#6

STUDY OF MUTAGENIC EFFECTS OF IONOL, C.P.
(BHT) (71-25)

July 1972

Compound Report No. 14

(Butylated-hydroxy-tolu

STUDY OF MUTAGENIC EFFECTS OF IONOL, C.P. (71-25)

BHT

Prepared for:

DHEW/PUBLIC HEALTH SERVICE
Food and Drug Administration
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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 Ionol C.P. Antioxidant (71-25).

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

Ionol, C.P. (71-25) 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.

Cytogenetic Assay

Ionol, C.P. (71-25) exhibits no adverse effect on metaphase chromosomes from rat bone marrow at any of the dose levels or time periods tested.

It causes a sharp increase in the percentage of aberrant cells obtained from human embryonic lung cells (WI-38) grown in tissue culture while being exposed to the Ionol.

Dominant Lethal Gene Test

No consistent responses occurred to suggest that Ionol, C.P. (71-25) is mutagenic to the rat by 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. Mathematical treatment of the Dominant Lethal Gene data, according to the statistical program outlined by FDA, failed to show consistent significant differences (which could be attributed to an effect of Ionol, C.P.) at $P<0.1$., $P<0.05$, $P<0.10$, or $P<0.20$.

RESULTS AND DISCUSSION

Oral Toxicity

Single and multiple dose toxicity data are presented in Table 1. The oral LD_{50} of Ionol, C.P. (71-25) given as a solution in corn oil was 2.56 g/kg, while the multiple dose LD_{50} was 0.8 g/kg. After an evaluation of the toxicity data, dosage levels for the mutagenesis assays were selected as follows:

Single dose	1.4 g/kg, 0.9 g/kg, and 30 mg/kg
Multiple dose	0.5 g/kg, 0.25 g/kg, and 30 mg/kg

Host-Mediated Assay

Table 2 presents a summary of the host-mediated assay results for Ionol, C.P. (71-25). Table 3 contains the data obtained on each individual mouse. This table is a computer printout of the calculations made on the data obtained for each mouse. Because of the nature of the computer, it is necessary to exceed its maximum number of significant figures to obtain a value as an exponent. For this reason, 12 significant figures are printed out. However, only three significant figures are used for calculations and reporting the results as summarized in Table 2. Table 4 summarizes the data obtained in the *in vitro* tests.

As can be seen from the results summarized in Table 2, no mutagenic response was observed for the two *Salmonella typhimurium* strains tested when mice were treated with the test compound. The mitotic recombination frequency of *Saccharomyces cerevisiae* was not affected. Similarly, no positive mutagenic response was detected in the *in vitro* tests.

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 Ionol, C.P. There is a noticeable increase in the mitotic index in the low dose animals treated for 24 hours. However, there is no trend to suggest a stimulatory effect on mitosis by the compound.

Table 6 indicates that Ionol causes a sharp increase in the number of aberrant anaphase cells tested *in vitro* and obtained from WI-38 cells grown in culture. This is primarily due to a large increase in the number of acentric fragments at all dose levels, indicating that Compound [illegible] causes an increased percentage of single breaks in the chromosomes. [illegible] increase in the number of cells scored as "other" was observed

at the lowest dose. Cells were scored as other when the two sets of chromosomes were broken up into numerous small clusters with no particular polar orientation. A severe reduction of cells in division is caused by the highest dose. Ionol thus has a distinctly adverse effect on cells tested *in vitro*.

Dominant Lethal Gene Test

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

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

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

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

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

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ORAL TOXICITY - RAT

Table 1

Compound: Ionol, C.P.
FDA No: 71-25

Dosage Regimen	LD_{50} (g/kg)	95% Confidence Limits (g/kg)
Single Dose	2.36	1.65 to 3.38
Multiple Dose	0.81	0.62 to 1.10

Table 2

HOST MEDIATED ASSAY
SUMMARY OF DATA

Compound No.: 71-25 (Ionol)

A. Acute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	1.56×10^{-8}	5.45	1.66×10^{-7}	1.74	1.06×10^{-4}	0.68
Intermediate	8.69×10^{-9}	3.04	1.12×10^{-7}	1.18	1.01×10^{-4}	0.65
Use Level	9.20×10^{-9}	3.21	1.70×10^{-7}	1.79	7.62×10^{-5}	0.49
Control (+)	7.38×10^{-7} ✓	258.04	1.94×10^{-6} ✓	20.38	1.41×10^{-3} ✓	9.10
Control (-)	2.86×10^{-9} ✓	1.00	9.52×10^{-8} ✓	1.00	1.55×10^{-4} ✓	1.00

B. Subacute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	9.46×10^{-9}	1.01	5.31×10^{-8}	0.74	7.74×10^{-5}	0.46
Intermediate	7.96×10^{-9}	0.85	3.71×10^{-8}	0.51	4.56×10^{-5}	0.27
Use Level	1.00×10^{-8}	1.07	1.97×10^{-8}	0.27	1.06×10^{-4}	0.63
Control (-)	9.34×10^{-9} ✓	1.00	7.21×10^{-8} ✓	1.00	1.67×10^{-4} ✓	1.00

Table 3

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.195000000000ex 03	.640000000000ex 09	.304687500000ex-06
2	.962500000000ex 02	.633333333330ex 09	.151973684211ex-06
3	.583333333330ex 01	.666666666665ex 07	.874999999997ex-06
4	.450000000000ex 02	.116666666666ex 09	.385714285716ex-06
5	.137500000000ex 03	.843333333330ex 09	.163043478261ex-06
6	.840000000000ex 03	.458333333333ex 09	.183272727272ex-05
7	.907500000000ex 03	.693333333330ex 09	.130889423077ex-05
8	.200000000000ex 03	.220000000000ex 09	.909090909090ex-06
9	.281666666666ex 03	.395000000000ex 09	.713080168774ex-06
			.738245725502ex-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.: 71-25 (Ionol)

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	.416666666666ex 01	.133166666666ex 10	.312891113893ex-08
2	.333333333333ex 01	.851666666665ex 09	.391389432485ex-08
3	.100000000000ex 01	.420000000000ex 09	.238095238095ex-08
4	.166666666666ex 01	.605000000000ex 09	.275482093662ex-08
5	.500000000000ex 01	.141666666666ex 10	.352941176472ex-08
6	.833333333330ex 00	.433333333333ex 09	.192307692307ex-08
7	.300000000000ex 01	.960000000000ex 09	.312500000000ex-08
8	.833333333330ex 00	.810000000000ex 09	.102880658435ex-08
9	.300000000000ex 01	.760000000000ex 09	.394736842105ex-08
			.285913805270ex-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	.665000000000ex 09	.250626566415ex-08
2	.500000000000ex 01	.188333333333ex 10	.265486725664ex-08
3	.500000000000ex 01	.960000000000ex 09	.520833333333ex-08
4	.125000000000ex 02	.820000000000ex 09	.152439024390ex-07
5	.666666666665ex 01	.841666666665ex 09	.792079207920ex-08
6	.130000000000ex 02	.155833333333ex 10	.834224598932ex-08
7	.133333333333ex 02	.973333333330ex 09	.136986301369ex-07
8	.225000000000ex 02	.117500000000ex 10	.191489361702ex-07
			.934049663358ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.416666666666ex 01	.101666666666ex 10	.409836065575ex-08
2	.225000000000ex 02	.137000000000ex 10	.164233576642ex-07
3	.166666666666ex 01	.500000000000ex 09	.333333333332ex-08
4	.416666666666ex 01	.400000000000ex 09	.104166666666ex-07
5	.750000000000ex 01	.433333333333ex 09	.173076923077ex-07
6	.666666666665ex 01	.363333333333ex 09	.183486238531ex-07
7	.666666666665ex 01	.210000000000ex 09	.317460317459ex-07
8	.133333333333ex 02	.600000000000ex 09	.222222222221ex-07
9	.833333333330ex 01	.500000000000ex 09	.166666666666ex-07
			.156181061237ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.110000000000ex 02	.853333333330ex 09	.128906250000ex-07
2	.183333333333ex 02	.790000000000ex 09	.232067510548ex-07
3	.750000000000ex 01	.112000000000ex 10	.669642857142ex-08
4	.833333333330ex 00	.680000000000ex 09	.122549019607ex-08
5	.166666666666ex 01	.166666666666ex 09	.100000000000ex-07
6	.250000000000ex 01	.102500000000ex 10	.243902439024ex-08
7	.158333333333ex 02	.741666666665ex 09	.213483146067ex-07
8	.166666666666ex 01	.755000000000ex 09	.220750551875ex-08
9	.166666666666ex 01	.806666666665ex 09	.206611570247ex-08
10	.666666666665ex 01	.533333333330ex 09	.125000000000ex-07
			.945802550402ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

Organism: G-46

Treatment: INTERMEDIATE

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.333333333333ex 01	.465000000000ex 09	.716845878135ex-08
2	.166666666666ex 01	.668333333330ex 09	.249376558603ex-08
3	.100000000000ex 01	.843333333330ex 09	.118577075099ex-08
4	.500000000000ex 01	.146666666666ex 09	.340909090910ex-07
5	.250000000000ex 01	.386666666666ex 09	.646551724139ex-08
6	.500000000000ex 01	.561666666665ex 09	.890207715136ex-08
7	.250000000000ex 01	.353333333333ex 09	.707547169811ex-08
8	.833333333330ex 00	.395000000000ex 09	.210970464134ex-08
			.868645936766ex-08

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.125000000000ex 02	.161666666666ex 10	.773195876291ex-08
2	.333333333333ex 01	.245000000000ex 09	.136054421768ex-07
3	.333333333333ex 01	.120666666666ex 10	.276243093923ex-08
4	.125000000000ex 01	.633333333330ex 08	.197368421053ex-07
5	.250000000000ex 01	.735000000000ex 09	.340136054421ex-08
6	.500000000000ex 01	.178333333333ex 10	.280373831776ex-08
7	.916666666665ex 01	.808333333330ex 09	.113402061855ex-07
8	.166666666666ex 01	.720000000000ex 09	.231481481480ex-08
			.796209923080ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.583333333330ex 01	.575000000000ex 09	.101449275361ex-07
2	.583333333330ex 01	.645000000000ex 09	.904392764852ex-08
3	.141666666666ex 02	.770000000000ex 09	.183982683981ex-07
4	.416666666666ex 01	.753333333330ex 09	.553097345134ex-08
5	.666666666665ex 01	.821666666665ex 09	.811359026368ex-08
6	.500000000000ex 01	.740000000000ex 09	.675675675675ex-08
7	.500000000000ex 01	.766666666665ex 09	.652173913044ex-08
8	.583333333330ex 01	.701666666665ex 09	.831353919237ex-08
9	.666666666665ex 01	.670000000000ex 09	.995024875619ex-08
			.919710790367ex-08

