-16	4	M	.0300	16	31	Y	8	3	0	0	0	0	8	3
71-16	4	M	.0300	16	32	Y	6	9	1	1	0	0	6	9
71-16	4	M	.0300	17	33	Y	3	8	0	0	0	0	3	8
71-16	4	M	.0300	17	34	Y	3	9	0	0	0	1	3	9
71-16	4	M	.0300	18	35	Y	5	6	0	0	0	0	5	6
71-16	4	M	.0300	18	36	Y	3	8	0	1	0	0	3	8
71-16	4	M	.0300	19	37	Y	7	7	0	0	0	0	7	7
71-16	4	M	.0300	19	38	Y	8	5	0	0	0	0	8	5
71-16	4	M	.0300	20	39	Y	7	7	0	0	1	0	7	7
71-16	4	M	.0300	20	40	Y	7	9	1	0	1	0	7	9
71-16	4	M	2.5000	21	41	Y	7	7	0	0	0	1	7	7
71-16	4	M	2.5000	21	42	Y	0	7	0	0	0	2	4	7
71-16	4	M	2.5000	22	43	Y	9	6	1	0	1	0	9	6
71-16	4	M	2.5000	22	44	Y	6	5	0	0	1	0	6	5
71-16	4	M	2.5000	23	45	Y	3	6	0	1	0	0	4	7
71-16	4	M	2.5000	23	46	Y	7	6	0	0	0	0	7	6
71-16	4	M	2.5000	24	47	Y	7	6	0	0	0	0	7	6
71-16	4	M	2.5000	24	48	Y	7	5	0	0	1	0	9	5
71-16	4	M	2.5000	25	49	Y	3	1	0	0	1	0	8	4
71-16	4	M	2.5000	25	50	Y	1	2	1	2	0	0	3	5
71-16	4	M	2.5000	26	51	Y	8	6	0	0	0	0	8	6
71-16	4	M	2.5000	26	52	Y	5	5	0	0	0	0	7	6
71-16	4	M	2.5000	27	53	Y	5	9	0	0	0	0	5	9
71-16	4	M	2.5000	27	54	Y	6	5	0	0	0	0	9	5
71-16	4	M	2.5000	28	55	Y	7	4	1	0	0	0	8	4
71-16	4	M	2.5000	28	56	Y	4	7	1	0	0	0	4	7
71-16	4	M	2.5000	29	57	Y	0	4	0	0	0	0	8	6
71-16	4	M	2.5000	29	58	Y	5	9	0	0	0	0	5	9
71-16	4	M	2.5000	30	59	Y	8	6	0	2	0	0	8	7
71-16	4	M	2.5000	30	60	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
71-16	4	M	5.0000	31	61	Y	5	7	0	0	0	0	5	7
71-16	4	M	5.0000	31	62	Y	5	7	0	0	0	0	5	7
71-16	4	M	5.0000	32	63	Y	6	8	0	0	0	0	6	8
71-16	4	M	5.0000	32	64	Y	3	8	1	1	0	0	6	8
71-16	4	M	5.0000	33	65	Y	7	6	0	0	0	0	7	6
71-16	4	M	5.0000	33	66	Y	6	8	0	0	0	0	6	8
71-16	4	M	5.0000	34	67	Y	5	10	0	1	0	0	5	10
71-16	4	M	5.0000	34	68	Y	7	5	0	0	0	0	7	6
71-16	4	M	5.0000	35	69	Y	7	7	0	0	1	0	8	7
71-16	4	M	5.0000	35	70	Y	8	6	0	0	0	0	10	6
71-16	4	M	5.0000	36	71	Y	5	8	0	0	0	0	5	9
71-16	4	M	5.0000	36	72	Y	6	8	0	0	0	0	6	8
71-16	4	M	5.0000	37	73	Y	5	9	0	0	0	0	5	10
71-16	4	M	5.0000	37	74	Y	6	8	0	0	0	0	6	9
71-16	4	M	5.0000	38	75	Y	8	4	0	1	0	0	8	4
71-16	4	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-16	4	M	5.0000	39	77	Y	6	7	0	1	0	0	7	7
71-16	4	M	5.0000	39	78	Y	5	8	0	0	0	1	5	8
71-16	4	M	5.0000	40	79	Y	7	6	1	0	0	0	7	6
71-16	4	M	5.0000	40	80	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
CNTRL16	5	S	0.0000	1	1	Y	5	10	0	0	1	0	5	10
CNTRL16	5	S	0.0000	1	2	Y	10	5	0	0	0	1	10	6
CNTRL16	5	S	0.0000	2	3	Y	6	9	0	0	0	0	6	9
CNTRL16	5	S	0.0000	2	4	Y	8	5	0	0	0	1	8	5
CNTRL16	5	S	0.0000	3	5	Y	6	6	1	0	0	0	6	6
CNTRL16	5	S	0.0000	3	6	Y	7	7	1	1	0	1	7	7
CNTRL16	5	S	0.0000	4	7	Y	8	7	1	0	0	0	8	7
CNTRL16	5	S	0.0000	4	8	Y	7	8	0	0	0	1	7	9
CNTRL16	5	S	0.0000	5	9	Y	3	9	0	0	0	1	5	9
CNTRL16	5	S	0.0000	5	10	Y	8	5	0	1	0	0	9	5
CNTRL16	5	S	0.0000	6	11	Y	7	6	0	0	0	0	7	6
CNTRL16	5	S	0.0000	6	12	Y	7	7	0	2	0	1	7	8
CNTRL16	5	S	0.0000	7	13	Y	5	7	0	0	0	0	5	7
CNTRL16	5	S	0.0000	7	14	Y	7	8	0	0	0	1	7	8
CNTRL16	5	S	0.0000	8	15	Y	8	8	1	2	0	0	8	8
CNTRL16	5	S	0.0000	8	16	Y	9	5	0	0	1	0	9	5
CNTRL16	5	S	0.0000	9	17	Y	7	6	1	0	0	0	7	6
CNTRL16	5	S	0.0000	9	18	Y	6	2	0	0	0	0	8	2
CNTRL16	5	S	0.0000	10	19	Y	5	7	1	1	1	1	6	8
CNTRL16	5	S	0.0000	10	20	Y	7	9	0	0	2	1	8	9
71-16	5	S	.0300	21	41	Y	6	7	0	0	0	0	7	7
71-16	5	S	.0300	21	42	Y	6	6	0	0	0	0	6	6
71-16	5	S	.0300	22	43	Y	6	9	0	0	0	0	6	9
71-16	5	S	.0300	22	44	Y	6	7	1	1	0	0	6	7
71-16	5	S	.0300	23	45	Y	7	7	0	0	0	1	7	7
71-16	5	S	.0300	23	46	Y	6	9	0	0	0	0	7	9
71-16	5	S	.0300	24	47	Y	5	8	0	0	0	0	5	8
71-16	5	S	.0300	24	48	N	0	0	0	0	0	0	0	0
71-16	5	S	.0300	25	49	Y	7	7	0	0	1	0	7	7
71-16	5	S	.0300	25	50	Y	7	4	0	0	0	1	8	6
71-16	5	S	.0300	26	51	Y	4	9	0	1	0	1	5	9
71-16	5	S	.0300	26	52	Y	5	7	0	0	0	0	5	7
71-16	5	S	.0300	27	53	Y	6	7	0	0	0	0	6	7
71-16	5	S	.0300	27	54	Y	4	8	0	0	0	0	4	8
71-16	5	S	.0300	28	55	Y	4	8	0	0	0	1	4	9
71-16	5	S	.0300	28	56	Y	9	6	0	0	0	0	9	6
71-16	5	S	.0300	29	57	Y	8	3	0	0	0	0	9	4
71-16	5	S	.0300	29	58	Y	5	7	0	0	0	0	5	8
71-16	5	S	.0300	30	59	Y	6	8	0	0	1	4	6	8
71-16	5	S	.0300	30	60	Y	6	7	1	0	0	0	6	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
71-16	5	S	2.5000	31	61	Y	9	5	0	0	0	0	9	5
71-16	5	S	2.5000	31	62	Y	7	5	0	0	4	0	7	7
71-16	5	S	2.5000	32	63	Y	5	8	0	0	1	5	5	8
71-16	5	S	2.5000	32	64	N	0	0	0	0	0	0	0	0
71-16	5	S	2.5000	33	65	Y	9	6	0	0	0	0	9	6
71-16	5	S	2.5000	33	66	Y	7	6	0	0	0	0	8	6
71-16	5	S	2.5000	34	67	Y	8	4	0	1	0	0	8	4
71-16	5	S	2.5000	34	68	Y	4	8	0	0	1	0	4	9
71-16	5	S	2.5000	35	69	Y	9	6	0	0	4	1	9	6
71-16	5	S	2.5000	35	70	Y	6	7	0	0	2	3	6	10
71-16	5	S	2.5000	36	71	N	0	0	0	0	0	0	0	0
71-16	5	S	2.5000	36	72	Y	6	9	0	0	0	0	8	9
71-16	5	S	2.5000	37	73	Y	7	7	0	0	0	0	7	7
71-16	5	S	2.5000	37	74	Y	6	8	0	0	0	1	6	8
71-16	5	S	2.5000	38	75	Y	8	5	0	0	0	0	8	5
71-16	5	S	2.5000	38	76	Y	7	6	0	1	0	0	7	6
71-16	5	S	2.5000	39	77	Y	9	5	0	0	0	2	9	5
71-16	5	S	2.5000	39	78	N	0	0	0	0	0	0	0	0
71-16	5	S	2.5000	40	79	Y	7	7	0	1	0	0	7	7
71-16	5	S	2.5000	40	80	Y	5	5	0	0	0	0	6	6
71-16	5	S	5.0000	41	81	Y	8	6	0	0	1	0	8	6
71-16	5	S	5.0000	41	82	Y	10	3	0	0	0	0	11	3
71-16	5	S	5.0000	42	83	Y	4	7	0	0	0	0	4	7
71-16	5	S	5.0000	42	84	Y	6	8	0	0	0	0	6	8
71-16	5	S	5.0000	43	85	Y	5	9	0	0	0	0	5	9
71-16	5	S	5.0000	43	86	Y	5	7	0	0	0	0	5	8
71-16	5	S	5.0000	44	87	Y	6	5	0	0	0	0	6	5
71-16	5	S	5.0000	44	88	Y	5	5	0	0	1	1	6	7
71-16	5	S	5.0000	45	89	Y	6	7	0	0	0	0	6	7
71-16	5	S	5.0000	45	90	Y	7	7	0	0	0	0	8	7
71-16	5	S	5.0000	46	91	Y	4	6	0	0	0	0	4	7
71-16	5	S	5.0000	46	92	Y	6	6	0	0	0	0	6	8
71-16	5	S	5.0000	47	93	Y	8	4	0	0	0	0	9	5
71-16	5	S	5.0000	47	94	Y	3	9	0	0	0	0	4	10
71-16	5	S	5.0000	48	95	Y	9	7	1	0	1	2	9	7
71-16	5	S	5.0000	48	96	Y	6	6	0	0	2	0	6	7
71-16	5	S	5.0000	49	97	Y	8	5	0	0	1	0	8	5
71-16	5	S	5.0000	49	98	Y	9	4	0	0	0	0	9	4
71-16	5	S	5.0000	50	99	Y	4	10	0	0	0	0	4	10
71-16	5	S	5.0000	50	100	Y	6	6	0	0	1	0	6	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
TEM16	5	S	.0002	11	21	Y	5	8	0	0	0	0	5	8
TEM16	5	S	.0002	11	22	Y	5	6	0	0	0	3	5	6
TEM16	5	S	.0002	12	23	Y	0	4	0	0	0	0	8	4
TEM16	5	S	.0002	12	24	Y	4	6	1	1	2	0	4	6
TEM16	5	S	.0002	13	25	Y	7	6	0	0	1	0	7	6