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.333333333333ex 01	.136250000000ex 10	.244648318042ex-08
2	.666666666665ex 01	.733333333330ex 09	.909090909092ex-08
3	.583333333330ex 01	.823333333330ex 09	.708502024290ex-08
4	.750000000000ex 01	.918333333330ex 09	.816696914703ex-08
5	.125000000000ex 02	.868333333330ex 09	.143953934741ex-07
6	.333333333333ex 01	.936666666665ex 09	.355871886121ex-08
7	.108333333333ex 02	.976666666665ex 09	.110921501706ex-07
8	.833333333330ex 01	.275000000000ex 09	.303030303029ex-07
9	.416666666666ex 01	.102833333333ex 10	.405186385738ex-08
			.100211709252ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.680000000000ex 03	.296666666666ex 09	.229213483146ex-05
2	.333333333333ex 03	.325000000000ex 09	.102564102564ex-05
3	.302500000000ex 03	.566666666665ex 08	.533823529413ex-05
4	.713333333330ex 03	.575000000000ex 09	.124057971013ex-05
5	.787500000000ex 03	.176666666666ex 09	.445754716982ex-05
6	.575000000000ex 02	.316666666666ex 09	.181578947368ex-06
7	.775000000000ex 02	.211666666666ex 09	.366141732284ex-06
8	.258750000000ex 03	.436666666666ex 09	.592557251909ex-06
			.193680199531ex-05

B. Subacute

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

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.500000000000ex 01	.183333333333ex 08	.272727272727ex-06
2	.333333333333ex 02	.331666666666ex 09	.100502512562ex-06
3	.250000000000ex 02	.575000000000ex 09	.434782608695ex-07
4	.158333333333ex 02	.250000000000ex 09	.633333333332ex-07
5	.200000000000ex 02	.576666666665ex 09	.346820809249ex-07
6	.141666666666ex 02	.251666666666ex 09	.562913907283ex-07
			.951691418571ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.191666666666ex 02	.255000000000ex 09	.751633986925ex-07
2	.750000000000ex 01	.415000000000ex 09	.180722891566ex-07
3	.525000000000ex 02	.735000000000ex 09	.714285714285ex-07
4	.333333333333ex 01	.481666666666ex 09	.692041522491ex-08
5	.450000000000ex 02	.325000000000ex 09	.138461538461ex-06
6	.258333333333ex 02	.458333333333ex 09	.563636363636ex-07
7	.233333333333ex 02	.191666666666ex 09	.121739130435ex-06
8	.430000000000ex 02	.501666666665ex 09	.857142857145ex-07
9	.150000000000ex 02	.200000000000ex 09	.750000000000ex-07
			.720959183860ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.183333333333ex 02	.101666666666ex 09	.180327868853ex-06
2	.500000000000ex 01	.125000000000ex 09	.400000000000ex-07
3	.666666666665ex 01	.150000000000ex 08	.444444444443ex-06
4	.391666666666ex 02	.381666666666ex 09	.102620087336ex-06
5	.350000000000ex 02	.273333333333ex 09	.128048780487ex-06
6	.416666666666ex 01	.336666666666ex 09	.123762376237ex-07
7	.500000000000ex 01	.433333333333ex 08	.115384615384ex-06
8	.650000000000ex 02	.201666666666ex 09	.322314049587ex-06
9	.666666666665ex 01	.450000000000ex 08	.148148148147ex-06
			.165962692426ex-06

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.666666666665ex 01	.208333333333ex 09	.319999999999ex-07
2	.150000000000ex 02	.635000000000ex 09	.236220472440ex-07
3	.241666666666ex 02	.398333333333ex 09	.606694560668ex-07
4	.300000000000ex 02	.621666666665ex 09	.482573726542ex-07
5	.200000000000ex 02	.321666666666ex 09	.621761658032ex-07
6	.133333333333ex 02	.175000000000ex 09	.761904761902ex-07
7	.283333333333ex 02	.733333333330ex 09	.386363636364ex-07
8	.375000000000ex 02	.635000000000ex 09	.590551181102ex-07
9	.175000000000ex 02	.226666666666ex 09	.772058823531ex-07
			.530903202284ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.833333333330ex 01	.750000000000ex 08	.111111111110ex-06
2	.330000000000ex 02	.190000000000ex 09	.173684210526ex-06
3	.200000000000ex 02	.783333333330ex 08	.255319148937ex-06
4	.108333333333ex 02	.213333333333ex 09	.507812499999ex-07
5	.583333333330ex 01	.128333333333ex 09	.454545454544ex-07
6	.440000000000ex 02	.551666666665ex 09	.797583081573ex-07
7	.340000000000ex 02	.488333333333ex 09	.696245723788ex-07
			.112247592508ex-06

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 02	.618333333330ex 09	.269541778976ex-07
2	.216666666666ex 02	.861666666665ex 09	.251450676982ex-07
3	.116666666666ex 02	.105000000000ex 10	.111111111110ex-07
4	.275000000000ex 02	.111833333333ex 10	.245901639344ex-07
5	.316666666666ex 02	.421666666666ex 09	.750988142292ex-07
6	.216666666666ex 02	.386666666666ex 09	.560344827585ex-07
7	.158333333333ex 02	.326666666666ex 09	.484693877550ex-07
8	.125000000000ex 02	.515000000000ex 09	.242718446601ex-07
9	.258333333333ex 02	.610000000000ex 09	.423497267759ex-07
			.371138640908ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.130000000000ex 02	.268333333333ex 09	.484472049690ex-07
2	.310000000000ex 02	.381666666666ex 09	.812227074237ex-07
3	.291666666666ex 02	.273333333333ex 09	.106707317073ex-06
4	.112500000000ex 02	.198333333333ex 09	.567226890757ex-07
5	.216666666666ex 02	.126666666666ex 09	.171052631579ex-06
6	.175000000000ex 02	.145000000000ex 09	.120689655172ex-06
7	.212500000000ex 02	.683333333330ex 08	.310975609757ex-06
8	.325000000000ex 02	.700000000000ex 08	.464285714285ex-06
			.170012941166ex-06

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.408333333333ex 02	.137666666666ex 10	.296610169492ex-07
2	.275000000000ex 02	.838333333330ex 09	.328031809146ex-07
3	.266666666666ex 02	.216666666666ex 10	.123076923076ex-07
4	.408333333333ex 02	.956666666665ex 09	.426829268293ex-07
5	.266666666666ex 02	.528333333330ex 09	.504731861200ex-07
6	.541666666665ex 02	.531666666665ex 10	.101880877742ex-07
7	.266666666666ex 02	.226333333333ex 11	.117820324005ex-08
8	.250000000000ex 02	.648333333330ex 10	.385604113112ex-08
9	.208333333333ex 02	.368333333333ex 10	.565610859728ex-08
10	.250000000000ex 02	.303333333333ex 10	.824175824176ex-08
			.197048202103ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.265000000000ex 05	.310000000000ex 08	.854838709677ex-03
2	.420000000000ex 05	.163333333333ex 08	.257142857143ex-02
3	.300000000000ex 05	.410000000000ex 08	.731707317073ex-03
4	.435000000000ex 05	.383333333333ex 08	.113478260869ex-02
5	.420000000000ex 05	.188250000000ex 08	.223107569721ex-02
6	.435000000000ex 05	.278333333333ex 08	.156287425149ex-02
7	.245000000000ex 05	.178333333333ex 08	.137383177570ex-02
8	.327777777777ex 05	.251666666666ex 08	.130242825607ex-02
9	.200000000000ex 05	.205000000000ex 08	.975609756097ex-03
10	.330000000000ex 05	.251666666666ex 08	.131125827814ex-02
			.140498352213ex-02

B. Subacute

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

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.400000000000ex 04	.271666666666ex 08	.147239263804ex-03
2	.500000000000ex 04	.401666666666ex 08	.124481327801ex-03
3	.150000000000ex 04	.235000000000ex 08	.638297872340ex-04
4	.750000000000ex 04	.576666666665ex 08	.130057803468ex-03
5	.550000000000ex 04	.288333333333ex 08	.190751445086ex-03
6	.250000000000ex 04	.123333333333ex 08	.202702702703ex-03
7	.350000000000ex 04	.131666666666ex 08	.265822784811ex-03
8	.400000000000ex 04	.253333333333ex 08	.157894736842ex-03
9	.350000000000ex 04	.316666666666ex 08	.110526315789ex-03
			.154811796391ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.250000000000ex 04	.308333333333ex 08	.810810810811ex-04
2	.550000000000ex 04	.361666666666ex 08	.152073732719ex-03
3	.500000000000ex 04	.330000000000ex 08	.151515151515ex-03
4	.400000000000ex 04	.163333333333ex 08	.244897959184ex-03
5	.600000000000ex 04	.490000000000ex 08	.122448979591ex-03
6	.650000000000ex 04	.281666666666ex 08	.230769230769ex-03
7	.650000000000ex 04	.411666666666ex 08	.157894736842ex-03
8	.400000000000ex 04	.246666666666ex 08	.162162162162ex-03
9	.300000000000ex 04	.475000000000ex 08	.631578947368ex-04
10	.600000000000ex 04	.196666666666ex 08	.305084745763ex-03
			.167108567435ex-03

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.300000000000ex 04	.351666666666ex 08	.853080568721ex-04
2	.350000000000ex 04	.175000000000ex 08	.200000000000ex-03
3	.250000000000ex 04	.318333333333ex 08	.785340314136ex-04
4	.166666666666ex 04	.406666666666ex 08	.409836065572ex-04
5	.200000000000ex 04	.110000000000ex 08	.181818181818ex-03
6	.100000000000ex 04	.385000000000ex 08	.259740259740ex-04
7	.500000000000ex 04	.280000000000ex 08	.178571428571ex-03
8	.450000000000ex 04	.401666666666ex 08	.112033195020ex-03
9	.200000000000ex 04	.196666666666ex 08	.101694915254ex-03
10	.200000000000ex 04	.351666666666ex 08	.568720379147ex-04
			.106178947938ex-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	.371666666666ex 08	.807174887893ex-04
2	.350000000000ex 04	.430000000000ex 08	.813953488372ex-04
3	.450000000000ex 04	.325000000000ex 08	.138461538461ex-03
4	.500000000000ex 03	.275000000000ex 08	.181818181818ex-04
5	.100000000000ex 04	.371666666666ex 08	.269058295964ex-04
6	.150000000000ex 04	.276666666666ex 08	.542168674700ex-04
7	.400000000000ex 04	.398333333333ex 08	.100418410041ex-03
8	.350000000000ex 04	.291666666666ex 08	.120000000000ex-03
9	.200000000000ex 04	.481666666666ex 08	.415224913495ex-04
10	.150000000000ex 04	.133750000000ex 08	.112149532710ex-03
			.773969325434ex-04

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.105000000000ex 05	.451666666666ex 08	.232472324723ex-03
2	.550000000000ex 04	.303333333333ex 08	.181318681318ex-03
3	.100000000000ex 04	.413333333333ex 08	.241935483871ex-04
4	.250000000000ex 04	.390000000000ex 08	.641025641025ex-04
5	.200000000000ex 04	.283333333333ex 08	.705882352942ex-04
6	.111111111111ex 04	.316666666666ex 08	.350877192982ex-04
			.101293845520ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.100000000000ex 04	.280000000000ex 08	.357142857142ex-04
2	.150000000000ex 04	.321666666666ex 08	.466321243524ex-04
3	.100000000000ex 04	.348333333333ex 08	.287081339713ex-04
4	.500000000000ex 03	.378333333333ex 08	.132158590308ex-04
5	.250000000000ex 04	.410000000000ex 08	.609756097560ex-04
6	.300000000000ex 04	.501666666665ex 08	.598006644520ex-04
7	.200000000000ex 04	.448333333333ex 08	.446096654275ex-04
8	.250000000000ex 04	.496666666666ex 08	.503355704698ex-04
9	.200000000000ex 04	.298333333333ex 08	.670391061453ex-04
10	.200000000000ex 04	.405000000000ex 08	.493827160493ex-04
			.456413735365ex-04

Table 3 (concluded)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-25 (Ionol)

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	.100000000000ex 04	.368333333333ex 08	.271493212669ex-04
2	.450000000000ex 04	.440000000000ex 08	.102272727272ex-03
3	.312500000000ex 04	.275000000000ex 08	.113636363636ex-03
4	.111111111111ex 04	.371666666666ex 08	.298953662182ex-04
5	.350000000000ex 04	.340000000000ex 08	.102941176470ex-03
6	.500000000000ex 03	.283333333333ex 08	.176470588235ex-04
7	.300000000000ex 04	.121666666666ex 08	.246575342467ex-03
8	.500000000000ex 03	.270000000000ex 08	.185185185185ex-04
9	.500000000000ex 03	.183333333333ex 08	.272727272727ex-04
			.762120668824ex-04

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.250000000000ex 04	.386666666666ex 08	.646551724139ex-04
2	.350000000000ex 04	.933333333330ex 07	.375000000001ex-03
3	.200000000000ex 04	.633333333330ex 08	.315789473685ex-04
4	.100000000000ex 04	.250000000000ex 08	.400000000000ex-04
5	.250000000000ex 04	.560000000000ex 08	.446428571428ex-04
6	.200000000000ex 04	.351666666666ex 08	.568720379147ex-04
7	.600000000000ex 04	.486666666666ex 08	.123287671233ex-03
8	.250000000000ex 04	.341666666666ex 08	.731707317074ex-04
9	.450000000000ex 04	.320000000000ex 08	.140625000000ex-03
			.105536935308ex-03

Table 4

HOST-MEDIATED ASSAY
IN VITRO MUTAGENICITY OF COMPOUND 71-25 (Ionol)

Salmonella typhimurium G-46

5% w/v 71-25	EMS
negative	positive

Salmonella typhimurium TA-1530

5% w/v 71-25	EMS
negative	positive

Saccharomyces cerevisiae D-3

Compound	Concentration	Survival (%)	Recombinants/10 Survivors	RFt/RFc
71-25	5% w/v	112	15.12	1.06
Control (+) for 71-25	--	100	14.28	1.00
EMS	0.1% w/v	86	289.79	74.50
Control (-) for EMS	--	100	3.89	1.00

DOMINANT LETHAL CONG-RAT

Table 7

(Butylated hydroxytoluene)

AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

Compound: Ionol, C.P.
FDA No: 71-25

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-25 (30 mg/kg)	71-25 (0.9 g/kg)	71-25 (1.4 g/kg)
Acute-Single Dose					
1	120/12=10.0	201/20=10.1	236/20=11.8	194/20= 9.7	108/10=10.8
2	163/14=11.6	154/20= 7.7**	218/20=10.9	246/20=12.3	244/20=12.2
3	190/16=11.9	168/20= 8.4**	247/20=12.4	247/19=13.0	209/20=10.5
4	188/17=11.1	77/16= 4.8**	226/20=11.3	262/20=13.1**I	228/20=11.4
5	177/17=10.4	204/20=10.2	220/19=11.6	222/20=11.1	224/20=11.2
6	179/17=10.5	180/17=10.6	239/20=12.0	225/20=11.3	214/18=11.9
7	187/17=11.0	237/20=11.9	236/20=11.8	200/20=10.0	193/18=10.7
8	170/16=10.6	226/20=11.3	239/20=12.0	221/18=12.3*I	218/20=10.9
Subacute-Multiple Dose			71-25 (30 mg/kg) x5	71-25 (0.25 g/kg) x5	71-25 (0.5 g/kg) x5 2.5 gm total
1			238/20=11.9	200/17=11.8	233/19=12.3
2			225/20=11.3	219/20=11.0	238/20=11.9
3			248/20=12.4	237/19=12.5	208/20=10.4
4			247/20=12.4	230/20=11.5	233/20=11.7
5			251/20=12.6*I	209/18=11.6	211/17=12.4
6			243/20=12.2	219/20=11.0	228/20=11.4
7			247/20=12.4	224/20=11.2	220/20=11.0

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

DOMINANT LETHAL GENE-RAT

(Biological Hydroxy Toluene)

Table 8

AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

Compound: Ionol, C.P.
FDA No: 71-25

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-25 (30 mg/kg)	71-25 (0.9 g/kg)	71-25 (1.4 g/kg)
Acute-Single Dose					
1	4/12=0.33	53/20=2.65**	5/20=0.25	20/20=1.00	2/10=0.20
2	11/14=0.79	129/20=6.45**	11/20=0.55	21/20=1.05	25/20=1.25
3	8/16=0.50	127/20=6.35**	15/20=0.75	13/19=0.68	12/20=0.60
4	8/17=0.47	84/16=5.25**	11/20=0.55	11/20=0.55	16/20=0.80
5	14/17=0.82	65/20=3.25**	17/19=0.89	23/20=1.15	24/20=1.20
6	8/17=0.47	19/17=1.12	14/20=0.70	11/20=0.55	8/18=0.44
7	12/17=0.71	29/20=1.45	6/20=0.30	18/20=0.90	15/18=0.83
8	14/16=0.88	21/20=1.05	16/20=0.80	14/18=0.78	15/20=0.75
			71-25 (30 mg/kg)	71-25 (0.25 g/kg)	71-25 (0.5 g/kg)
Subacute-Multiple Dose					
1			11/20=0.55	7/17=0.41	15/19=0.79
2			8/20=0.40	23/20=1.15	17/20=0.85
3			21/20=1.05	18/19=0.95	29/20=1.45
4			43/20=2.15**	12/20=0.60	12/20=0.60
5			11/20=0.55	18/18=1.00	8/17=0.47
6			35/20=1.75**	12/20=0.60	16/20=0.80
7			15/20=0.75	14/20=0.70	18/20=0.90

** Significant at $P < 0.01$

DOMINANT LETHAL GENE-RAT

Table 9

DEAD IMPLANTS/TOTAL IMPLANTS

Compound: Ionol, C.P.
FDA No: 71-25

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-25 (30 mg/kg)	71-25 (0.9 g/kg)	71-25 (1.4 g/kg)
Acute-Single Dose					
1	4/120=0.03	53/201=0.26**	5/236=0.02	20/194=0.10	2/108=0.02
2	11/163=0.07	129/154=0.84**	11/218=0.05	21/246=0.09	25/244=0.10
3	8/190=0.04	127/168=0.76**	15/247=0.06	13/247=0.05	12/209=0.06
4	8/188=0.04	74/ 77=0.96**	11/226=0.05	11/262=0.04	16/228=0.07
5	14/177=0.08	65/204=0.32**	17/220=0.08	23/222=0.10	24/224=0.11
6	8/179=0.04	19/180=0.11	14/239=0.06	11/225=0.05	8/214=0.04
7	12/187=0.06	29/237=0.12	6/236=0.03	18/200=0.09	15/193=0.08
8	14/170=0.08	21/226=0.09	16/239=0.07	14/221=0.06	15/218=0.07
			71-25 (30 mg/kg)	71-25 (0.25 g/kg)	71-25 (0.5 g/kg)
Subacute-Multiple Dose					
1			11/238=0.05	7/200=0.04	15/233=0.06
2			8/225=0.04	23/219=0.11	17/238=0.07
3			21/248=0.08	18/237=0.08	29/208=0.14*
4			43/247=0.17**	12/230=0.05	12/233=0.05
5			11/251=0.04	18/209=0.09	8/211=0.04
6			35/243=0.14	12/219=0.05	16/228=0.07
7			15/247=0.06	14/224=0.06	18/220=0.08

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

DOMINANT LETHAL GENE-RAT

Table 10

AVERAGE CORPORA LUTEA PER PREGNANT FEMALE

Compound: Ionol, C.P.
FDA No: 71-25

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-25 (30 mg/kg)	71-25 (0.9 g/kg)	71-25 (1.4 g/kg)
Acute-Single Dose					
1	143/12=11.9	267/20=13.4	257/20=12.9	228/20=11.4	115/10=11.5
2	179/14=12.8	239/20=12.0	242/20=12.1	263/20=13.2	260/20=13.0
3	205/16=12.8	249/20=12.5	271/20=13.6	261/19=13.7	245/20=12.3
4	231/17=13.6	222/16=13.9	272/20=13.6	286/20=14.3	247/20=12.4
5	205/17=12.1	241/20=12.1	231/19=12.2	273/20=13.7*I	248/20=12.4
6	218/17=12.8	208/17=12.2	258/20=12.9	246/20=12.3	231/18=12.8
7	206/17=12.1	265/20=13.3*I	264/20=13.2*I	249/20=12.5	222/18=12.3
8	213/16=13.3	259/20=13.0	262/20=13.1	226/18=12.6	259/20=13.0
			71-25 (30 mg/kg)	71-25 (0.25 g/kg)	71-25 (0.5 g/kg)
Subacute-Multiple Dose					
1			254/20=12.7	211/17=12.4	250/19=13.2
2			247/20=12.4	252/20=12.6	264/20=13.2
3			277/20=13.9	257/19=13.5	248/20=12.4
4			266/20=13.3	250/20=12.5	252/20=12.6
5			283/20=14.2*I	233/18=12.9	232/17=13.6*I
6			283/20=14.2	271/20=13.6	251/20=12.6
7			263/20=13.2	251/20=12.6	261/20=13.1