TEM16	5	S	.0002	13	26	Y	5	7	0	0	1	1	5	7
TEM16	5	S	.0002	14	27	Y	6	6	0	0	1	1	6	8
TEM16	5	S	.0002	14	28	Y	6	6	2	1	0	0	6	6
TEM16	5	S	.0002	15	29	Y	5	7	0	0	0	0	5	7
TEM16	5	S	.0002	15	30	Y	5	6	0	0	0	1	6	6
TEM16	5	S	.0002	16	31	Y	6	8	1	2	0	2	6	8
TEM16	5	S	.0002	16	32	Y	6	5	0	3	0	0	6	5
TEM16	5	S	.0002	17	33	Y	1	1	0	0	0	0	10	4
TEM16	5	S	.0002	17	34	Y	9	3	1	0	0	0	9	3
TEM16	5	S	.0002	18	35	Y	4	7	3	5	0	0	4	8
TEM16	5	S	.0002	18	36	Y	5	9	1	3	0	0	5	9
TEM16	5	S	.0002	19	37	Y	7	6	0	0	1	1	9	6
TEM16	5	S	.0002	19	38	Y	5	5	3	1	0	0	9	6
TEM16	5	S	.0002	20	39	Y	7	5	0	2	1	0	9	6
TEM16	5	S	.0002	20	40	Y	8	5	2	2	0	0	9	5
CNTRL16	5	M	0.0000	1	1	Y	5	10	0	0	1	0	5	10
CNTRL16	5	M	0.0000	1	2	Y	10	5	0	0	0	1	10	6
CNTRL16	5	M	0.0000	2	3	Y	6	9	0	0	0	0	6	9
CNTRL16	5	M	0.0000	2	4	Y	8	5	0	0	0	1	8	5
CNTRL16	5	M	0.0000	3	5	Y	6	6	1	0	0	0	6	6
CNTRL16	5	M	0.0000	3	6	Y	7	7	1	1	0	1	7	7
CNTRL16	5	M	0.0000	4	7	Y	8	7	1	0	0	0	8	7
CNTRL16	5	M	0.0000	4	8	Y	7	8	0	0	0	1	7	9
CNTRL16	5	M	0.0000	5	9	Y	3	9	0	0	0	1	5	9
CNTRL16	5	M	0.0000	5	10	Y	8	5	0	1	0	0	9	5
CNTRL16	5	M	0.0000	6	11	Y	7	6	0	0	0	0	7	6
CNTRL16	5	M	0.0000	6	12	Y	7	7	0	2	0	1	7	8
CNTRL16	5	M	0.0000	7	13	Y	5	7	0	0	0	0	5	7
CNTRL16	5	M	0.0000	7	14	Y	7	8	0	0	0	1	7	8
CNTRL16	5	M	0.0000	8	15	Y	8	8	1	2	0	0	8	8
CNTRL16	5	M	0.0000	8	16	Y	9	5	0	0	1	0	9	5
CNTRL16	5	M	0.0000	9	17	Y	7	6	1	0	0	0	7	6
CNTRL16	5	M	0.0000	9	18	Y	6	2	0	0	0	0	8	2
CNTRL16	5	M	0.0000	10	19	Y	5	7	1	1	1	1	6	8
CNTRL16	5	M	0.0000	10	20	Y	7	9	0	0	2	1	8	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
71-16	5	M	.0300	11	21	Y	0	11	1	0	0	0	1	11
71-16	5	M	.0300	11	22	Y	3	9	0	0	0	1	3	9
71-16	5	M	.0300	12	23	Y	4	5	1	0	0	0	6	6
71-16	5	M	.0300	12	24	Y	7	3	0	0	0	0	8	3
71-16	5	M	.0300	13	25	Y	8	4	0	0	0	0	9	4
71-16	5	M	.0300	13	26	Y	4	9	0	0	1	0	4	10
71-16	5	M	.0300	14	27	Y	7	5	0	0	0	0	7	6
71-16	5	M	.0300	14	28	Y	8	4	0	0	0	0	8	4
71-16	5	M	.0300	15	29	Y	7	9	0	0	1	2	7	11
71-16	5	M	.0300	15	30	Y	7	6	0	0	1	0	8	6
71-16	5	M	.0300	16	31	Y	4	8	0	1	0	0	4	8
71-16	5	M	.0300	16	32	Y	5	6	0	1	0	0	5	6
71-16	5	M	.0300	17	33	Y	6	1	0	0	0	0	9	3
71-16	5	M	.0300	17	34	Y	8	0	0	0	0	0	9	8
71-16	5	M	.0300	18	35	Y	8	5	0	1	0	0	9	6
71-16	5	M	.0300	18	36	Y	6	6	0	0	2	1	7	8
71-16	5	M	.0300	19	37	Y	1	0	1	0	0	0	6	6
71-16	5	M	.0300	19	38	Y	4	8	0	0	0	0	4	9
71-16	5	M	.0300	20	39	Y	9	4	0	0	0	0	10	4
71-16	5	M	.0300	20	40	Y	8	5	0	0	0	0	9	6
71-16	5	M	2.5000	21	41	Y	7	4	0	0	0	0	8	4
71-16	5	M	2.5000	21	42	Y	6	4	0	0	0	0	7	6
71-16	5	M	2.5000	22	43	Y	4	5	0	0	0	0	4	7
71-16	5	M	2.5000	22	44	Y	3	10	0	0	0	3	3	10
71-16	5	M	2.5000	23	45	Y	8	3	0	0	0	0	8	3
71-16	5	M	2.5000	23	46	Y	5	6	0	0	0	0	6	6
71-16	5	M	2.5000	24	47	Y	2	8	0	0	0	0	2	10
71-16	5	M	2.5000	24	48	Y	4	9	0	2	0	0	4	9
71-16	5	M	2.5000	25	49	Y	6	5	0	0	0	0	7	5
71-16	5	M	2.5000	25	50	Y	10	2	0	0	0	0	10	3
71-16	5	M	2.5000	26	51	Y	7	4	0	0	0	0	8	4
71-16	5	M	2.5000	26	52	Y	6	6	0	0	0	0	7	6
71-16	5	M	2.5000	27	53	Y	2	10	0	0	0	1	3	10
71-16	5	M	2.5000	27	54	Y	4	7	0	0	1	1	6	11
71-16	5	M	2.5000	28	55	Y	6	4	0	1	0	0	7	5
71-16	5	M	2.5000	28	56	Y	4	0	0	0	0	0	5	7
71-16	5	M	2.5000	29	57	Y	6	7	0	0	0	0	7	8
71-16	5	M	2.5000	29	58	Y	4	7	0	0	0	1	4	9
71-16	5	M	2.5000	30	59	Y	8	6	0	0	0	0	8	6
71-16	5	M	2.5000	30	60	Y	3	9	1	0	0	0	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
71-16	5	M	5.0000	31	61	Y	8	5	0	0	0	0	9	8
71-16	5	M	5.0000	31	62	Y	4	8	0	0	0	0	4	8
71-16	5	M	5.0000	32	63	Y	3	7	0	0	0	0	3	7
71-16	5	M	5.0000	32	64	Y	8	4	1	0	0	0	8	4
71-16	5	M	5.0000	33	65	Y	7	7	0	0	0	1	7	7
71-16	5	M	5.0000	33	66	Y	8	8	0	0	0	0	9	8
71-16	5	M	5.0000	34	67	Y	3	10	0	0	0	0	3	11
71-16	5	M	5.0000	34	68	N	0	0	0	0	0	0	0	0
71-16	5	M	5.0000	35	69	Y	3	6	0	1	0	0	4	9
71-16	5	M	5.0000	35	70	Y	8	8	0	0	0	1	8	8
71-16	5	M	5.0000	36	71	Y	6	7	1	0	0	0	6	7
71-16	5	M	5.0000	36	72	Y	7	6	0	0	0	0	7	6
71-16	5	M	5.0000	37	73	Y	6	7	0	0	1	1	6	8
71-16	5	M	5.0000	37	74	Y	6	7	0	0	0	0	6	8
71-16	5	M	5.0000	38	75	Y	7	6	1	0	0	0	7	6
71-16	5	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-16	5	M	5.0000	39	77	Y	9	5	0	0	0	0	9	6
71-16	5	M	5.0000	39	78	Y	7	5	0	0	0	0	8	5
71-16	5	M	5.0000	40	79	Y	7	6	0	0	0	0	7	6
71-16	5	M	5.0000	40	80	Y	6	7	0	0	0	0	6	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
CNTRL16	6	S	0.0000	1	1	Y	7	6	0	0	0	1	7	7
CNTRL16	6	S	0.0000	1	2	Y	7	5	0	0	0	0	7	5
CNTRL16	6	S	0.0000	2	3	Y	4	9	0	0	0	0	4	10
CNTRL16	6	S	0.0000	2	4	Y	8	6	0	0	0	0	8	6
CNTRL16	6	S	0.0000	3	5	Y	5	7	0	0	0	0	6	7
CNTRL16	6	S	0.0000	3	6	Y	10	5	0	0	1	0	10	7
CNTRL16	6	S	0.0000	4	7	Y	7	5	0	0	7	5	7	5
CNTRL16	6	S	0.0000	4	8	Y	8	5	1	0	0	0	8	5
CNTRL16	6	S	0.0000	5	9	Y	4	7	0	0	0	0	5	7
CNTRL16	6	S	0.0000	5	10	Y	6	8	0	0	0	0	6	8
CNTRL16	6	S	0.0000	6	11	Y	7	8	0	0	0	0	8	9
CNTRL16	6	S	0.0000	6	12	Y	7	6	0	0	0	0	7	6
CNTRL16	6	S	0.0000	7	13	Y	7	6	0	0	0	0	7	6
CNTRL16	6	S	0.0000	7	14	Y	6	6	0	0	1	0	6	6
CNTRL16	6	S	0.0000	8	15	Y	8	3	0	1	0	0	8	4
CNTRL16	6	S	0.0000	8	16	Y	6	6	0	0	0	0	7	6
CNTRL16	6	S	0.0000	9	17	Y	4	7	0	0	0	0	4	8
CNTRL16	6	S	0.0000	9	18	Y	9	4	0	0	0	0	9	4
CNTRL16	6	S	0.0000	10	19	Y	6	6	1	1	0	0	6	6
CNTRL16	6	S	0.0000	10	20	Y	10	4	0	0	0	0	11	4
71-16	6	S	.0300	21	41	Y	8	6	0	0	0	0	8	6
71-16	6	S	.0300	21	42	Y	0	10	0	0	0	0	6	10
71-16	6	S	.0300	22	43	Y	8	4	0	0	0	0	8	4
71-16	6	S	.0300	22	44	Y	3	7	0	0	0	0	4	8
71-16	6	S	.0300	23	45	N	0	0	0	0	0	0	0	0
71-16	6	S	.0300	23	46	Y	3	1	3	1	0	0	5	5
71-16	6	S	.0300	24	47	Y	9	4	0	0	0	0	9	4
71-16	6	S	.0300	24	48	Y	10	4	0	0	0	0	11	4
71-16	6	S	.0300	25	49	Y	8	4	0	0	0	0	9	4
71-16	6	S	.0300	25	50	Y	7	4	0	0	0	0	8	4
71-16	6	S	.0300	26	51	Y	8	4	0	0	0	0	9	4
71-16	6	S	.0300	26	52	Y	8	5	0	0	0	0	8	5
71-16	6	S	.0300	27	53	Y	5	10	0	0	1	0	5	10
71-16	6	S	.0300	27	54	Y	8	4	0	0	0	0	8	4
71-16	6	S	.0300	28	55	N	0	0	0	0	0	0	0	0
71-16	6	S	.0300	28	56	Y	5	8	0	0	0	0	6	8
71-16	6	S	.0300	29	57	Y	5	7	0	1	0	0	5	7
71-16	6	S	.0300	29	58	N	0	0	0	0	0	0	0	0
71-16	6	S	.0300	30	59	Y	7	5	0	0	1	0	7	5
71-16	6	S	.0300	30	60	Y	4	6	0	0	0	0	5	7