* Significant at $P < 0.05$

I Increased above control

DOMINANT LETHAL GENE-RAT

Table 11

AVERAGE PREIMPLANTATION LOSS PER PREGNANT FEMALE

Compound: Ionol, C.P.
FDA No: 71-25

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-25 (30 mg/kg)	71-25 (0.9 g/kg)	71-25 (1.4 g/kg)
Acute-Single Dose					
1	23/12=1.92	66/20=3.30	21/20=1.05	34/20=1.70	7/10=0.70
2	16/14=1.14	85/20=4.25**	24/20=1.20	17/20=0.85	16/20=0.80
3	15/16=0.94	81/20=4.05**	24/20=1.20	14/19=0.74	36/20=1.80
4	43/17=2.53	145/16=9.06**	46/20=2.30	24/20=1.20*D	19/20=0.95*D
5	28/17=1.65	37/20=1.85	11/19=0.58	51/20=2.55	24/20=1.20
6	39/17=2.29	28/17=1.65	19/20=0.95	21/20=1.05	17/18=0.94
7	19/17=1.12	28/20=1.40	28/20=1.40	49/20=2.45	29/18=1.61
8	43/16=2.69	33/20=1.65	23/20=1.15*D	5/18=0.28**D	41/20=2.05
			71-25 (30 mg/kg)	71-25 (0.25 g/kg)	71-25 (0.5 g/kg)
Subacute-Multiple Dose					
1			16/20=0.80	11/17=0.65	17/19=0.89
2			22/20=1.10	35/20=1.75	26/20=1.30
3			29/20=1.45	20/19=1.05	40/20=2.00
4			19/20=0.95	20/20=1.00*D	19/20=0.95*D
5			32/20=1.60	24/18=1.33	21/17=1.24
6			40/20=2.00	52/20=2.60	23/20=1.15
7			16/20=0.80	27/20=1.35	41/20=2.05

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

APPENDIX A

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

Statistical Analysis Procedures for Dominant Lethal Gene Tests With

A Description and Explanation of the Computer Printouts

The first stage of the analysis of the dominant lethal tests of the mutagenic studies on chemicals is 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 teatment) 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 is 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 is greater than or equal to the number of implants. If any data fail this check, the run is aborted and the data are 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:

$$X_i^2 = \frac{(N_o+N_i)(|n_o(N_i-n_i)-n_i(N_o-n_o)|-(N_o+N_i)/2)^2}{(n_o+n_i)(N_o-n_o+N_i-n_i)(N_o)(N_i)} \quad \text{(corrected for continuity)}$$

where the subscript o represents the control group.*

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

4. Armitage's test for a linear trend in proportions is applied to the fertility index. The formula for this calculation is found on pages 246-248 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

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

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

*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.

where Σnx stands for $\sum_{i=1}^{3} n_i x_i$, $\Sigma \frac{n^2}{N}$ for $\sum_{i=1}^{3} \frac{n_i^2}{N_i}$, etc., and the x_i are the dosage levels.

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

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 degrees of freedom, 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 implantations, $\bar{u}_i$, is made for both the arithmetic and logarithmic dose $\left(X_i \text{ and } \log X_i\right)$ 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 includes data from the three treatment groups and the control group.

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

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

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

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

SD U = standard deviation of the U_i

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

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

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

From these quantities, we compute:

B = estimate of the slope of the regression line

$= S_{XU}/SS_X$,

A = estimate of the intercept of the regression line

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

Also,

$$\text{VARU.X} = \text{variance of U about the regression line}$$

$$= \frac{SS_U - \left(S_{XU}\right)^2 / SS_X}{N-2}$$

and from this is computed,

$$\text{VARB} = \text{variance of the estimate, B}$$

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

$$\text{VARA} = \text{variance of the estimate, A}$$

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

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

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

and

$$\text{CV U.X} = \text{coefficient of variation of U about X}$$

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

And finally we have:

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

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

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 for pregnant females by repeating step 7 above with z_{ij} substituted for y_{ij}.

9. The number of pregnant 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 pregnant 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, and n_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

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

($N_x(0,1)$ 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 pregnant female, j. The Freeman-Tukey transformation and subsequent t-test is applied to this data by repeating step 7, above, as follows:

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

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

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

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

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 (as defined in Step 7) per pregnant female,

d. The number of dead implants per pregnant female,

e. The ratio of dead implants to the total implants per pregnant female.

In view of the fact that none of the variables on which the one-way analysis of variance have been performed is even approximately normal in distribution, the probability levels associated with these analyses of variances are necessarily approximate.

For case a., R_{kj} equals 1 if female j assigned to male k became pregnant; otherwise R_{kj} equals zero. For cases b. through e. the tabulation is limited to data for pregnant females; i.e., R_{kj} equals the value of the specified variable for female j assigned to male k if the female was pregnant; data for non-pregnant females are excluded.

For case a., L_k equals the number of females assigned to male k. For cases b. through e., L_k equals the number of females assigned to male k that became pregnant.

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

M is the number 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 = $SUMSQ_w$

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

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,

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

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

The T-statistic for dose i has $n_o + n_1 - 2$ 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 Analyses

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Table 5

CYTOGENETIC ASSAY
METAPHASE SUMMARY SHEET BY TIME OF SACRIFICE
Ionol (71-25)

Dosage	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 (0.5 mg/kg)	24	1.85	5	250	41.6	28.4	27.2	42.8
Negative Control	6	2.65	3	150	1.3	0	0	1.3
30 mg/kg	6	1.70	5	250	0.4	0	0	0.4
900 mg/kg	6	1.40	5	250	0.4	0	0	0.4
1400 mg/kg	6	2.10	5	236	0.8	0	0	0.8
Negative Control	24	1.60	3	150	1.3	0	0	1.3
30 mg/kg	24	3.75	5	250	0	0	0	0
900 mg/kg	24	1.60	5	250	1.2	0	0	1.2
1400 mg/kg	24	2.20	5	250	1.2	0	0	1.2
Negative Control	48	1.60	3	150	0	0	0	0
30 mg/kg	48	2.85	5	250	1.6	0	0	1.6
900 mg/kg	48	2.20	5	250	0.4	0	0	0.4
1400 mg/kg	48	2.50	5	250	1.6	0	0	1.6
Negative Control	SA**	2.20	3	150	0	0	0	0
30 mg/kg	SA	2.10	5	250	0.4	0	0	0.4
900 mg/kg	SA	2.05	5	250	1.2	0	0	1.2
1400 mg/kg	SA	3.05	5	250	0.4	0	0	0.4

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

Table 6

CYTOGENETIC ASSAY
ANAPHASE SUMMARY SHEET
Ionol (71-25)

Dosage	Time*	No. of Cells	Cells with Acentric Fragments (%)	Cells with Bridges (%)	Multipolar Cells (%)	Other (Abnormal) (%)	Cells with More than One Type Aber. (%)	Cells with Aber. (%)
Negative Control	24	263	6.1	2.3	0	2.3	1.9	8.7
2.5 μg/ml	24	267	25.1	1.5	0	9.7	8.2	28.1
25 μg/ml	24	280	14.6	1.4	0	2.5	1.1	17.5
250 μg/ml	24	50	18.0	2.0	0	2.0	2.0	20.0
TEM (0.05 μg/ml)	24	121	19.8	5.0	0	5.8	2.5	28.1

* Time of harvest after treatment (hours).

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
CNTRL25	1	S	0.0000	1	1	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	2	3	Y	5	9	1	0	0	0	6	9
CNTRL25	1	S	0.0000	2	4	Y	0	3	0	0	0	0	4	5
CNTRL25	1	S	0.0000	3	5	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	3	6	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	4	7	Y	2	11	0	0	0	0	2	11
CNTRL25	1	S	0.0000	4	8	Y	8	5	0	0	0	0	10	5
CNTRL25	1	S	0.0000	5	9	Y	4	3	0	0	0	0	7	5
CNTRL25	1	S	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	6	11	Y	5	11	0	0	0	0	5	11
CNTRL25	1	S	0.0000	6	12	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	7	13	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	7	14	Y	2	0	0	0	1	0	4	6
CNTRL25	1	S	0.0000	8	15	Y	4	7	0	0	0	0	4	7
CNTRL25	1	S	0.0000	8	16	Y	6	4	0	0	0	0	6	4
CNTRL25	1	S	0.0000	9	17	Y	3	7	0	0	0	0	4	7
CNTRL25	1	S	0.0000	9	18	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	S	0.0000	10	19	Y	4	6	0	0	0	0	4	6
CNTRL25	1	S	0.0000	10	20	Y	5	6	0	1	1	0	5	6
71-25	1	S	.0300	51	101	Y	4	8	0	0	0	0	5	8
71-25	1	S	.0300	51	102	Y	8	3	0	0	0	0	8	4
71-25	1	S	.0300	52	103	Y	9	6	0	0	0	0	9	6
71-25	1	S	.0300	52	104	Y	5	8	0	0	0	1	7	9
71-25	1	S	.0300	53	105	Y	4	7	0	0	0	0	4	9
71-25	1	S	.0300	53	106	Y	4	4	0	1	0	0	7	4
71-25	1	S	.0300	54	107	Y	5	7	0	0	0	0	5	7
71-25	1	S	.0300	54	108	Y	3	8	0	0	0	0	3	9
71-25	1	S	.0300	55	109	Y	5	9	0	0	0	0	6	9
71-25	1	S	.0300	55	110	Y	8	3	0	0	0	0	8	3
71-25	1	S	.0300	56	111	Y	5	7	0	0	0	0	5	8
71-25	1	S	.0300	56	112	Y	6	6	0	0	1	0	6	6
71-25	1	S	.0300	57	113	Y	4	9	0	0	0	0	6	9
71-25	1	S	.0300	57	114	Y	5	6	0	0	0	0	6	7
71-25	1	S	.0300	58	115	Y	6	5	0	0	0	0	6	6
71-25	1	S	.0300	58	116	Y	4	7	0	2	0	0	4	8
71-25	1	S	.0300	59	117	Y	6	7	0	0	0	0	7	7
71-25	1	S	.0300	59	118	Y	6	5	0	0	0	0	6	5
71-25	1	S	.0300	60	119	Y	5	7	0	0	0	0	5	7
71-25	1	S	.0300	60	120	Y	6	6	0	0	0	0	7	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-25 IONOL C.P.

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
71-25	1	S	.9000	61	121	Y	5	6	0	0	0	0	6	6
71-25	1	S	.9000	61	122	Y	4	6	0	0	0	1	4	6
71-25	1	S	.9000	62	123	Y	4	5	0	0	0	0	4	5
71-25	1	S	.9000	62	124	Y	3	4	0	0	0	0	3	4
71-25	1	S	.9000	63	125	Y	6	6	0	0	0	0	6	7
71-25	1	S	.9000	63	126	Y	7	6	0	0	1	0	7	6
71-25	1	S	.9000	64	127	Y	4	5	0	0	1	1	4	5
71-25	1	S	.9000	64	128	Y	0	5	0	0	0	0	5	8
71-25	1	S	.9000	65	129	Y	3	8	0	0	0	0	3	8
71-25	1	S	.9000	65	130	Y	8	3	0	0	2	0	8	4
71-25	1	S	.9000	66	131	Y	7	5	0	0	0	0	7	5
71-25	1	S	.9000	66	132	Y	9	2	1	0	1	1	9	2
71-25	1	S	.9000	67	133	Y	3	9	0	0	0	0	3	9
71-25	1	S	.9000	67	134	Y	7	5	2	0	0	0	7	5
71-25	1	S	.9000	68	135	Y	5	6	0	0	2	2	5	7
71-25	1	S	.9000	68	136	Y	7	6	0	0	0	1	7	6
71-25	1	S	.9000	69	137	Y	4	7	0	0	0	0	7	7
71-25	1	S	.9000	69	138	Y	6	4	2	0	0	0	6	4
71-25	1	S	.9000	70	139	Y	1	0	0	0	0	0	7	4
71-25	1	S	.9000	70	140	Y	1	2	0	0	0	0	10	2
71-25	1	S	1.4000	71	141	Y	3	7	0	0	0	0	3	7
71-25	1	S	1.4000	71	142	Y	3	8	0	0	0	0	3	10
71-25	1	S	1.4000	72	143	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	72	144	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	73	145	Y	5	7	0	0	0	0	5	7
71-25	1	S	1.4000	73	146	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	74	147	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	74	148	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	75	149	Y	6	5	0	0	0	0	6	5
71-25	1	S	1.4000	75	150	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	76	151	Y	1	6	0	0	0	0	1	8
71-25	1	S	1.4000	76	152	Y	1	9	0	0	0	0	2	9
71-25	1	S	1.4000	77	153	Y	7	6	0	0	0	0	7	6
71-25	1	S	1.4000	77	154	Y	5	8	0	0	0	1	6	8
71-25	1	S	1.4000	78	155	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	78	156	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	79	157	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	S	1.4000	79	158	Y	5	6	0	0	0	1	5	6
71-25	1	S	1.4000	80	159	Y	3	7	0	0	0	0	3	8
71-25	1	S	1.4000	80	160	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
TEM25	1	S	.0002	11	21	Y	4	2	1	2	0	0	4	7
TEM25	1	S	.0002	11	22	Y	7	7	1	0	0	2	7	7
TEM25	1	S	.0002	12	23	Y	6	6	1	2	0	1	6	6
TEM25	1	S	.0002	12	24	Y	8	3	2	0	1	1	10	11
TEM25	1	S	.0002	13	25	Y	6	6	0	0	0	0	8	7
TEM25	1	S	.0002	13	26	Y	3	9	0	0	0	3	3	9
TEM25	1	S	.0002	14	27	Y	3	5	1	2	0	0	5	6
TEM25	1	S	.0002	14	28	Y	5	9	0	2	0	0	5	9
TEM25	1	S	.0002	15	29	Y	0	5	0	0	0	0	7	6
TEM25	1	S	.0002	15	30	Y	4	6	0	0	1	1	9	10
TEM25	1	S	.0002	16	31	Y	8	6	1	2	0	0	8	6
TEM25	1	S	.0002	16	32	Y	7	4	2	3	0	0	9	6
TEM25	1	S	.0002	17	33	Y	7	8	0	0	0	0	7	8
TEM25	1	S	.0002	17	34	Y	4	7	1	0	0	0	4	7
TEM25	1	S	.0002	18	35	Y	5	5	0	0	3	2	7	5
TEM25	1	S	.0002	18	36	Y	2	10	0	0	0	0	3	10
TEM25	1	S	.0002	19	37	Y	2	0	1	0	0	0	8	4
TEM25	1	S	.0002	19	38	Y	2	1	0	0	0	0	6	5
TEM25	1	S	.0002	20	39	Y	5	6	0	1	3	3	5	6
TEM25	1	S	.0002	20	40	Y	4	4	0	0	4	3	5	7
CNTRL25	1	M	0.0000	1	1	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	2	3	Y	5	9	1	0	0	0	6	9
CNTRL25	1	M	0.0000	2	4	Y	0	3	0	0	0	0	4	5
CNTRL25	1	M	0.0000	3	5	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	3	6	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	4	7	Y	2	11	0	0	0	0	2	11
CNTRL25	1	M	0.0000	4	8	Y	8	5	0	0	0	0	10	5
CNTRL25	1	M	0.0000	5	9	Y	4	3	0	0	0	0	7	5
CNTRL25	1	M	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	6	11	Y	5	11	0	0	0	0	5	11
CNTRL25	1	M	0.0000	6	12	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	7	13	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	7	14	Y	2	0	0	0	1	0	4	6
CNTRL25	1	M	0.0000	8	15	Y	4	7	0	0	0	0	4	7
CNTRL25	1	M	0.0000	8	16	Y	6	4	0	0	0	0	6	4
CNTRL25	1	M	0.0000	9	17	Y	3	7	0	0	0	0	4	7
CNTRL25	1	M	0.0000	9	18	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	1	M	0.0000	10	19	Y	4	6	0	0	0	0	4	6
CNTRL25	1	M	0.0000	10	20	Y	5	6	0	1	1	0	5	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-25 IONOL C.P.