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-16 · GUAR GUM

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
71-16	6	S	2.5000	31	61	Y	3	9	0	0	0	0	3	9
71-16	6	S	2.5000	31	62	Y	9	5	0	0	1	0	9	5
71-16	6	S	2.5000	32	63	Y	6	5	1	0	0	1	8	5
71-16	6	S	2.5000	32	64	Y	0	4	0	0	0	0	7	7
71-16	6	S	2.5000	33	65	Y	6	8	0	0	0	0	6	8
71-16	6	S	2.5000	33	66	Y	7	6	0	0	0	1	7	6
71-16	6	S	2.5000	34	67	Y	4	8	0	0	0	0	5	8
71-16	6	S	2.5000	34	68	Y	6	9	0	0	0	0	6	9
71-16	6	S	2.5000	35	69	Y	6	6	0	0	0	0	6	7
71-16	6	S	2.5000	35	70	Y	9	5	0	0	0	0	9	6
71-16	6	S	2.5000	36	71	Y	5	7	1	0	0	0	5	8
71-16	6	S	2.5000	36	72	Y	7	5	0	0	2	0	9	5
71-16	6	S	2.5000	37	73	Y	3	9	0	0	0	0	3	9
71-16	6	S	2.5000	37	74	Y	7	6	0	0	0	0	7	6
71-16	6	S	2.5000	38	75	Y	6	7	0	0	0	0	7	7
71-16	6	S	2.5000	38	76	Y	8	6	0	1	0	0	9	6
71-16	6	S	2.5000	39	77	Y	8	5	0	0	0	0	9	6
71-16	6	S	2.5000	39	78	Y	9	5	0	0	3	2	9	5
71-16	6	S	2.5000	40	79	Y	6	5	0	1	0	0	6	6
71-16	6	S	2.5000	40	80	Y	7	3	0	0	0	0	7	4
71-16	6	S	5.0000	41	81	Y	3	10	0	0	0	0	3	10
71-16	6	S	5.0000	41	82	Y	7	5	0	0	1	0	7	5
71-16	6	S	5.0000	42	83	Y	6	8	0	0	0	0	6	8
71-16	6	S	5.0000	42	84	Y	9	6	0	0	1	0	9	6
71-16	6	S	5.0000	43	85	Y	7	8	0	0	0	0	7	8
71-16	6	S	5.0000	43	86	Y	7	6	0	0	0	0	7	6
71-16	6	S	5.0000	44	87	Y	4	7	0	0	3	3	4	8
71-16	6	S	5.0000	44	88	Y	4	5	0	1	0	0	5	10
71-16	6	S	5.0000	45	89	Y	8	7	1	0	0	0	8	7
71-16	6	S	5.0000	45	90	Y	5	2	1	0	0	0	10	3
71-16	6	S	5.0000	46	91	Y	4	8	0	2	0	0	4	6
71-16	6	S	5.0000	46	92	Y	8	6	0	0	0	0	8	4
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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
TEM16	6	S	.0002	11	21	Y	5	5	0	1	0	0	5	6
TEM16	6	S	.0002	11	22	Y	6	6	0	0	0	0	7	6
TEM16	6	S	.0002	12	23	Y	8	7	0	0	0	0	10	8
TEM16	6	S	.0002	12	24	Y	6	7	0	0	1	1	6	7
TEM16	6	S	.0002	13	25	Y	6	6	0	0	0	0	6	9
TEM16	6	S	.0002	13	26	Y	4	8	1	2	0	0	4	8
TEM16	6	S	.0002	14	27	Y	3	4	0	0	0	0	9	4
TEM16	6	S	.0002	14	28	Y	4	8	0	1	0	0	4	8
TEM16	6	S	.0002	15	29	Y	6	5	0	0	0	0	7	5
TEM16	6	S	.0002	15	30	Y	8	5	1	1	0	0	8	5
TEM16	6	S	.0002	16	31	Y	0	6	0	0	0	0	7	6
TEM16	6	S	.0002	16	32	Y	6	8	0	0	4	3	6	8
TEM16	6	S	.0002	17	33	Y	1	8	0	0	0	0	1	11
TEM16	6	S	.0002	17	34	Y	4	8	0	1	0	0	5	8
TEM16	6	S	.0002	18	35	Y	4	9	0	1	1	0	5	9
TEM16	6	S	.0002	18	36	Y	4	9	0	0	0	0	4	11
TEM16	6	S	.0002	19	37	Y	7	8	0	0	0	0	7	8
TEM16	6	S	.0002	19	38	Y	4	7	1	0	0	0	4	8
TEM16	6	S	.0002	20	39	Y	5	7	0	0	1	2	6	7
TEM16	6	S	.0002	20	40	Y	6	9	0	0	2	4	7	9
CNTRL16	6	M	0.0000	1	1	Y	7	6	0	0	0	1	7	7
CNTRL16	6	M	0.0000	1	2	Y	7	5	0	0	0	0	7	5
CNTRL16	6	M	0.0000	2	3	Y	4	9	0	0	0	0	4	10
CNTRL16	6	M	0.0000	2	4	Y	8	6	0	0	0	0	8	6
CNTRL16	6	M	0.0000	3	5	Y	5	7	0	0	0	0	6	7
CNTRL16	6	M	0.0000	3	6	Y	10	5	0	0	1	0	10	7
CNTRL16	6	M	0.0000	4	7	Y	7	5	0	0	7	5	7	5
CNTRL16	6	M	0.0000	4	8	Y	8	5	1	0	0	0	8	5
CNTRL16	6	M	0.0000	5	9	Y	4	7	0	0	0	0	5	7
CNTRL16	6	M	0.0000	5	10	Y	6	8	0	0	0	0	6	8
CNTRL16	6	M	0.0000	6	11	Y	7	8	0	0	0	0	8	9
CNTRL16	6	M	0.0000	6	12	Y	7	6	0	0	0	0	7	6
CNTRL16	6	M	0.0000	7	13	Y	7	6	0	0	0	0	7	6
CNTRL16	6	M	0.0000	7	14	Y	6	6	0	0	1	0	6	6
CNTRL16	6	M	0.0000	8	15	Y	8	3	0	1	0	0	8	4
CNTRL16	6	M	0.0000	8	16	Y	6	6	0	0	0	0	7	6
CNTRL16	6	M	0.0000	809	17	Y	4	7	0	0	0	0	4	8
CNTRL16	6	M	0.0000	809	18	Y	9	4	0	0	0	0	9	4
CNTRL16	6	M	0.0000	10	19	Y	6	6	1	1	0	0	6	6
CNTRL16	6	M	0.0000	10	20	Y	10	4	0	0	0	0	11	4