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
71-25	1	M	.0300	41	81	Y	5	5	0	0	2	2	5	5
71-25	1	M	.0300	41	82	Y	6	7	1	0	1	0	6	7
71-25	1	M	.0300	42	83	Y	5	6	0	0	0	0	5	6
71-25	1	M	.0300	42	84	Y	7	8	0	0	0	0	7	8
71-25	1	M	.0300	43	85	Y	7	6	0	0	0	0	7	6
71-25	1	M	.0300	43	86	Y	7	8	0	0	0	0	7	8
71-25	1	M	.0300	44	87	Y	7	4	0	0	0	0	7	4
71-25	1	M	.0300	44	88	Y	6	6	0	0	0	0	6	6
71-25	1	M	.0300	45	89	Y	7	4	0	0	0	0	7	5
71-25	1	M	.0300	45	90	Y	3	8	0	0	0	0	5	8
71-25	1	M	.0300	46	91	Y	6	7	0	0	0	0	6	7
71-25	1	M	.0300	46	92	Y	6	6	0	0	0	0	6	6
71-25	1	M	.0300	47	93	Y	4	5	0	0	0	1	4	6
71-25	1	M	.0300	47	94	Y	6	4	0	0	0	0	8	5
71-25	1	M	.0300	48	95	Y	8	5	0	0	0	0	9	5
71-25	1	M	.0300	48	96	Y	7	6	0	0	0	0	7	6
71-25	1	M	.0300	49	97	Y	8	3	0	0	0	0	8	4
71-25	1	M	.0300	49	98	Y	4	5	0	2	1	1	7	9
71-25	1	M	.0300	50	99	Y	4	7	0	0	0	0	4	7
71-25	1	M	.0300	50	100	Y	8	7	0	0	0	0	8	7
71-25	1	M	.2500	51	101	Y	8	2	0	0	0	0	8	2
71-25	1	M	.2500	51	102	Y	0	6	0	1	0	0	5	6
71-25	1	M	.2500	52	103	Y	6	5	0	0	0	0	6	5
71-25	1	M	.2500	52	104	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	M	.2500	53	105	Y	5	7	0	0	0	0	7	7
71-25	1	M	.2500	53	106	Y	6	7	0	0	1	0	6	7
71-25	1	M	.2500	54	107	Y	6	8	0	0	0	0	6	8
71-25	1	M	.2500	54	108	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	M	.2500	55	109	Y	5	6	0	0	0	0	5	6
71-25	1	M	.2500	55	110	Y	8	5	0	0	0	0	8	5
71-25	1	M	.2500	56	111	Y	8	5	0	0	0	0	10	5
71-25	1	M	.2500	56	112	Y	5	7	0	0	0	0	6	7
71-25	1	M	.2500	57	113	Y	6	3	0	0	0	0	7	3
71-25	1	M	.2500	57	114	Y	8	3	0	0	1	0	8	3
71-25	1	M	.2500	58	115	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	M	.2500	58	116	Y	7	6	0	0	0	0	7	6
71-25	1	M	.2500	59	117	Y	7	6	0	0	0	1	7	6
71-25	1	M	.2500	59	118	Y	8	6	0	0	0	0	8	6
71-25	1	M	.2500	60	119	Y	5	8	1	1	0	0	5	8
71-25	1	M	.2500	60	120	Y	5	7	1	0	0	0	5	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-25	1	M	.5000	61	121	Y	7	7	0	0	1	1	7	8
71-25	1	M	.5000	61	122	Y	7	7	0	0	0	0	7	7
71-25	1	M	.5000	62	123	Y	7	7	1	0	0	0	7	7
71-25	1	M	.5000	62	124	Y	6	6	0	0	0	0	6	6
71-25	1	M	.5000	63	125	Y	7	3	0	0	0	0	7	4
71-25	1	M	.5000	63	126	Y	5	6	0	0	0	0	6	6
71-25	1	M	.5000	64	127	Y	6	7	0	1	2	2	6	7
71-25	1	M	.5000	64	128	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	1	M	.5000	65	129	Y	6	7	0	0	0	0	6	7
71-25	1	M	.5000	65	130	Y	7	5	0	0	0	0	7	5
71-25	1	M	.5000	66	131	Y	7	4	0	0	0	0	7	5
71-25	1	M	.5000	66	132	Y	5	5	0	0	0	0	6	6
71-25	1	M	.5000	67	133	Y	7	5	0	0	0	1	7	6
71-25	1	M	.5000	67	134	Y	5	7	0	0	0	1	5	7
71-25	1	M	.5000	68	135	Y	6	1	0	0	0	0	7	7
71-25	1	M	.5000	68	136	Y	6	10	0	1	0	0	7	11
71-25	1	M	.5000	69	137	Y	5	9	0	0	0	0	5	9
71-25	1	M	.5000	69	138	Y	6	6	0	0	2	1	6	7
71-25	1	M	.5000	70	139	Y	8	5	0	0	0	0	9	5
71-25	1	M	.5000	70	140	Y	6	6	0	1	0	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
CNTRL25	2	S	0.0000	1	1	Y	5	7	0	0	0	0	5	7
CNTRL25	2	S	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	S	0.0000	2	3	Y	7	5	1	0	0	0	7	5
CNTRL25	2	S	0.0000	2	4	Y	5	7	0	1	0	1	5	7
CNTRL25	2	S	0.0000	3	5	Y	5	7	0	0	0	0	5	7
CNTRL25	2	S	0.0000	3	6	Y	5	1	0	0	0	0	5	7
CNTRL25	2	S	0.0000	4	7	Y	6	6	0	0	0	1	6	6
CNTRL25	2	S	0.0000	4	8	Y	4	7	0	2	0	0	5	8
CNTRL25	2	S	0.0000	5	9	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	S	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	S	0.0000	6	11	Y	7	4	0	0	1	0	7	4
CNTRL25	2	S	0.0000	6	12	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	S	0.0000	7	13	Y	3	9	0	0	0	0	3	9
CNTRL25	2	S	0.0000	7	14	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	S	0.0000	8	15	Y	6	6	0	0	0	0	6	8
CNTRL25	2	S	0.0000	8	16	Y	5	8	0	0	2	1	8	8
CNTRL25	2	S	0.0000	9	17	Y	9	4	0	0	0	0	10	4
CNTRL25	2	S	0.0000	9	18	Y	3	9	-0	-0	-0	-0	3	9
CNTRL25	2	S	0.0000	10	19	Y	7	6	1	0	0	0	7	8
CNTRL25	2	S	0.0000	10	20	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	2	S	.0300	51	101	Y	7	5	0	0	0	1	7	5
71-25	2	S	.0300	51	102	Y	6	1	0	0	0	0	7	3
71-25	2	S	.0300	52	103	Y	4	7	0	0	0	0	4	8
71-25	2	S	.0300	52	104	Y	9	4	0	0	0	0	9	4
71-25	2	S	.0300	53	105	Y	3	8	0	0	0	0	3	8
71-25	2	S	.0300	53	106	Y	4	1	0	1	0	0	5	4
71-25	2	S	.0300	54	107	Y	5	8	0	0	1	0	6	8
71-25	2	S	.0300	54	108	Y	4	5	0	0	1	0	5	6
71-25	2	S	.0300	55	109	Y	4	7	0	0	0	0	4	7
71-25	2	S	.0300	55	110	Y	3	8	0	0	0	0	4	8
71-25	2	S	.0300	56	111	Y	3	7	0	0	0	0	4	9
71-25	2	S	.0300	56	112	Y	7	7	2	0	0	0	9	8
71-25	2	S	.0300	57	113	Y	6	6	0	0	0	0	6	7
71-25	2	S	.0300	57	114	Y	3	10	0	0	0	0	3	13
71-25	2	S	.0300	58	115	Y	5	8	1	0	0	0	5	8
71-25	2	S	.0300	58	116	Y	6	6	0	0	0	0	6	6
71-25	2	S	.0300	59	117	Y	4	7	0	0	0	0	4	7
71-25	2	S	.0300	59	118	Y	4	5	0	1	0	0	4	5
71-25	2	S	.0300	60	119	Y	5	4	1	0	0	0	6	5
71-25	2	S	.0300	60	120	Y	5	7	0	1	1	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
71-25	2	S	.9000	61	121	Y	5	8	0	0	0	2	5	8
71-25	2	S	.9000	61	122	Y	7	9	0	0	2	0	7	9
71-25	2	S	.9000	62	123	Y	7	7	0	0	0	0	7	7
71-25	2	S	.9000	62	124	Y	6	4	0	0	0	0	6	4
71-25	2	S	.9000	63	125	Y	4	8	0	0	0	0	4	8
71-25	2	S	.9000	63	126	Y	5	8	0	0	0	0	5	8
71-25	2	S	.9000	64	127	Y	6	8	1	0	0	0	6	8
71-25	2	S	.9000	64	128	Y	9	3	1	1	2	0	9	3
71-25	2	S	.9000	65	129	Y	6	6	0	0	0	1	6	6
71-25	2	S	.9000	65	130	Y	6	7	0	0	0	0	6	7
71-25	2	S	.9000	66	131	Y	6	6	1	0	0	0	7	6
71-25	2	S	.9000	66	132	Y	5	3	2	0	0	1	9	12
71-25	2	S	.9000	67	133	Y	8	5	0	0	0	0	8	5
71-25	2	S	.9000	67	134	Y	4	8	2	0	2	2	4	8
71-25	2	S	.9000	68	135	Y	6	7	0	0	0	0	6	8
71-25	2	S	.9000	68	136	Y	8	5	0	0	0	0	8	5
71-25	2	S	.9000	69	137	Y	9	4	0	0	3	0	10	4
71-25	2	S	.9000	69	138	Y	5	6	0	0	0	0	5	6
71-25	2	S	.9000	70	139	Y	6	7	0	0	0	0	6	7
71-25	2	S	.9000	70	140	Y	5	4	0	0	0	0	5	5
71-25	2	S	1.4000	71	141	Y	7	4	0	1	0	0	7	4
71-25	2	S	1.4000	71	142	Y	7	4	0	0	0	0	7	4
71-25	2	S	1.4000	72	143	Y	5	8	0	0	0	0	5	9
71-25	2	S	1.4000	72	144	Y	7	9	0	1	0	0	7	9
71-25	2	S	1.4000	73	145	Y	0	6	0	0	0	1	4	7
71-25	2	S	1.4000	73	146	Y	4	7	0	0	0	0	4	7
71-25	2	S	1.4000	74	147	Y	6	6	0	0	1	0	6	6
71-25	2	S	1.4000	74	148	Y	8	6	1	1	0	0	8	6
71-25	2	S	1.4000	75	149	Y	9	4	0	0	1	1	9	9
71-25	2	S	1.4000	75	150	Y	2	12	0	0	0	0	2	12
71-25	2	S	1.4000	76	151	Y	8	7	1	0	0	0	8	7
71-25	2	S	1.4000	76	152	Y	3	9	0	0	0	1	4	10
71-25	2	S	1.4000	77	153	Y	8	5	0	0	1	2	8	5
71-25	2	S	1.4000	77	154	Y	3	6	0	0	1	1	3	6
71-25	2	S	1.4000	78	155	Y	7	5	1	0	0	0	7	7
71-25	2	S	1.4000	78	156	Y	7	4	0	0	0	0	7	4
71-25	2	S	1.4000	79	157	Y	7	6	0	0	1	1	7	6
71-25	2	S	1.4000	79	158	Y	6	5	0	0	0	0	6	5
71-25	2	S	1.4000	80	159	Y	9	6	2	1	1	3	9	6