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-16 GUAR GUM

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
71-16	6	M	.0300	11	21	Y	6	6	0	0	0	0	6	6
71-16	6	M	.0300	11	22	Y	5	8	0	0	2	2	5	9
71-16	6	M	.0300	12	23	Y	2	10	0	0	1	0	4	10
71-16	6	M	.0300	12	24	Y	6	4	0	0	0	0	10	5
71-16	6	M	.0300	13	25	Y	7	6	1	0	0	0	7	6
71-16	6	M	.0300	13	26	Y	6	5	1	0	0	0	6	6
71-16	6	M	.0300	14	27	Y	5	6	0	1	1	2	5	6
71-16	6	M	.0300	14	28	Y	5	5	1	0	0	0	6	5
71-16	6	M	.0300	15	29	Y	0	1	0	1	0	0	3	8
71-16	6	M	.0300	15	30	Y	6	6	0	0	0	0	6	6
71-16	6	M	.0300	16	31	Y	6	5	1	0	0	0	6	7
71-16	6	M	.0300	16	32	Y	5	5	0	0	0	0	5	7
71-16	6	M	.0300	17	33	Y	6	5	0	0	0	0	7	5
71-16	6	M	.0300	17	34	Y	4	0	1	0	0	0	6	6
71-16	6	M	.0300	18	35	Y	7	5	0	0	0	0	7	6
71-16	6	M	.0300	18	36	Y	4	6	1	0	0	0	6	6
71-16	6	M	.0300	19	37	Y	7	5	0	0	1	0	7	5
71-16	6	M	.0300	19	38	Y	6	7	2	0	0	0	6	7
71-16	6	M	.0300	20	39	Y	4	8	0	0	1	0	4	8
71-16	6	M	.0300	20	40	Y	5	6	0	0	0	0	5	6
71-16	6	M	2.5000	21	41	Y	3	6	0	0	1	2	3	8
71-16	6	M	2.5000	21	42	Y	0	6	0	0	0	0	4	6
71-16	6	M	2.5000	22	43	Y	2	8	0	1	0	0	2	9
71-16	6	M	2.5000	22	44	N	0	0	0	0	0	0	0	0
71-16	6	M	2.5000	23	45	Y	6	5	0	0	0	0	6	5
71-16	6	M	2.5000	23	46	Y	4	5	0	0	0	0	5	6
71-16	6	M	2.5000	24	47	Y	6	8	0	0	0	0	6	8
71-16	6	M	2.5000	24	48	Y	7	6	1	0	0	0	7	6
71-16	6	M	2.5000	25	49	Y	7	6	0	0	0	0	7	6
71-16	6	M	2.5000	25	50	Y	7	4	1	0	1	0	7	4
71-16	6	M	2.5000	26	51	Y	7	6	0	0	0	0	8	7
71-16	6	M	2.5000	26	52	Y	10	5	0	0	0	0	10	5
71-16	6	M	2.5000	27	53	Y	5	7	0	0	0	0	5	7
71-16	6	M	2.5000	27	54	Y	4	9	0	0	0	0	4	9
71-16	6	M	2.5000	28	55	Y	9	5	0	0	0	0	9	5
71-16	6	M	2.5000	28	56	Y	7	5	1	0	0	0	8	5
71-16	6	M	2.5000	29	57	Y	9	5	0	0	0	0	9	5
71-16	6	M	2.5000	29	58	Y	4	7	0	0	0	0	4	7
71-16	6	M	2.5000	30	59	Y	0	2	0	1	0	0	5	6
71-16	6	M	2.5000	30	60	Y	4	9	0	0	0	1	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
71-16	6	M	5.0000	31	61	Y	3	3	0	0	0	0	5	6
71-16	6	M	5.0000	31	62	Y	5	5	0	0	0	1	5	5
71-16	6	M	5.0000	32	63	Y	6	8	0	0	0	0	6	8
71-16	6	M	5.0000	32	64	Y	7	4	0	0	0	0	9	4
71-16	6	M	5.0000	33	65	Y	6	6	1	0	0	0	6	6
71-16	6	M	5.0000	33	66	Y	7	5	1	0	0	0	7	5
71-16	6	M	5.0000	34	67	Y	6	4	0	0	0	0	6	4
71-16	6	M	5.0000	34	68	Y	9	3	1	0	0	0	10	5
71-16	6	M	5.0000	35	69	Y	4	9	0	0	0	0	4	9
71-16	6	M	5.0000	35	70	Y	6	8	0	0	1	0	6	9
71-16	6	M	5.0000	36	71	Y	1	0	0	0	0	0	8	6
71-16	6	M	5.0000	36	72	Y	5	6	1	2	1	0	5	6
71-16	6	M	5.0000	37	73	Y	8	5	2	0	0	0	8	5
71-16	6	M	5.0000	37	74	Y	8	7	0	0	0	0	8	7
71-16	6	M	5.0000	38	75	Y	6	7	0	0	0	0	6	7
71-16	6	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-16	6	M	5.0000	39	77	Y	6	5	0	0	1	0	7	5
71-16	6	M	5.0000	39	78	Y	7	6	1	1	0	0	7	6
71-16	6	M	5.0000	40	79	Y	6	5	0	0	2	1	6	5
71-16	6	M	5.0000	40	80	Y	6	6	1	0	0	0	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
CNTRL16	7	S	0.0000	1	1	Y	7	7	1	0	0	0	7	7
CNTRL16	7	S	0.0000	1	2	Y	4	10	0	1	0	0	4	10
CNTRL16	7	S	0.0000	2	3	Y	6	6	1	1	1	0	7	7
CNTRL16	7	S	0.0000	2	4	Y	4	7	0	0	0	0	5	7
CNTRL16	7	S	0.0000	3	5	Y	4	6	0	0	0	0	7	7
CNTRL16	7	S	0.0000	3	6	Y	0	1	0	1	0	0	6	5
CNTRL16	7	S	0.0000	4	7	Y	3	6	1	0	0	0	4	7
CNTRL16	7	S	0.0000	4	8	Y	5	7	0	0	0	0	6	7
CNTRL16	7	S	0.0000	5	9	Y	9	6	0	0	2	0	9	7
CNTRL16	7	S	0.0000	5	10	Y	1	0	0	0	0	0	4	3
CNTRL16	7	S	0.0000	6	11	Y	5	5	0	0	0	0	5	5
CNTRL16	7	S	0.0000	6	12	Y	5	6	0	1	0	1	5	6
CNTRL16	7	S	0.0000	7	13	Y	4	7	0	0	0	0	4	8
CNTRL16	7	S	0.0000	7	14	Y	5	5	0	0	0	1	5	5
CNTRL16	7	S	0.0000	8	15	Y	7	4	0	0	1	0	7	4
CNTRL16	7	S	0.0000	8	16	Y	4	7	0	0	0	0	5	8
CNTRL16	7	S	0.0000	9	17	Y	6	8	0	0	0	0	6	8
CNTRL16	7	S	0.0000	9	18	Y	4	8	1	1	1	1	4	9
CNTRL16	7	S	0.0000	10	19	Y	4	6	1	1	0	0	5	8
CNTRL16	7	S	0.0000	10	20	Y	1	9	0	1	0	0	1	9
71-16	7	S	.0300	21	41	Y	8	5	0	0	0	0	8	5
71-16	7	S	.0300	21	42	Y	7	2	1	0	0	0	8	2
71-16	7	S	.0300	22	43	Y	4	9	0	0	3	3	4	9
71-16	7	S	.0300	22	44	Y	5	6	0	0	4	2	6	6
71-16	7	S	.0300	23	45	Y	5	7	1	0	0	0	5	7
71-16	7	S	.0300	23	46	Y	8	4	1	1	0	0	8	5
71-16	7	S	.0300	24	47	Y	3	6	1	0	0	0	4	6
71-16	7	S	.0300	24	48	Y	4	3	0	2	1	0	4	8
71-16	7	S	.0300	25	49	Y	2	9	0	0	0	0	2	9
71-16	7	S	.0300	25	50	Y	4	6	0	0	0	0	4	6
71-16	7	S	.0300	26	51	Y	3	8	0	0	0	0	3	8
71-16	7	S	.0300	26	52	Y	6	3	0	0	0	0	6	3
71-16	7	S	.0300	27	53	Y	6	4	0	0	0	0	6	5
71-16	7	S	.0300	27	54	Y	10	2	0	0	0	0	10	2
71-16	7	S	.0300	28	55	Y	5	5	0	0	0	0	6	6
71-16	7	S	.0300	28	56	Y	4	8	0	0	0	0	5	10
71-16	7	S	.0300	29	57	Y	6	8	0	0	0	0	7	8
71-16	7	S	.0300	29	58	Y	7	5	0	0	0	0	8	5
71-16	7	S	.0300	30	59	Y	5	5	0	0	0	0	5	5
71-16	7	S	.0300	30	60	Y	5	9	0	0	0	1	5	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
71-16	7	S	2.5000	31	61	Y	4	7	0	0	0	0	4	8
71-16	7	S	2.5000	31	62	Y	2	0	1	0	0	0	8	6
71-16	7	S	2.5000	32	63	Y	8	5	0	0	0	0	8	5
71-16	7	S	2.5000	32	64	Y	6	7	0	1	1	0	7	8
71-16	7	S	2.5000	33	65	Y	7	6	0	0	0	0	7	6
71-16	7	S	2.5000	33	66	Y	7	6	0	0	0	1	7	6
71-16	7	S	2.5000	34	67	Y	7	6	0	1	0	0	7	6
71-16	7	S	2.5000	34	68	Y	7	4	0	0	0	0	10	4
71-16	7	S	2.5000	35	69	Y	5	6	0	0	0	0	5	7
71-16	7	S	2.5000	35	70	Y	6	10	0	0	7	0	7	10
71-16	7	S	2.5000	36	71	Y	7	6	1	0	0	0	7	6
71-16	7	S	2.5000	36	72	Y	8	4	0	0	0	0	9	4
71-16	7	S	2.5000	37	73	Y	7	4	0	0	0	0	7	5
71-16	7	S	2.5000	37	74	Y	5	8	0	0	1	1	5	8
71-16	7	S	2.5000	38	75	Y	7	5	0	0	0	0	7	6
71-16	7	S	2.5000	38	76	Y	6	9	2	0	1	0	6	9
71-16	7	S	2.5000	39	77	Y	9	5	0	0	1	0	9	5
71-16	7	S	2.5000	39	78	Y	2	7	0	0	0	0	3	7
71-16	7	S	2.5000	40	79	Y	7	5	0	0	1	0	7	5
71-16	7	S	2.5000	40	80	Y	5	9	0	0	0	0	6	9
71-16	7	S	5.0000	41	81	Y	5	6	0	0	1	1	6	6
71-16	7	S	5.0000	41	82	Y	5	6	1	0	0	0	5	8
71-16	7	S	5.0000	42	83	Y	7	7	0	0	0	0	8	9
71-16	7	S	5.0000	42	84	Y	0	4	0	2	0	0	2	7
71-16	7	S	5.0000	43	85	Y	9	4	0	0	0	0	9	4
71-16	7	S	5.0000	43	86	Y	2	2	1	1	0	0	5	6
71-16	7	S	5.0000	44	87	Y	5	7	0	0	0	0	5	7
71-16	7	S	5.0000	44	88	Y	5	7	1	0	0	0	5	7
71-16	7	S	5.0000	45	89	Y	7	4	0	0	0	0	7	5
71-16	7	S	5.0000	45	90	Y	6	3	0	0	0	0	7	3
71-16	7	S	5.0000	46	91	Y	6	6	0	0	0	0	6	7
71-16	7	S	5.0000	46	92	Y	1	3	1	1	0	0	3	10
71-16	7	S	5.0000	47	93	Y	7	5	0	0	0	1	7	5
71-16	7	S	5.0000	47	94	Y	5	0	0	0	0	0	6	4
71-16	7	S	5.0000	48	95	Y	6	5	1	0	0	0	6	5
71-16	7	S	5.0000	48	96	Y	5	4	1	0	0	0	5	8
71-16	7	S	5.0000	49	97	Y	8	0	0	0	0	0	8	6
71-16	7	S	5.0000	49	98	Y	7	5	0	0	0	0	7	5
71-16	7	S	5.0000	50	99	Y	8	0	1	0	1	0	9	3
71-16	7	S	5.0000	50	100	Y	3	4	0	1	0	0	6	8