71-25	2	S	1.4000	80	160	Y	3	9	0	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
TEM25	2	S	.0002	11	21	Y	1	5	0	0	1	5	7	7
TEM25	2	S	.0002	11	22	Y	3	7	3	6	0	0	3	7
TEM25	2	S	.0002	12	23	Y	3	4	2	3	0	0	6	6
TEM25	2	S	.0002	12	24	Y	4	4	4	1	0	0	7	6
TEM25	2	S	.0002	13	25	Y	4	8	4	8	0	0	4	8
TEM25	2	S	.0002	13	26	Y	1	6	1	6	0	0	1	10
TEM25	2	S	.0002	14	27	Y	1	2	0	0	1	2	12	4
TEM25	2	S	.0002	14	28	Y	3	6	1	4	1	1	5	7
TEM25	2	S	.0002	15	29	Y	1	0	0	0	0	0	1	9
TEM25	2	S	.0002	15	30	Y	6	4	6	3	0	0	6	4
TEM25	2	S	.0002	16	31	Y	5	6	5	4	0	0	6	6
TEM25	2	S	.0002	16	32	Y	5	5	2	5	2	0	7	5
TEM25	2	S	.0002	17	33	Y	3	5	2	3	0	1	6	9
TEM25	2	S	.0002	17	34	Y	7	6	2	0	4	3	7	6
TEM25	2	S	.0002	18	35	Y	0	4	0	4	0	0	6	7
TEM25	2	S	.0002	18	36	Y	2	7	2	7	0	0	5	7
TEM25	2	S	.0002	19	37	Y	5	3	4	3	0	0	5	4
TEM25	2	S	.0002	19	38	Y	1	0	0	0	1	0	4	5
TEM25	2	S	.0002	20	39	Y	4	4	4	4	0	0	6	7
TEM25	2	S	.0002	20	40	Y	4	4	4	4	0	0	7	4
CNTRL25	2	M	0.0000	1	1	Y	5	7	0	0	0	0	5	7
CNTRL25	2	M	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	M	0.0000	2	3	Y	7	5	1	0	0	0	7	5
CNTRL25	2	M	0.0000	2	4	Y	5	7	0	1	0	1	5	7
CNTRL25	2	M	0.0000	3	5	Y	5	7	0	0	0	0	5	7
CNTRL25	2	M	0.0000	3	6	Y	5	1	0	0	0	0	5	7
CNTRL25	2	M	0.0000	4	7	Y	6	6	0	0	0	1	6	6
CNTRL25	2	M	0.0000	4	8	Y	4	7	0	2	0	0	5	8
CNTRL25	2	M	0.0000	5	9	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	M	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	M	0.0000	6	11	Y	7	4	0	0	1	0	7	4
CNTRL25	2	M	0.0000	6	12	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	M	0.0000	7	13	Y	3	9	0	0	0	0	3	9
CNTRL25	2	M	0.0000	7	14	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	2	M	0.0000	8	15	Y	6	6	0	0	0	0	6	8
CNTRL25	2	M	0.0000	8	16	Y	5	8	0	0	2	1	8	8
CNTRL25	2	M	0.0000	9	17	Y	9	4	0	0	0	0	10	4
CNTRL25	2	M	0.0000	9	18	Y	3	9	-0	-0	-0	-0	3	9
CNTRL25	2	M	0.0000	10	19	Y	7	6	1	0	0	0	7	8
CNTRL25	2	M	0.0000	10	20	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
71-25	2	M	.0300	41	81	Y	3	6	0	0	0	0	4	6
71-25	2	M	.0300	41	82	Y	4	10	0	0	0	0	4	10
71-25	2	M	.0300	42	83	Y	6	2	1	0	0	0	7	4
71-25	2	M	.0300	42	84	Y	2	8	0	0	0	0	2	9
71-25	2	M	.0300	43	85	Y	6	6	0	0	0	0	6	6
71-25	2	M	.0300	43	86	Y	3	6	0	1	0	0	4	8
71-25	2	M	.0300	44	87	Y	6	5	0	0	0	0	6	5
71-25	2	M	.0300	44	88	Y	4	7	0	0	0	0	4	7
71-25	2	M	.0300	45	89	Y	4	6	0	0	0	0	5	6
71-25	2	M	.0300	45	90	Y	5	9	0	0	0	0	5	9
71-25	2	M	.0300	46	91	Y	3	7	0	0	1	0	5	8
71-25	2	M	.0300	46	92	Y	7	4	0	0	0	0	8	7
71-25	2	M	.0300	47	93	Y	8	5	0	0	0	0	8	6
71-25	2	M	.0300	47	94	Y	4	7	0	0	0	0	4	8
71-25	2	M	.0300	48	95	Y	6	6	0	0	2	2	7	6
71-25	2	M	.0300	48	96	Y	8	4	0	0	0	0	9	4
71-25	2	M	.0300	49	97	Y	5	7	1	0	0	0	5	7
71-25	2	M	.0300	49	98	Y	7	4	0	0	0	0	9	4
71-25	2	M	.0300	50	99	Y	7	4	0	0	0	0	7	4
71-25	2	M	.0300	50	100	Y	7	7	0	0	0	0	7	7
71-25	2	M	.2500	51	101	Y	6	5	1	1	0	0	6	5
71-25	2	M	.2500	51	102	Y	6	5	0	1	0	0	6	5
71-25	2	M	.2500	52	103	Y	5	8	0	0	0	0	5	8
71-25	2	M	.2500	52	104	Y	4	6	0	0	0	0	4	6
71-25	2	M	.2500	53	105	Y	8	6	1	1	1	0	8	6
71-25	2	M	.2500	53	106	Y	4	6	1	0	0	0	5	6
71-25	2	M	.2500	54	107	Y	3	7	0	0	0	0	3	7
71-25	2	M	.2500	54	108	Y	3	6	0	0	0	0	4	6
71-25	2	M	.2500	55	109	Y	4	0	0	0	0	0	5	7
71-25	2	M	.2500	55	110	Y	9	2	0	0	0	0	11	2
71-25	2	M	.2500	56	111	Y	9	6	0	0	4	2	10	6
71-25	2	M	.2500	56	112	Y	7	3	5	2	2	1	7	6
71-25	2	M	.2500	57	113	Y	5	0	0	0	0	0	7	5
71-25	2	M	.2500	57	114	Y	7	6	0	0	0	0	8	6
71-25	2	M	.2500	58	115	Y	6	7	0	0	0	0	6	7
71-25	2	M	.2500	58	116	Y	9	6	0	0	0	0	9	6
71-25	2	M	.2500	59	117	Y	1	2	0	0	0	0	7	4
71-25	2	M	.2500	59	118	Y	8	6	0	0	0	0	9	7
71-25	2	M	.2500	60	119	Y	6	10	0	0	0	0	7	10
71-25	2	M	.2500	60	120	Y	5	7	0	0	0	0	5	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-25	2	M	.5000	61	121	Y	5	7	0	1	1	1	6	8
71-25	2	M	.5000	61	122	Y	5	6	0	0	0	0	5	6
71-25	2	M	.5000	62	123	Y	5	5	0	0	0	0	10	6
71-25	2	M	.5000	62	124	Y	5	6	0	0	0	0	8	6
71-25	2	M	.5000	63	125	Y	7	7	0	0	1	0	7	7
71-25	2	M	.5000	63	126	Y	7	6	0	0	0	0	8	7
71-25	2	M	.5000	64	127	Y	6	9	0	0	0	0	6	9
71-25	2	M	.5000	64	128	Y	6	6	0	0	0	0	8	6
71-25	2	M	.5000	65	129	Y	5	8	0	1	0	0	6	8
71-25	2	M	.5000	65	130	Y	7	3	0	0	0	0	8	3
71-25	2	M	.5000	66	131	Y	6	7	0	0	1	1	6	7
71-25	2	M	.5000	66	132	Y	5	8	0	0	0	0	5	8
71-25	2	M	.5000	67	133	[illegible]	3	5	0	0	0	0	7	5
71-25	2	M	.5000	67	134	[illegible]	5	6	0	0	0	0	5	6
71-25	2	M	.5000	68	135	Y	7	5	0	0	1	0	7	5
71-25	2	M	.5000	68	136	Y	7	5	0	0	0	0	8	5
71-25	2	M	.5000	69	137	Y	7	5	0	0	0	2	7	5
71-25	2	M	.5000	69	138	Y	6	6	0	0	0	0	6	6
71-25	2	M	.5000	70	139	Y	6	6	0	0	0	0	8	7
71-25	2	M	.5000	70	140	Y	5	7	0	0	1	6	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
CNTRL25	3	S	0.0000	1	1	Y	5	8	0	0	0	0	5	8
CNTRL25	3	S	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	S	0.0000	2	3	Y	7	5	0	0	0	0	7	5
CNTRL25	3	S	0.0000	2	4	Y	3	9	0	1	0	0	3	9
CNTRL25	3	S	0.0000	3	5	Y	10	2	0	0	0	0	10	2
CNTRL25	3	S	0.0000	3	6	Y	1	8	0	1	0	0	2	10
CNTRL25	3	S	0.0000	4	7	Y	8	7	0	0	0	0	8	7
CNTRL25	3	S	0.0000	4	8	Y	6	5	0	0	0	0	6	7
CNTRL25	3	S	0.0000	5	9	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	S	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	S	0.0000	6	11	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	S	0.0000	6	12	Y	6	7	0	1	0	0	6	9
CNTRL25	3	S	0.0000	7	13	Y	7	7	0	0	0	0	7	7
CNTRL25	3	S	0.0000	7	14	Y	6	3	0	0	0	0	5	6
CNTRL25	3	S	0.0000	8	15	Y	4	6	0	0	0	0	5	7
CNTRL25	3	S	0.0000	8	16	Y	4	8	0	0	0	0	6	8
CNTRL25	3	S	0.0000	9	17	Y	5	10	0	0	0	0	5	10
CNTRL25	3	S	0.0000	9	18	Y	5	6	1	0	0	0	5	6
CNTRL25	3	S	0.0000	10	19	Y	5	7	0	2	0	0	6	7
CNTRL25	3	S	0.0000	10	20	Y	7	3	1	0	0	0	7	6
71-25	3	S	.0300	51	101	Y	5	7	1	1	0	0	5	7
71-25	3	S	.0300	51	102	Y	7	8	0	1	0	0	8	8
71-25	3	S	.0300	52	103	Y	7	4	0	0	0	0	7	4
71-25	3	S	.0300	52	104	Y	6	8	0	2	1	0	11	14
71-25	3	S	.0300	53	105	Y	6	7	0	0	0	3	7	8
71-25	3	S	.0300	53	106	Y	3	8	0	0	0	0	3	8
71-25	3	S	.0300	54	107	Y	8	6	1	0	0	1	8	6
71-25	3	S	.0300	54	108	Y	7	6	0	0	0	0	7	7
71-25	3	S	.0300	55	109	Y	5	7	0	0	0	0	5	7
71-25	3	S	.0300	55	110	Y	5	6	0	0	0	0	6	6
71-25	3	S	.0300	56	111	Y	7	5	0	1	0	0	7	5
71-25	3	S	.0300	56	112	Y	6	7	0	0	0	1	6	7
71-25	3	S	.0300	57	113	Y	7	6	0	0	0	0	7	6
71-25	3	S	.0300	57	114	Y	6	6	0	1	0	1	6	7
71-25	3	S	.0300	58	115	Y	7	0	0	0	0	0	7	3
71-25	3	S	.0300	58	116	Y	9	4	0	0	0	0	10	4
71-25	3	S	.0300	59	117	Y	4	9	0	0	0	0	5	9
71-25	3	S	.0300	59	118	Y	8	7	0	0	0	0	8	7
71-25	3	S	.0300	60	119	Y	3	6	0	0	0	0	3	7
71-25	3	S	.0300	60	120	Y	7	7	0	0	0	0	7	8