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-16 GUAR GUM

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
TEM16	7	S	.0002	11	21	Y	7	4	0	0	0	0	7	4
TEM16	7	S	.0002	11	22	Y	5	7	0	0	0	0	5	7
TEM16	7	S	.0002	12	23	Y	5	5	0	0	2	0	5	5
TEM16	7	S	.0002	12	24	Y	7	5	0	0	0	0	7	5
TEM16	7	S	.0002	13	25	Y	6	5	0	0	0	0	6	5
TEM16	7	S	.0002	13	26	Y	6	5	0	0	0	0	6	5
TEM16	7	S	.0002	14	27	Y	4	6	1	0	0	0	4	8
TEM16	7	S	.0002	14	28	Y	5	5	0	0	0	0	5	6
TEM16	7	S	.0002	15	29	Y	6	7	1	0	0	0	6	7
TEM16	7	S	.0002	15	30	Y	7	4	0	0	0	0	7	4
TEM16	7	S	.0002	16	31	Y	5	6	0	0	2	1	6	6
TEM16	7	S	.0002	16	32	Y	3	8	0	0	0	0	3	8
TEM16	7	S	.0002	17	33	Y	6	5	0	0	0	0	7	5
TEM16	7	S	.0002	17	34	Y	4	9	0	0	0	0	4	9
TEM16	7	S	.0002	18	35	Y	7	5	0	0	0	1	8	6
TEM16	7	S	.0002	18	36	Y	4	6	0	0	0	2	5	6
TEM16	7	S	.0002	19	37	Y	7	4	0	0	0	0	9	4
TEM16	7	S	.0002	19	38	Y	4	7	0	0	0	0	4	7
TEM16	7	S	.0002	20	39	Y	5	6	0	0	2	1	5	6
TEM16	7	S	.0002	20	40	Y	4	9	0	0	1	1	4	9
CNTRL16	7	M	0.0000	1	1	Y	7	7	1	0	0	0	7	7
CNTRL16	7	M	0.0000	1	2	Y	4	10	0	1	0	0	4	10
CNTRL16	7	M	0.0000	2	3	Y	6	6	1	1	1	0	7	7
CNTRL16	7	M	0.0000	2	4	Y	4	7	0	0	0	0	5	7
CNTRL16	7	M	0.0000	3	5	Y	4	6	0	0	0	0	7	7
CNTRL16	7	M	0.0000	3	6	Y	0	1	0	1	0	0	6	5
CNTRL16	7	M	0.0000	4	7	Y	3	6	1	0	0	0	4	7
CNTRL16	7	M	0.0000	4	8	Y	5	7	0	0	0	0	6	7
CNTRL16	7	M	0.0000	5	9	Y	9	6	0	0	2	0	9	7
CNTRL16	7	M	0.0000	5	10	Y	1	0	0	0	0	0	4	3
CNTRL16	7	M	0.0000	6	11	Y	5	5	0	0	0	0	5	5
CNTRL16	7	M	0.0000	6	12	Y	5	6	0	1	0	1	5	6
CNTRL16	7	M	0.0000	7	13	Y	4	7	0	0	0	0	4	8
CNTRL16	7	M	0.0000	7	14	Y	5	5	0	0	0	1	5	5
CNTRL16	7	M	0.0000	8	15	Y	7	4	0	0	1	0	7	4
CNTRL16	7	M	0.0000	8	16	Y	4	7	0	0	0	0	5	8
CNTRL16	7	M	0.0000	9	17	Y	6	8	0	0	0	0	6	8
CNTRL16	7	M	0.0000	9	18	Y	4	8	1	1	1	1	4	9
CNTRL16	7	M	0.0000	10	19	Y	4	6	1	1	0	0	5	8
CNTRL16	7	M	0.0000	10	20	Y	1	9	0	1	0	0	1	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
71-16	7	M	.0300	11	21	Y	6	6	0	0	0	0	6	7
71-16	7	M	.0300	11	22	Y	5	9	0	0	0	0	5	9
71-16	7	M	.0300	12	23	Y	2	9	0	0	0	0	2	10
71-16	7	M	.0300	12	24	Y	5	8	0	0	0	0	5	8
71-16	7	M	.0300	13	25	Y	6	6	0	0	0	0	6	6
71-16	7	M	.0300	13	26	Y	2	8	0	0	0	0	3	10
71-16	7	M	.0300	14	27	Y	4	6	0	1	0	0	5	7
71-16	7	M	.0300	14	28	Y	5	6	0	0	0	0	6	6
71-16	7	M	.0300	15	29	Y	7	5	0	0	1	0	7	5
71-16	7	M	.0300	15	30	Y	8	6	1	1	0	0	8	7
71-16	7	M	.0300	16	31	Y	3	12	0	1	0	0	3	12
71-16	7	M	.0300	16	32	Y	9	5	0	0	0	0	9	5
71-16	7	M	.0300	17	33	Y	6	0	0	0	1	0	3	9
71-16	7	M	.0300	17	34	Y	9	7	0	0	0	0	9	7
71-16	7	M	.0300	18	35	Y	4	1	0	0	0	0	5	9
71-16	7	M	.0300	18	36	Y	4	5	0	0	2	2	7	7
71-16	7	M	.0300	19	37	Y	1	5	1	0	0	0	3	10
71-16	7	M	.0300	19	38	Y	5	6	0	0	0	0	5	6
71-16	7	M	.0300	20	39	Y	7	7	1	0	0	0	7	7
71-16	7	M	.0300	20	40	Y	7	6	0	0	0	0	7	6
71-16	7	M	2.5000	21	41	Y	4	7	0	1	0	0	6	7
71-16	7	M	2.5000	21	42	Y	6	5	0	0	0	0	6	5
71-16	7	M	2.5000	22	43	Y	5	6	0	0	0	0	5	8
71-16	7	M	2.5000	22	44	Y	5	8	0	0	0	0	5	8
71-16	7	M	2.5000	23	45	Y	5	10	0	0	0	0	5	10
71-16	7	M	2.5000	23	46	Y	0	5	0	0	0	0	5	5
71-16	7	M	2.5000	24	47	Y	0	2	0	0	0	0	3	8
71-16	7	M	2.5000	24	48	Y	0	7	0	0	0	0	6	7
71-16	7	M	2.5000	25	49	Y	3	10	0	0	0	0	4	10
71-16	7	M	2.5000	25	50	Y	9	5	1	0	1	0	9	5
71-16	7	M	2.5000	26	51	Y	7	7	0	0	0	0	7	7
71-16	7	M	2.5000	26	52	Y	6	8	1	0	3	3	6	9
71-16	7	M	2.5000	27	53	Y	6	6	0	0	0	0	6	6
71-16	7	M	2.5000	27	54	Y	5	6	0	1	0	0	6	6
71-16	7	M	2.5000	28	55	Y	2	7	0	0	0	0	2	12
71-16	7	M	2.5000	28	56	Y	7	4	0	0	0	0	7	4
71-16	7	M	2.5000	29	57	Y	3	7	0	0	0	0	5	8
71-16	7	M	2.5000	29	58	Y	7	3	0	0	0	0	8	4
71-16	7	M	2.5000	30	59	Y	5	6	0	1	0	0	5	7
71-16	7	M	2.5000	30	60	Y	6	7	0	0	0	0	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
71-16	7	M	5.0000	31	61	Y	7	5	0	0	0	0	7	5
71-16	7	M	5.0000	31	62	Y	5	8	0	0	0	0	5	8
71-16	7	M	5.0000	32	63	Y	7	6	0	0	0	0	7	6
71-16	7	M	5.0000	32	64	Y	7	3	0	0	0	0	8	3
71-16	7	M	5.0000	33	65	Y	7	5	0	0	0	0	7	5
71-16	7	M	5.0000	33	66	Y	6	5	0	0	0	0	6	5
71-16	7	M	5.0000	34	67	Y	8	8	0	0	0	0	8	8
71-16	7	M	5.0000	34	68	Y	3	10	0	0	0	1	3	10
71-16	7	M	5.0000	35	69	Y	4	6	0	0	0	0	4	6
71-16	7	M	5.0000	35	70	Y	4	6	1	2	0	0	4	6
71-16	7	M	5.0000	36	71	Y	7	4	0	0	0	0	7	5
71-16	7	M	5.0000	36	72	Y	4	4	1	0	0	2	5	7
71-16	7	M	5.0000	37	73	Y	10	3	0	0	0	0	10	3
71-16	7	M	5.0000	37	74	Y	5	1	1	0	0	0	5	7
71-16	7	M	5.0000	38	75	Y	4	8	0	0	0	0	5	9
71-16	7	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-16	7	M	5.0000	39	77	Y	9	2	0	0	0	0	9	2
71-16	7	M	5.0000	39	78	Y	8	3	0	0	0	0	8	4
71-16	7	M	5.0000	40	79	Y	3	9	0	0	1	3	3	10
71-16	7	M	5.0000	40	80	Y	2	7	0	0	1	4	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
CNTRL16	8	S	0.0000	1	1	Y	3	7	0	0	0	1	3	8
CNTRL16	8	S	0.0000	1	2	Y	7	6	1	0	0	0	7	6
CNTRL16	8	S	0.0000	2	3	Y	7	4	0	0	1	0	7	4
CNTRL16	8	S	0.0000	2	4	Y	3	5	0	0	1	0	5	7
CNTRL16	8	S	0.0000	3	5	Y	3	9	0	0	0	0	3	9
CNTRL16	8	S	0.0000	3	6	Y	8	5	0	0	0	1	8	5
CNTRL16	8	S	0.0000	4	7	Y	1	6	0	0	0	1	5	6
CNTRL16	8	S	0.0000	4	8	Y	5	7	0	0	0	0	5	7
CNTRL16	8	S	0.0000	5	9	Y	7	6	0	0	0	1	7	6
CNTRL16	8	S	0.0000	5	10	Y	7	6	0	0	0	0	7	6
CNTRL16	8	S	0.0000	6	11	Y	8	5	0	0	0	0	8	5
CNTRL16	8	S	0.0000	6	12	Y	7	6	0	0	0	0	7	6
CNTRL16	8	S	0.0000	7	13	Y	6	7	0	0	0	1	6	7
CNTRL16	8	S	0.0000	7	14	Y	3	10	0	0	0	0	3	10
CNTRL16	8	S	0.0000	8	15	Y	6	6	0	0	0	0	6	6
CNTRL16	8	S	0.0000	8	16	Y	10	1	0	0	0	0	11	1
CNTRL16	8	S	0.0000	9	17	Y	7	9	0	0	1	0	7	9
CNTRL16	8	S	0.0000	9	18	Y	3	9	0	2	0	0	3	9
CNTRL16	8	S	0.0000	10	19	Y	5	8	0	0	0	2	7	8
CNTRL16	8	S	0.0000	10	20	Y	5	8	0	0	0	0	5	8
71-16	8	S	.0300	21	41	Y	8	3	0	0	1	0	8	7
71-16	8	S	.0300	21	42	Y	7	8	0	0	0	0	7	8
71-16	8	S	.0300	22	43	Y	4	11	0	0	0	0	7	11
71-16	8	S	.0300	22	44	Y	7	8	1	0	1	3	7	8
71-16	8	S	.0300	23	45	Y	5	10	0	0	1	1	5	10
71-16	8	S	.0300	23	46	Y	9	4	1	0	0	0	9	5
71-16	8	S	.0300	24	47	Y	2	11	0	1	0	0	2	11
71-16	8	S	.0300	24	48	Y	6	9	0	0	1	1	6	9
71-16	8	S	.0300	25	49	Y	5	7	0	3	0	0	5	7
71-16	8	S	.0300	25	50	Y	10	3	0	0	0	0	10	3
71-16	8	S	.0300	26	51	Y	7	5	0	0	0	0	9	5
71-16	8	S	.0300	26	52	Y	9	6	0	0	0	0	10	6
71-16	8	S	.0300	27	53	Y	8	5	1	0	0	0	10	5
71-16	8	S	.0300	27	54	Y	8	6	0	1	0	0	8	6
71-16	8	S	.0300	28	55	Y	6	4	1	0	0	0	7	4
71-16	8	S	.0300	28	56	Y	5	7	0	0	0	0	5	9
71-16	8	S	.0300	29	57	Y	5	6	0	0	0	0	6	6
71-16	8	S	.0300	29	58	Y	7	5	0	0	1	0	8	5
71-16	8	S	.0300	30	59	Y	8	4	1	2	5	0	8	4
71-16	8	S	.0300	30	60	Y	8	4	1	0	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
71-16	8	S	2.5000	31	61	Y	3	1	1	0	0	0	4	7
71-16	8	S	2.5000	31	62	Y	9	5	0	0	0	0	9	6
71-16	8	S	2.5000	32	63	Y	5	9	0	0	4	2	6	9
71-16	8	S	2.5000	32	64	Y	7	6	1	0	2	4	7	6
71-16	8	S	2.5000	33	65	Y	6	4	1	1	3	0	6	5
71-16	8	S	2.5000	33	66	Y	7	9	0	0	0	0	7	9
71-16	8	S	2.5000	34	67	Y	8	4	0	0	0	0	8	4
71-16	8	S	2.5000	34	68	Y	4	7	0	0	0	0	5	7
71-16	8	S	2.5000	35	69	Y	6	8	0	0	0	0	6	8
71-16	8	S	2.5000	35	70	Y	6	7	1	0	0	0	7	7
71-16	8	S	2.5000	36	71	Y	6	6	0	0	0	0	6	6
71-16	8	S	2.5000	36	72	Y	4	6	0	1	0	0	7	7
71-16	8	S	2.5000	37	73	Y	7	4	0	0	0	0	8	6
71-16	8	S	2.5000	37	74	Y	6	6	0	1	0	0	7	6
71-16	8	S	2.5000	38	75	Y	8	5	0	2	0	0	8	5
71-16	8	S	2.5000	38	76	Y	9	3	0	0	0	0	9	3
71-16	8	S	2.5000	39	77	Y	6	8	0	0	0	0	6	8
71-16	8	S	2.5000	39	78	Y	3	8	0	0	0	0	3	8
71-16	8	S	2.5000	40	79	Y	7	7	0	0	0	0	7	8
71-16	8	S	2.5000	40	80	Y	8	6	1	0	0	0	8	7
71-16	8	S	5.0000	41	81	Y	4	4	0	1	1	0	5	7
71-16	8	S	5.0000	41	82	Y	6	8	0	0	0	0	6	8
71-16	8	S	5.0000	42	83	Y	5	7	0	0	0	0	5	7
71-16	8	S	5.0000	42	84	Y	8	5	0	0	0	0	10	7
71-16	8	S	5.0000	43	85	Y	8	6	1	0	0	0	8	6
71-16	8	S	5.0000	43	86	N	0	0	0	0	0	0	0	0
71-16	8	S	5.0000	44	87	Y	3	8	0	0	0	0	3	9
71-16	8	S	5.0000	44	88	Y	8	5	1	0	0	0	8	5
71-16	8	S	5.0000	45	89	Y	5	8	1	1	0	0	5	8
71-16	8	S	5.0000	45	90	Y	8	4	1	0	0	0	8	5
71-16	8	S	5.0000	46	91	Y	7	6	1	0	0	0	7	6
71-16	8	S	5.0000	46	92	Y	7	6	0	0	0	0	7	6
71-16	8	S	5.0000	47	93	Y	0	3	0	1	0	0	7	4
71-16	8	S	5.0000	47	94	Y	9	6	0	0	0	0	9	6
71-16	8	S	5.0000	48	95	Y	7	3	0	0	3	0	8	3
71-16	8	S	5.0000	48	96	Y	5	6	0	0	0	0	7	6
71-16	8	S	5.0000	49	97	Y	6	5	0	0	0	0	9	5
71-16	8	S	5.0000	49	98	Y	9	6	0	0	0	0	9	6
71-16	8	S	5.0000	50	99	Y	5	7	0	0	1	2	5	7
71-16	8	S	5.0000	50	100	Y	7	8	0	0	0	0	7	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
TEM16	8	S	.0002	11	21	Y	6	7	0	0	1	1	6	7
TEM16	8	S	.0002	11	22	Y	0	5	0	0	0	0	8	5
TEM16	8	S	.0002	12	23	Y	7	6	1	0	1	1	7	6
TEM16	8	S	.0002	12	24	N	0	0	0	0	0	0	0	0
TEM16	8	S	.0002	13	25	Y	4	5	0	1	0	0	5	5
TEM16	8	S	.0002	13	26	Y	6	6	0	0	1	1	6	6
TEM16	8	S	.0002	14	27	Y	6	6	1	0	0	0	7	8
TEM16	8	S	.0002	14	28	Y	1	5	0	0	0	0	7	6
TEM16	8	S	.0002	15	29	Y	5	6	0	1	2	0	5	6
TEM16	8	S	.0002	15	30	Y	8	3	2	0	0	0	10	3
TEM16	8	S	.0002	16	31	Y	5	7	0	1	0	1	6	7
TEM16	8	S	.0002	16	32	Y	7	6	0	0	0	0	7	6
TEM16	8	S	.0002	17	33	Y	7	7	0	0	0	0	7	7
TEM16	8	S	.0002	17	34	Y	5	5	1	0	0	0	5	5
TEM16	8	S	.0002	18	35	Y	6	7	0	0	0	0	7	7
TEM16	8	S	.0002	18	36	Y	3	10	0	1	2	3	3	11
TEM16	8	S	.0002	19	37	Y	4	7	0	0	0	1	4	8
TEM16	8	S	.0002	19	38	Y	3	7	0	0	0	0	5	7
TEM16	8	S	.0002	20	39	Y	5	7	0	0	0	0	5	7
TEM16	8	S	.0002	20	40	Y	4	9	0	0	0	1	4	9

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

REPN	VEHICLE CONTROL				71-16 .03 G/KG				71-16 2.5 G/KG				71-16 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	20	20	1.00	0.00	16	20	.80	2.50	17	20	.85	1.44	18	20	.90	.53	18	20	.90	.53
2	20	20	1.00	0.00	19	20	.95	0.00	18	20	.90	.53	18	20	.90	.53	19	20	.95	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	18	20	.90	.53
4	19	20	.95	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
5	20	20	1.00	0.00	19	20	.95	0.00	17	20	.85	1.44	20	20	1.00	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	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	20	20	1.00	0.00	19	20	.95	0.00	19	20	.95	0.00
MULTIPLE TREATMENT																				
1	20	20	1.00	0.00	17	20	.85	1.44	20	20	1.00	0.00	15	20	.75	3.66				
2	20	20	1.00	0.00	19	20	.95	0.00	16	20	.80	2.50	18	20	.90	.53				
3	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	19	20	.95	0.00				
4	19	20	.95	0.00	20	20	1.00	0.00	20	20	1.00	0.00	19	20	.95	.53				
5	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	18	20	.90	.53				
6	20	20	1.00	0.00	20	20	1.00	0.00	19	20	.95	0.00	19	20	.95	0.00				
7	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	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

WEEK	.63 G/KG N PRG	.63 G/KG N MTD	2.5 G/KG N PRG	2.5 G/KG N MTD	5.0 G/KG N PRG	5.0 G/KG N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
								SINGLE TREATMENT	
1	16	20	17	20	18	20	.78	.78	.00
2	19	20	18	20	18	20	.44	.33	.11
3	20	20	20	20	20	20	0.00	0.00	0.00
4	20	20	20	20	20	20	0.00	0.00	0.00
5	19	20	17	20	20	20	3.75	.41	3.34
6	17	20	20	20	20	20	6.32	4.72	1.60
7	20	20	20	20	20	20	0.00	0.00	0.00
8	20	20	20	20	19	20	2.03	1.53	.50
								MULTIPLE TREATMENT	
1	17	20	20	20	15	20	5.48	.88	4.60
2	19	20	16	20	18	20	2.26	.24	2.03
3	20	20	20	20	19	20	2.03	1.53	.50
4	20	20	20	20	19	20	2.03	1.53	.50
5	20	20	20	20	18	20	4.14	3.12	1.02
6	20	20	19	20	19	20	1.03	.77	.26
7	20	20	20	20	19	20	2.03	1.53	.50

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	18	20	.78	.67	.12
2	19	20	18	20	18	20	.44	.43	.01
3	20	20	20	20	20	20	0.00	0.00	0.00
4	20	20	20	20	20	20	0.00	0.00	0.00
5	19	20	17	20	20	20	3.75	.02	3.73
6	17	20	20	20	20	20	6.32	6.22	.10
7	20	20	20	20	20	20	0.00	0.00	0.00
8	20	20	20	20	19	20	2.03	.74	1.29
								MULTIPLE TREATMENT	
1	17	20	20	20	15	20	5.48	.00	5.48
2	19	20	16	20	18	20	2.26	1.01	1.25
3	20	20	20	20	19	20	2.03	.74	1.29
4	20	20	20	20	19	20	2.03	.74	1.29
5	20	20	20	20	18	20	4.14	1.51	2.63
6	20	20	19	20	19	20	1.03	1.02	.02
7	20	20	20	20	19	20	2.03	.74	1.29

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	20	20	16	20	17	20	18	20	4.38	.02	4.36
2	20	20	19	20	18	20	18	20	2.35	.87	1.48
3	20	20	20	20	20	20	20	20	0.00	0.00	0.00
4	19	20	20	20	20	20	20	20	3.04	.47	2.57
5	20	20	19	20	17	20	20	20	6.32	.85	5.47
6	20	20	17	20	20	20	20	20	9.35	1.40	7.95
7	20	20	20	20	20	20	20	20	0.00	0.00	0.00
8	20	20	20	20	20	20	19	20	3.04	2.99	.04
							MULTIPLE TREATMENT				
1	20	20	17	20	20	20	15	20	10.00	6.02	3.98
2	20	20	19	20	16	20	18	20	5.48	.25	5.23
3	20	20	20	20	20	20	19	20	3.04	2.99	.04
4	19	20	20	20	20	20	19	20	2.05	.55	1.50
5	20	20	20	20	20	20	18	20	6.15	6.06	.09
6	20	20	20	20	19	20	19	20	2.05	.93	1.12
7	20	20	20	20	20	20	19	20	3.04	2.99	.04

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

WEEK	CONTROL			71-16 .03 G/KG					71-16 2.5 G/KG					71-16 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	20	12.20	1.40	16	11.37	3.07	34	1.072	17	11.88	1.58	35	.649	18	11.72	1.96	35	.870	18	11.83	2.90	36	.505
2	20	12.85	2.78	19	12.32	1.73	37	.716	18	12.56	1.38	36	.406	18	11.94	3.15	36	.942	19	9.47	2.67	37	3.364
3	20	12.35	1.69	20	12.35	1.66	38	0.000	20	12.75	2.40	38	.608	20	11.95	1.32	38	.834	18	9.22	2.32	36	4.786
4	19	12.21	3.12	20	11.75	3.09	37	.463	20	12.45	2.98	37	.245	20	12.45	2.52	37	.264	20	5.15	2.94	37	7.274
5	20	13.60	1.88	19	13.00	1.25	37	1.170	17	13.29	1.31	35	.565	20	12.60	1.50	38	1.862	20	11.10	3.01	38	3.155
6	20	12.75	1.21	17	11.71	2.44	35	1.686	20	12.25	2.31	38	.856	20	12.65	2.06	38	.187	20	11.85	2.41	38	1.492
7	20	10.45	3.62	20	11.05	1.82	38	.662	20	12.05	2.84	38	1.556	20	9.45	3.20	38	.925	20	11.25	.97	38	.955
8	20	12.05	1.96	20	13.00	1.59	38	1.684	20	12.20	2.48	38	.212	19	12.00	2.83	37	.064	19	11.21	2.39	37	1.201
											MULTIPLE TREATMENT												
1	20	12.20	1.40	17	11.06	3.44	35	1.361	20	12.70	1.45	38	1.108	15	12.27	2.28	33	.107					
2	20	12.85	2.78	19	12.05	3.26	37	.824	16	12.75	1.24	34	.134	18	11.78	2.67	36	1.210					
3	20	12.35	1.69	20	10.85	3.53	38	1.714	20	12.35	1.69	38	0.000	19	12.00	2.45	37	.521					
4	19	12.21	3.12	20	12.25	1.92	37	.048	20	10.75	3.64	37	1.342	19	13.11	1.05	36	1.185					
5	20	13.60	1.88	20	11.10	3.09	38	3.091	20	11.05	2.06	38	4.089	18	12.89	1.68	36	1.227					
6	20	12.75	1.21	20	10.55	2.96	38	3.073	19	11.32	3.15	37	1.898	19	11.26	3.16	37	1.960					
7	20	10.45	3.62	20	11.40	3.05	38	.898	20	10.85	3.20	38	.370	19	11.21	2.18	37	.790					

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	51	2.61	2.05	11.67	2.23	.067	11.492	.430	49	5.0693	.1930	.0242	.2639	.0994
	LOG DOSE	51	-.23	2.26	11.67	2.23	.084	11.686	.594	49	5.0520	.1927	.0198	.1001	.0991
2	DOSE	55	2.46	2.06	12.27	2.19	-.074	12.454	-.504	53	4.8618	.1797	.0213	.2178	.0884
	LOG DOSE	55	-.38	2.31	12.27	2.19	-.027	12.262	-.206	53	4.8812	.1800	.0170	.0913	.0887
3	DOSE	60	2.51	2.05	12.35	1.85	-.081	12.553	-.685	58	3.4488	.1504	.0140	.1454	.0573
	LOG DOSE	60	-.33	2.29	12.35	1.85	-.018	12.344	-.169	58	3.4750	.1509	.0113	.0591	.0579
4	DOSE	60	2.51	2.05	12.22	2.85	.141	11.864	.773	58	8.1604	.2338	.0330	.3441	.1360
	LOG DOSE	60	-.33	2.29	12.22	2.85	.144	12.264	.889	58	8.1337	.2334	.0264	.1364	.1356
5	DOSE	56	2.55	2.09	12.95	1.37	-.082	13.157	-.934	54	1.8742	.1057	.0078	.0843	.0335
	LOG DOSE	56	-.34	2.31	12.95	1.37	-.032	12.936	-.394	54	1.8990	.1064	.0065	.0346	.0339
6	DOSE	57	2.64	2.02	12.23	2.26	.189	11.729	1.269	55	5.0528	.1838	.0222	.2434	.0886
	LOG DOSE	57	-.16	2.22	12.23	2.26	.163	12.254	1.206	55	5.0667	.1841	.0183	.0894	.0889
7	DOSE	60	2.51	2.05	10.85	2.85	-.323	11.662	-1.817	58	7.8244	.2578	.0317	.3300	.1304
	LOG DOSE	60	-.33	2.29	10.85	2.85	-.120	10.811	-.738	58	8.1928	.2638	.0266	.1394	.1365
8	DOSE	59	2.47	2.04	12.41	2.35	-.202	12.905	-1.343	57	5.4459	.1881	.0226	.2301	.0923
	LOG DOSE	59	-.36	2.29	12.41	2.35	-.190	12.338	-1.423	57	5.4254	.1877	.0178	.0943	.0920
							MULTIPLE TREATMENTS								
1	DOSE	52	2.41	1.97	12.04	2.54	.252	11.430	1.409	50	6.3079	.2086	.0320	.3078	.1213
	LOG DOSE	52	-.33	2.25	12.04	2.54	.294	12.135	1.911	50	6.1121	.2054	.0236	.1201	.1175
2	DOSE	53	2.46	2.10	12.17	2.57	-.053	12.301	-.310	51	6.7221	.2130	.0294	.3055	.1288
	LOG DOSE	53	-.43	2.34	12.17	2.57	.017	12.177	.113	51	6.7330	.2132	.0237	.1315	.1270
3	DOSE	59	2.47	2.04	11.73	2.70	.234	11.152	1.352	57	7.2017	.2288	.0299	.3043	.1221
	LOG DOSE	59	-.36	2.29	11.73	2.70	.267	11.825	1.755	57	7.0515	.2264	.0232	.1225	.1195
4	DOSE	59	2.47	2.04	12.02	2.62	.167	11.605	.990	57	6.8469	.2177	.0284	.2893	.1160
	LOG DOSE	59	-.36	2.29	12.02	2.62	-.021	12.010	-.136	57	6.9623	.2196	.0229	.1210	.1160
5	DOSE	58	2.42	2.03	11.64	2.48	.354	10.780	2.258	56	5.7513	.2061	.0246	.2435	.0992
	LOG DOSE	58	-.39	2.30	11.64	2.48	.210	11.721	1.484	56	6.0375	.2111	.0201	.1072	.1041
6	DOSE	58	2.47	2.05	11.03	3.05	.145	10.678	.731	56	9.4089	.2780	.0391	.4002	.1622
	LOG DOSE	58	-.36	2.30	11.03	3.05	.152	11.092	.861	56	9.3746	.2775	.0310	.1661	.1616
7	DOSE	59	2.47	2.04	11.15	2.82	-.039	11.250	-.215	57	8.0571	.2545	.0335	.3404	.1366
	LOG DOSE	59	-.36	2.29	11.15	2.82	-.069	11.128	-.427	57	8.0379	.2542	.0264	.1397	.1362

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

KEY	X	N	XBAR	SD X	UBAR	SD U	B	A	TB	DF	VARU.X	CV U	VARB	VARA	VARUBAR
						SINGLE TREATMENT									
1	DOSE	71	1.87	2.09	11.82	2.04	-.019	11.853	-.165	69	4.2102	.1736	.0137	.1074	.0593
2	DOSE	75	1.81	2.07	12.43	2.35	-.119	12.641	-.896	73	5.5600	.1898	.0175	.1314	.0741
3	DOSE	81	1.86	2.08	12.35	1.80	-.059	12.460	-.599	78	3.2696	.1464	.0096	.0748	.0409
4	DOSE	79	1.91	2.06	12.22	2.89	.103	12.018	.654	77	8.4380	.2378	.0250	.1976	.1068
5	DOSE	76	1.85	2.12	13.12	1.53	-.132	13.367	-1.597	74	2.2983	.1156	.0068	.0544	.0302
6	DOSE	77	1.95	2.09	12.35	2.04	.068	12.230	.606	75	4.2170	.1661	.0127	.1035	.0548
7	DOSE	80	1.86	2.08	10.75	3.04	-.190	11.107	-1.156	78	9.2141	.2824	.0270	.2108	.1152
8	DOSE	79	1.94	2.06	12.32	2.25	-.107	12.514	-.864	77	5.0817	.1830	.0153	.1164	.0643
						MULTIPLE TREATMENTS									
1	DOSE	72	1.74	1.99	12.08	2.27	.157	11.810	1.161	70	5.1228	.1873	.0182	.1265	.0712
2	DOSE	73	1.79	2.10	12.35	2.63	-.115	12.562	-.778	71	6.9371	.2132	.0219	.1652	.0950
3	DOSE	79	1.64	2.06	11.89	2.49	.101	11.700	.734	77	6.2417	.2102	.0188	.1429	.0790
4	DOSE	78	1.87	2.06	12.06	2.73	.102	11.875	.672	76	7.4908	.2269	.0228	.1756	.0960
5	DOSE	78	1.8[illegible]	2.04	12.14	2.48	.038	12.073	.271	76	6.2499	.2059	.0194	.1433	.0801
6	DOSE	78	1.83	2.07	11.47	2.80	-.085	11.630	-.550	76	7.9086	.2451	.0239	.1818	.1014
7	DOSE	79	1.84	2.06	10.97	3.03	.050	10.883	.296	77	9.2875	.2777	.0280	.2127	.1176

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			71-16 .03 G/KG				71-16 2.5 G/KG				71-16 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	20	.47	.32	16	.55	.51	34	.552	17	.53	.29	35	.541	18	.58	.35	36	.950	18	.74	.47	36	2.072
2	20	.51	.45	19	.43	.30	37	.646	18	.59	.33	36	.674	18	.63	.54	36	.764	19	1.01	.42	37	3.987
3	20	.57	.37	20	.55	.35	38	.158	20	.55	.39	38	.190	20	.50	.30	38	.640	18	1.00	.44	36	3.253
4	19	.61	.51	20	.69	.46	37	.514	20	.61	.48	37	.025	20	.54	.46	37	.436	20	1.73	.59	37	6.384
5	20	.44	.24	19	.44	.24	37	.082	17	.45	.27	35	.091	20	.49	.27	38	.601	20	.66	.58	38	1.541
6	20	.48	.21	17	.61	.43	35	1.221	20	.59	.40	38	1.179	20	.51	.40	38	.337	20	.69	.39	38	2.157
7	20	.76	.61	20	.55	.32	38	1.330	20	.59	.47	38	.945	20	.94	.58	38	.955	20	.46	.24	38	2.020
8	20	.44	.33	20	.55	.29	38	1.071	20	.58	.40	38	1.167	19	.59	.48	37	1.094	19	.63	.46	37	1.488
MULTIPLE TREATMENT																							
1	20	.47	.32	17	.55	.52	35	1.284	20	.53	.30	38	.621	15	.51	.44	33	.283					
2	20	.51	.45	19	.60	.56	37	.591	16	.52	.24	34	.121	18	.53	.44	36	.154					
3	20	.57	.37	20	.63	.54	38	.387	20	.49	.26	38	.819	19	.63	.44	37	.482					
4	19	.61	.51	20	.47	.31	37	1.003	20	.76	.59	37	.873	19	.45	.23	36	1.227					
5	20	.44	.24	20	.82	.52	38	2.915	20	.76	.38	38	3.116	18	.48	.27	36	.443					
6	20	.48	.21	20	.74	.57	38	1.910	19	.59	.51	37	.968	19	.59	.57	37	.818					
7	20	.76	.61	20	.66	.53	38	.409	20	.77	.53	38	.086	19	.57	.41	37	1.087					

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

REP	CONTROL			71-16 .03 G/KG					71-16 2.5 G/KG					71-16 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	.39	.23	20	.78	.49	38	3.191	20	.57	.46	38	1.503	20	.52	.42	38	1.219	20	1.22	.47	38	7.121
2	20	.51	.34	20	.57	.39	38	.499	20	.61	.42	38	.830	20	.53	.43	38	.101	20	1.70	.71	38	6.747
3	20	.47	.29	20	.51	.34	38	.322	20	.45	.30	38	.315	20	.37	.22	38	1.236	20	1.78	.38	38	12.056
4	20	.57	.38	20	.64	.27	38	.675	20	.53	.34	38	.377	20	.53	.26	38	.419	20	1.37	.54	38	5.479
5	20	.65	.25	20	.54	.38	38	1.132	20	.79	.51	38	1.075	20	.43	.26	38	2.734	20	.90	.43	38	2.252
6	20	.52	.59	20	.58	.51	38	.322	20	.47	.29	38	.344	20	.58	.34	38	.387	20	.64	.41	38	.702
7	20	.60	.29	20	.56	.42	38	.326	20	.54	.32	38	.663	20	.56	.28	38	.445	20	.52	.32	38	.465
8	20	.51	.23	20	.54	.41	38	1.220	20	.58	.45	38	.600	20	.58	.38	38	.638	20	.70	.40	38	1.847
MULTIPLE TREATMENT																							
1	20	.39	.23	20	.65	.46	38	2.239	20	.49	.32	38	1.062	20	.78	.54	38	2.979					
2	20	.51	.34	20	.44	.33	38	.739	20	.69	.52	38	1.257	20	.59	.47	38	.553					
3	20	.47	.29	20	.42	.22	38	.626	20	.39	.25	38	.995	20	.63	.38	38	1.452					
4	20	.57	.38	20	.48	.24	38	.845	20	.57	.30	38	.059	20	.47	.33	38	.857					
5	20	.65	.25	20	.51	.24	38	1.754	20	.45	.25	38	2.577	20	.54	.41	38	1.040					
6	20	.52	.59	20	.60	.30	38	.546	20	.52	.36	38	.047	20	.63	.38	38	.690					
7	20	.60	.29	20	.46	.26	38	1.615	20	.42	.31	38	1.825	20	.57	.45	38	.263					

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

WEEK	VEHICLE CONTROL				71-16 .03 G/KG				71-16 2.5 G/KG				71-16 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	5	20	.25	0.00	9	20	.45	.99	5	20	.25	.13	5	20	.25	.13	17	20	.85	12.22
2	10	20	.50	0.00	9	20	.45	0.00	9	20	.45	0.00	5	20	.25	1.71	17	20	.85	4.10
3	8	20	.40	0.00	8	20	.40	.10	7	20	.35	0.00	4	20	.20	1.07	18	20	.90	8.90
4	9	20	.45	0.00	15	20	.75	2.60	10	20	.50	0.00	12	20	.60	.40	20	20	1.00	12.54
5	16	20	.80	0.00	8	20	.40	5.10	10	20	.50	2.75	6	20	.30	8.18	16	20	.80	.16
6	7	20	.35	0.00	4	20	.20	.50	8	20	.40	0.00	12	20	.60	1.60	11	20	.55	.91
7	12	20	.60	0.00	8	20	.40	.90	10	20	.50	.10	11	20	.55	0.00	8	20	.40	.90
8	11	20	.55	0.00	13	20	.65	.10	9	20	.45	.10	9	20	.45	.10	12	20	.60	0.00
									MULTIPLE TREATMENT											
1	5	20	.25	0.00	8	20	.40	.46	8	20	.40	.46	7	20	.35	.12				
2	10	20	.50	0.00	5	20	.25	1.71	6	20	.30	.94	6	20	.30	.94				
3	8	20	.40	0.00	6	20	.30	.11	4	20	.20	1.07	11	20	.55	.40				
4	9	20	.45	0.00	9	20	.45	.10	12	20	.60	.40	7	20	.35	.10				
5	16	20	.80	0.00	11	20	.55	1.82	7	20	.35	6.55	7	20	.35	6.55				
6	7	20	.35	0.00	13	20	.65	2.50	7	20	.35	.11	11	20	.55	.91				
7	12	20	.60	0.00	8	20	.40	.90	5	20	.25	3.68	6	20	.30	2.53				

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX
(1 DEGREE OF FREEDOM) BASED ON 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	5	20	5	20	2.46	1.84	.62
2	9	20	9	20	5	20	2.26	1.70	.56
3	8	20	7	20	4	20	2.00	1.85	.15
4	15	20	10	20	12	20	2.68	.94	1.74
5	8	20	10	20	6	20	1.67	.42	1.24
6	4	20	8	20	12	20	6.67	6.67	.00
7	8	20	10	20	11	20	.93	.90	.03
8	13	20	9	20	9	20	2.14	1.60	.54
								MULTIPLE TREATMENT	
1	8	20	8	20	7	20	.14	.11	.03
2	5	20	6	20	6	20	.16	.12	.04
3	6	20	4	20	11	20	5.71	2.77	2.95
4	9	20	12	20	7	20	2.54	.41	2.14
5	11	20	7	20	7	20	2.19	1.64	.56
6	13	20	7	20	11	20	3.74	.39	3.35
7	8	20	5	20	6	20	1.08	.46	.62

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH 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 WDI	N MTD	N WDI	N MTD	N WDI	N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
								SINGLE TREATMENT	
1	9	20	5	20	5	20	2.46	2.43	.04
2	9	20	9	20	5	20	2.26	.82	1.43
3	8	20	7	20	4	20	2.00	1.21	.79
4	15	20	10	20	12	20	2.68	1.99	.69
5	8	20	10	20	5	20	1.67	.03	1.64
6	4	20	8	20	12	20	6.67	5.66	1.00
7	8	20	10	20	11	20	.93	.89	.04
8	13	20	9	20	9	20	2.14	2.10	.03
								MULTIPLE TREATMENT	
1	8	20	8	20	7	20	.14	.05	.09
2	5	20	6	20	6	20	.16	.16	.00
3	6	20	4	20	11	20	5.71	.74	4.98
4	9	20	12	20	7	20	2.54	.00	2.54
5	11	20	7	20	7	20	2.19	2.16	.03
6	13	20	7	20	11	20	3.74	1.67	2.07
7	8	20	5	20	6	20	1.08	.87	.21

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)	ARMTG CHISQ
							SINGLE TREATMENT				
1	5	20	9	20	5	20	5	20	2.86	.77	2.09
2	10	20	9	20	9	20	5	20	3.04	2.88	.16
3	8	20	8	20	7	20	4	20	2.40	2.39	.01
4	9	20	15	20	10	20	12	20	4.30	.00	4.29
5	16	20	8	20	10	20	6	20	11.20	4.65	6.55
6	7	20	4	20	8	20	12	20	6.90	5.93	.97
7	12	20	8	20	10	20	11	20	1.75	.14	1.61
8	11	20	13	20	9	20	9	20	2.21	1.00	1.20
							MULTIPLE TREATMENT				
1	5	20	8	20	8	20	7	20	1.32	.08	1.24
2	10	20	5	20	6	20	6	20	3.30	.30	3.00
3	8	20	6	20	4	20	11	20	5.79	2.43	3.36
4	9	20	9	20	12	20	7	20	2.56	.67	1.90
5	16	20	11	20	7	20	7	20	10.96	4.10	6.86
6	7	20	13	20	7	20	11	20	5.41	.12	5.30
7	12	20	8	20	5	20	6	20	6.06	1.68	4.38

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-16 GUAR GUM

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	-.261	4.471	.03	1
2	-.151	4.679	1.51	1
3	-.186	4.489	.89	1
4	-.246	5.272	.69	1
5	-.027	4.743	1.65	1
6	.430	4.778	.90	1
7	.157	4.960	.04	1
8	-.243	5.010	.03	1
	MULTIPLE TREATMENT			
1	-.038	4.698	.09	1
2	.071	4.436	.00	1
3	.147	4.632	4.76	1
4	-.003	4.916	2.54	1
5	-.243	4.751	.03	1
6	-.216	5.014	2.09	1
7	-.157	4.495	.22	1

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

WEEK	CONTROL			71-16 .03 G/KG					71-16 2.5 G/KG					71-16 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	.40	.23	20	.87	.61	38	3.223	20	.58	.46	38	1.520	20	.54	.42	38	1.280	20	1.32	.47	38	7.810
2	20	.54	.35	20	.59	.39	38	.414	20	.64	.43	38	.812	20	.56	.43	38	.176	20	2.03	.81	38	7.531
3	20	.49	.30	20	.53	.37	38	.362	20	.47	.33	38	.249	20	.39	.22	38	1.286	20	2.23	.54	38	12.431
4	20	.66	.54	20	.70	.33	38	.326	20	.59	.42	38	.423	20	.56	.29	38	.719	20	2.58	.21	38	14.725
5	20	.67	.26	20	.55	.38	38	1.171	20	.80	.52	38	1.056	20	.44	.28	38	2.643	20	.96	.42	38	2.879
6	20	.53	.59	20	.65	.67	38	.606	20	.50	.30	38	.233	20	.61	.37	38	.533	20	.66	.40	38	.828
7	20	.73	.49	20	.59	.46	38	.879	20	.59	.39	38	.940	20	.70	.46	38	.183	20	.53	.33	38	1.452
8	20	.53	.25	20	.66	.41	38	1.167	20	.62	.48	38	.722	20	.62	.43	38	.827	20	.73	.39	38	1.915
MULTIPLE TREATMENT																							
1	20	.40	.23	20	.71	.50	38	2.506	20	.50	.31	38	1.099	20	.80	.53	38	3.106					
2	20	.54	.35	20	.46	.32	38	.717	20	.70	.52	38	1.151	20	.61	.47	38	.519					
3	20	.49	.30	20	.46	.23	38	.433	20	.40	.26	38	1.061	20	.66	.37	38	1.509					
4	20	.66	.54	20	.50	.26	38	1.153	20	.70	.54	38	.226	20	.48	.33	38	1.230					
5	20	.67	.26	20	.63	.48	38	.298	20	.48	.26	38	2.213	20	.55	.41	38	1.068					
6	20	.53	.59	20	.73	.50	38	1.139	20	.58	.44	38	.269	20	.67	.37	38	.900					
7	20	.73	.49	20	.52	.34	38	1.568	20	.47	.32	38	1.969	20	.62	.51	38	.696					

CONTROL GROUP ANOVA FOR THE NUMBER OF PREGNANT FEMALES

WEEK	BETWEEN MALES SUMSQ	DF	MEANSQ	WITHIN MALES SUMSQ	DF	MEANSQ	TOTAL SUMSQ	DF	F
				SINGLE TREATMENT					
1	0.000	9	0.000	0.000	10	0.000	0.000	19	I
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	.450	9	.050	.500	10	.050	.950	19	1.000
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	0.000	9	0.000	0.000	10	0.000	0.000	19	I
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	.450	9	.050	.500	10	.050	.950	19	1.000
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	F
				SINGLE TREATMENT					
1	29.200	9	3.244	8.000	10	.800	37.200	19	4.056
2	80.050	9	8.894	66.500	10	6.650	146.550	19	1.338
3	32.050	9	3.561	22.500	10	2.250	54.550	19	1.583
4	82.687	9	9.188	92.500	9	10.278	175.187	18	.894
5	34.800	9	3.867	32.000	10	3.200	66.800	19	1.208
6	10.250	9	1.139	17.500	10	1.750	27.750	19	.651
7	102.450	9	11.383	146.500	10	14.650	248.950	19	.777
8	42.450	9	4.717	30.500	10	3.050	72.950	19	1.546
				MULTIPLE TREATMENT					
1	29.200	9	3.244	8.000	10	.800	37.200	19	4.056
2	80.050	9	8.894	66.500	10	6.650	146.550	19	1.338
3	32.050	9	3.561	22.500	10	2.250	54.550	19	1.583
4	82.687	9	9.188	92.500	9	10.278	175.187	18	.894
5	34.800	9	3.867	32.000	10	3.200	66.800	19	1.208
6	10.250	9	1.139	17.500	10	1.750	27.750	19	.651
7	102.450	9	11.383	146.500	10	14.650	248.950	19	.777

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	25.200	9	2.800	28.000	10	2.800	53.200	19	1.000
2	82.250	9	9.139	93.500	10	9.350	175.750	19	.977
3	33.200	9	3.689	30.000	10	3.000	63.200	19	1.230
4	50.727	9	5.636	32.500	9	3.611	83.227	18	1.561
5	6.450	9	.717	4.500	10	.450	10.950	19	1.593
6	3.800	9	.422	5.000	10	.500	8.800	19	.844
7	81.200	9	9.022	39.000	10	3.900	120.200	19	2.313
8	11.800	9	1.311	19.000	10	1.900	30.800	19	.690
				MULTIPLE TREATMENT					
1	25.200	9	2.800	28.000	10	2.800	53.200	19	1.000
2	82.250	9	9.139	93.500	10	9.350	175.750	19	.977
3	33.200	9	3.689	30.000	10	3.000	63.200	19	1.230
4	50.727	9	5.636	32.500	9	3.611	83.227	18	1.561
5	6.450	9	.717	4.500	10	.450	10.950	19	1.593
6	3.800	9	.422	5.000	10	.500	8.800	19	.844
7	81.200	9	9.022	39.000	10	3.900	120.200	19	2.313

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	3.050	9	.339	5.500	10	.550	8.550	19	.616
2	18.050	9	2.006	20.500	10	2.050	38.550	19	.978
3	10.200	9	1.133	14.000	10	1.400	24.200	19	.810
4	10.200	9	1.133	19.000	10	1.900	29.200	19	.596
5	16.050	9	1.783	10.500	10	1.050	26.550	19	1.698
6	70.450	9	7.828	64.500	10	6.450	134.950	19	1.214
7	5.000	9	.556	19.000	10	1.900	24.000	19	.292
8	4.050	9	.450	4.500	10	.450	8.550	19	1.000
				MULTIPLE TREATMENT					
1	3.050	9	.339	5.500	10	.550	8.550	19	.616
2	18.050	9	2.006	20.500	10	2.050	38.550	19	.978
3	10.200	9	1.133	14.000	10	1.400	24.200	19	.810
4	10.200	9	1.133	19.000	10	1.900	29.200	19	.596
5	16.050	9	1.783	10.500	10	1.050	26.550	19	1.698
6	70.450	9	7.828	64.500	10	6.450	134.950	19	1.214
7	5.000	9	.556	19.000	10	1.900	24.000	19	.292

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	.021	9	.002	.038	10	.004	.060	19	.624
2	.154	9	.017	.188	10	.019	.342	19	.900
3	.071	9	.008	.096	10	.010	.168	19	.824
4	.393	9	.044	.592	10	.059	.985	19	.739
5	.087	9	.010	.057	10	.006	.144	19	1.697
6	.485	9	.054	.453	10	.045	.937	19	1.190
7	.333	9	.037	.633	10	.063	.966	19	.586
8	.030	9	.003	.037	10	.004	.067	19	.898
				MULTIPLE TREATMENT					
1	.021	9	.002	.038	10	.004	.060	19	.624
2	.154	9	.017	.188	10	.019	.342	19	.900
3	.071	9	.008	.096	10	.010	.168	19	.824
4	.393	9	.044	.592	10	.059	.985	19	.739
5	.087	9	.010	.057	10	.006	.144	19	1.697
6	.485	9	.054	.453	10	.045	.937	19	1.190
7	.333	9	.037	.633	10	.063	.966	19	.586

T-TEST OF THE NUMBER OF CORPORA LUTEA IN PREGNANT FEMALES.

[illegible]	[illegible] CONTROL			71-16 .03 G/KG					71-16 2.5 G/KG					71-16 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	20	13.00	1.59	16	12.25	1.73	34	1.352	17	12.71	1.49	35	.577	18	12.78	1.66	36	.421	18	13.78	1.31	36	1.636
2	20	14.10	3.21	19	12.95	1.84	37	1.366	18	13.89	2.08	36	.237	18	13.39	1.69	36	.841	19	12.47	2.37	37	1.793
3	20	13.55	1.32	20	13.40	1.10	38	.392	20	13.80	1.40	38	.582	20	12.75	1.48	38	1.804	18	12.11	1.32	36	3.355
4	19	13.42	1.43	20	13.35	2.46	37	.110	20	13.90	1.59	37	.990	20	13.80	2.42	37	.592	20	13.40	3.36	37	.023
5	20	14.15	1.66	19	13.53	1.07	37	1.383	17	13.94	1.30	35	.420	20	13.30	1.30	38	1.600	20	12.85	1.46	38	2.626
6	20	13.35	1.53	17	12.94	1.48	35	.822	20	13.45	1.15	38	.234	20	13.70	1.42	38	.750	20	13.45	1.67	38	.197
7	20	12.15	2.06	20	11.90	1.68	36	.420	20	13.30	1.49	38	2.023	20	12.25	1.71	38	.167	20	11.75	1.02	38	.779
8	20	12.55	1.23	20	14.00	1.62	38	2.969	20	13.30	1.53	38	1.486	19	13.26	1.52	37	1.389	19	12.63	1.30	37	.040
											MULTIPLE TREATMENT												
1	20	13.00	1.59	17	12.47	2.10	35	.873	20	13.75	2.27	38	1.211	15	13.53	2.50	33	.770					
2	20	14.10	3.21	19	13.63	1.01	37	.608	16	13.56	1.63	34	.609	18	12.72	1.64	36	1.638					
3	20	13.55	1.32	20	12.00	2.36	38	2.545	20	13.00	1.49	38	1.238	19	13.63	2.93	37	.113					
4	19	13.42	1.43	20	13.05	2.35	37	.592	20	12.75	1.74	37	1.312	19	13.68	1.20	36	.614					
5	20	14.15	1.66	20	13.35	1.96	38	1.417	20	12.80	1.36	38	2.809	18	13.61	1.79	36	.963					
6	20	13.35	1.53	20	12.35	1.09	38	2.380	19	12.47	1.58	37	1.761	19	12.63	1.57	37	1.446					
7	20	12.15	2.06	20	13.20	1.28	38	1.936	20	12.80	1.40	38	1.168	19	12.32	1.42	37	.291					