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-25 IONOL C.P.

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
71-25	3	S	.9000	61	121	Y	8	5	0	0	1	0	9	5
71-25	3	S	.9000	61	122	Y	7	7	0	0	0	0	7	7
71-25	3	S	.9000	62	123	Y	11	1	0	0	0	0	11	1
71-25	3	S	.9000	62	124	Y	3	8	0	0	0	0	4	9
71-25	3	S	.9000	63	125	Y	6	6	0	0	0	0	8	6
71-25	3	S	.9000	63	126	Y	6	9	0	0	0	1	6	9
71-25	3	S	.9000	64	127	Y	6	8	0	0	0	0	7	8
71-25	3	S	.9000	64	128	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	3	S	.9000	65	129	Y	8	9	0	0	0	0	8	9
71-25	3	S	.9000	65	130	Y	6	7	0	0	0	0	6	7
71-25	3	S	.9000	66	131	Y	8	5	0	0	2	0	8	5
71-25	3	S	.9000	66	132	Y	6	6	0	0	0	0	6	6
71-25	3	S	.9000	67	133	Y	6	8	0	0	0	0	6	8
71-25	3	S	.9000	67	134	Y	5	7	1	0	0	0	6	8
71-25	3	S	.9000	68	135	Y	10	3	0	0	3	1	10	4
71-25	3	S	.9000	68	136	Y	3	10	0	0	1	0	3	11
71-25	3	S	.9000	69	137	Y	3	6	0	0	0	0	3	7
71-25	3	S	.9000	69	138	Y	5	8	0	0	0	0	5	8
71-25	3	S	.9000	70	139	Y	10	6	1	0	0	0	11	6
71-25	3	S	.9000	70	140	Y	7	3	2	0	0	0	10	3
71-25	3	S	1.4000	71	141	Y	6	6	0	0	0	0	6	6
71-25	3	S	1.4000	71	142	Y	4	7	1	0	0	0	4	7
71-25	3	S	1.4000	72	143	Y	7	7	0	0	0	0	7	8
71-25	3	S	1.4000	72	144	Y	3	9	0	0	0	0	3	9
71-25	3	S	1.4000	73	145	Y	6	5	0	0	0	0	6	5
71-25	3	S	1.4000	73	146	Y	4	8	0	0	0	0	4	8
71-25	3	S	1.4000	74	147	Y	7	4	0	0	0	0	8	4
71-25	3	S	1.4000	74	148	Y	3	7	0	0	0	0	3	8
71-25	3	S	1.4000	75	149	Y	2	5	0	0	0	0	6	7
71-25	3	S	1.4000	75	150	Y	6	4	2	1	0	0	8	9
71-25	3	S	1.4000	76	151	Y	2	1	0	0	0	0	5	5
71-25	3	S	1.4000	76	152	Y	7	4	0	0	0	0	7	6
71-25	3	S	1.4000	77	153	Y	4	6	0	0	0	0	5	6
71-25	3	S	1.4000	77	154	Y	5	5	2	1	0	0	5	5
71-25	3	S	1.4000	78	155	Y	7	5	0	0	0	0	7	6
71-25	3	S	1.4000	78	156	Y	7	6	0	0	2	0	7	6
71-25	3	S	1.4000	79	157	Y	6	6	0	0	0	0	6	6
71-25	3	S	1.4000	79	158	Y	8	5	3	0	0	0	8	5
71-25	3	S	1.4000	80	159	Y	7	5	0	0	0	0	8	5
71-25	3	S	1.4000	80	160	Y	2	1	0	0	0	0	7	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
TEM25	3	S	.0002	11	21	Y	1	2	0	2	0	0	2	5
TEM25	3	S	.0002	11	22	Y	6	3	5	3	0	0	7	5
TEM25	3	S	.0002	12	23	Y	5	4	2	2	0	0	7	5
TEM25	3	S	.0002	12	24	Y	6	5	5	5	0	0	8	5
TEM25	3	S	.0002	13	25	Y	2	10	1	7	1	1	2	11
TEM25	3	S	.0002	13	26	Y	4	4	0	0	4	4	6	8
TEM25	3	S	.0002	14	27	Y	4	7	0	0	4	6	5	7
TEM25	3	S	.0002	14	28	Y	0	5	0	5	0	0	1	12
TEM25	3	S	.0002	15	29	Y	6	5	0	0	0	0	7	5
TEM25	3	S	.0002	15	30	Y	8	4	7	3	0	1	9	6
TEM25	3	S	.0002	16	31	Y	3	4	0	0	2	3	5	6
TEM25	3	S	.0002	16	32	Y	6	3	5	2	0	0	7	4
TEM25	3	S	.0002	17	33	Y	7	2	6	2	1	0	9	3
TEM25	3	S	.0002	17	34	Y	5	5	5	4	0	0	8	6
TEM25	3	S	.0002	18	35	Y	1	5	0	0	1	4	6	7
TEM25	3	S	.0002	18	36	Y	5	5	4	5	0	0	5	6
TEM25	3	S	.0002	19	37	Y	6	4	0	0	0	0	8	5
TEM25	3	S	.0002	19	38	Y	2	2	0	0	2	2	10	3
TEM25	3	S	.0002	20	39	Y	6	3	0	0	5	3	9	6
TEM25	3	S	.0002	20	40	Y	2	1	2	1	0	0	6	7
CNTRL25	3	M	0.0000	1	1	Y	5	8	0	0	0	0	5	8
CNTRL25	3	M	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	M	0.0000	2	3	Y	7	5	0	0	0	0	7	5
CNTRL25	3	M	0.0000	2	4	Y	3	9	0	1	0	0	3	9
CNTRL25	3	M	0.0000	3	5	Y	10	2	0	0	0	0	10	2
CNTRL25	3	M	0.0000	3	6	Y	1	8	0	1	0	0	2	10
CNTRL25	3	M	0.0000	4	7	Y	8	7	0	0	0	0	8	7
CNTRL25	3	M	0.0000	4	8	Y	6	5	0	0	0	0	6	7
CNTRL25	3	M	0.0000	5	9	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	M	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	M	0.0000	6	11	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	3	M	0.0000	6	12	Y	6	7	0	1	0	0	6	9
CNTRL25	3	M	0.0000	7	13	Y	7	7	0	0	0	0	7	7
CNTRL25	3	M	0.0000	7	14	Y	6	3	0	0	0	0	5	6
CNTRL25	3	M	0.0000	8	15	Y	4	6	0	0	0	0	5	7
CNTRL25	3	M	0.0000	8	16	Y	4	8	0	0	0	0	6	8
CNTRL25	3	M	0.0000	9	17	Y	5	10	0	0	0	0	5	10
CNTRL25	3	M	0.0000	9	18	Y	5	6	1	0	0	0	5	6
CNTRL25	3	M	0.0000	10	19	Y	5	7	0	2	0	0	6	7
CNTRL25	3	M	0.0000	10	20	Y	7	3	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
71-25	3	M	.0300	41	81	Y	4	8	0	0	0	0	5	10
71-25	3	M	.0300	41	82	Y	5	9	0	0	0	0	5	9
71-25	3	M	.0300	42	83	Y	9	3	2	0	0	0	9	3
71-25	3	M	.0300	42	84	Y	4	5	0	0	0	0	5	7
71-25	3	M	.0300	43	85	Y	4	5	0	0	0	0	4	8
71-25	3	M	.0300	43	86	Y	8	5	0	0	3	3	8	7
71-25	3	M	.0300	44	87	Y	8	7	0	0	1	0	10	7
71-25	3	M	.0300	44	88	Y	6	6	0	0	0	0	7	7
71-25	3	M	.0300	45	89	Y	8	2	0	0	0	1	8	3
71-25	3	M	.0300	45	90	Y	8	8	0	0	0	1	8	8
71-25	3	M	.0300	46	91	Y	10	4	0	0	3	0	10	4
71-25	3	M	.0300	46	92	Y	2	7	0	0	1	2	2	10
71-25	3	M	.0300	47	93	Y	4	9	0	0	0	0	4	10
71-25	3	M	.0300	47	94	Y	8	5	0	0	0	0	9	5
71-25	3	M	.0300	48	95	Y	7	7	0	0	0	1	7	7
71-25	3	M	.0300	48	96	Y	8	6	0	0	0	0	8	6
71-25	3	M	.0300	49	97	Y	4	8	0	1	0	1	4	9
71-25	3	M	.0300	49	98	Y	3	7	1	0	0	0	6	9
71-25	3	M	.0300	50	99	Y	4	9	0	0	0	0	4	10
71-25	3	M	.0300	50	100	Y	3	11	0	0	0	0	3	12
71-25	3	M	.2500	51	101	Y	6	6	0	0	0	0	6	6
71-25	3	M	.2500	51	102	Y	8	7	1	0	0	0	8	7
71-25	3	M	.2500	52	103	Y	4	7	0	0	0	0	4	10
71-25	3	M	.2500	52	104	Y	6	7	0	0	1	2	6	8
71-25	3	M	.2500	53	105	Y	4	10	0	0	0	0	4	10
71-25	3	M	.2500	53	106	Y	4	7	1	0	0	0	4	7
71-25	3	M	.2500	54	107	Y	6	6	0	0	3	3	6	6
71-25	3	M	.2500	54	108	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	3	M	.2500	55	109	Y	3	10	0	0	0	0	3	10
71-25	3	M	.2500	55	110	Y	6	9	0	0	0	0	7	9
71-25	3	M	.2500	56	111	Y	4	7	0	0	0	0	5	7
71-25	3	M	.2500	56	112	Y	6	9	0	0	1	0	6	9
71-25	3	M	.2500	57	113	Y	7	7	0	0	0	0	7	7
71-25	3	M	.2500	57	114	Y	3	10	0	1	0	0	4	10
71-25	3	M	.2500	58	115	Y	4	8	0	0	1	0	5	8
71-25	3	M	.2500	58	116	Y	5	6	0	0	0	0	5	6
71-25	3	M	.2500	59	117	Y	6	8	0	0	0	1	6	9
71-25	3	M	.2500	59	118	Y	5	11	0	2	0	0	5	12
71-25	3	M	.2500	60	119	Y	9	3	0	0	0	0	9	3
71-25	3	M	.2500	60	120	Y	1	2	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
71-25	3	M	.5000	61	121	Y	6	4	0	0	1	0	6	4
71-25	3	M	.5000	61	122	Y	0	1	0	0	0	0	6	3
71-25	3	M	.5000	62	123	Y	4	4	1	0	1	1	5	5
71-25	3	M	.5000	62	124	Y	6	5	0	0	0	0	6	6
71-25	3	M	.5000	63	125	Y	7	4	0	0	0	0	9	5
71-25	3	M	.5000	63	126	Y	4	5	0	1	0	0	5	6
71-25	3	M	.5000	64	127	Y	6	6	0	0	0	0	6	6
71-25	3	M	.5000	64	128	Y	4	6	0	1	0	0	4	6
71-25	3	M	.5000	65	129	Y	6	7	0	0	1	1	6	7
71-25	3	M	.5000	65	130	Y	0	7	0	0	0	1	14	7
71-25	3	M	.5000	66	131	Y	9	3	0	0	0	0	9	4
71-25	3	M	.5000	66	131	Y	4	8	0	0	0	0	4	9
71-25	3	M	.5000	67	133	Y	6	8	0	0	0	1	6	8
71-25	3	M	.5000	67	134	Y	2	8	0	8	0	0	4	8
71-25	3	M	.5000	68	135	Y	5	5	2	2	0	0	7	7
71-25	3	M	.5000	68	136	Y	8	5	0	0	0	1	8	5
71-25	3	M	.5000	69	137	Y	5	3	0	0	3	1	6	3
71-25	3	M	.5000	69	138	Y	2	11	0	0	0	0	2	11
71-25	3	M	.5000	70	139	Y	2	11	1	1	0	0	2	11
71-25	3	M	.5000	70	140	Y	10	1	0	0	0	0	10	2

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
CNTRL25	4	S	0.0000	1	1	Y	4	9	0	0	0	0	7	13
CNTRL25	4	S	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	4	S	0.0000	2	3	Y	6	7	0	0	1	0	9	10
CNTRL25	4	S	0.0000	2	4	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	4	S	0.0000	3	5	Y	4	6	0	0	0	0	8	6
CNTRL25	4	S	0.0000	3	6	Y	7	4	0	0	0	0	8	4
CNTRL25	4	S	0.0000	4	7	Y	7	7	0	0	0	0	9	8
CNTRL25	4	S	0.0000	4	8	Y	3	5	0	0	0	0	3	5
CNTRL25	4	S	0.0000	5	9	Y	4	6	0	0	0	0	4	8
CNTRL25	4	S	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	4	S	0.0000	6	11	Y	9	3	0	0	1	0	9	3
CNTRL25	4	S	0.0000	6	12	Y	5	5	0	0	0	0	5	6
CNTRL25	4	S	0.0000	7	13	Y	4	8	0	0	0	0	4	9
CNTRL25	4	S	0.0000	7	14	Y	4	8	0	0	0	0	4	9
CNTRL25	4	S	0.0000	8	15	Y	10	3	0	0	0	0	10	4
CNTRL25	4	S	0.0000	8	16	Y	6	6	0	1	3	0	6	6
CNTRL25	4	S	0.0000	9	17	Y	8	6	0	0	1	1	9	6
CNTRL25	4	S	0.0000	9	18	Y	8	3	0	0	0	0	8	4
CNTRL25	4	S	0.0000	10	19	Y	4	6	0	0	0	0	5	10
CNTRL25	4	S	0.0000	10	20	Y	2	1	0	0	0	0	4	8
71-25	4	S	.0300	51	101	Y	6	6	1	0	0	0	6	7
71-25	4	S	.0300	51	102	Y	6	7	0	0	0	0	6	7
71-25	4	S	.0300	52	103	Y	3	8	0	0	0	1	3	8
71-25	4	S	.0300	52	104	Y	5	6	1	0	0	0	5	7
71-25	4	S	.0300	53	105	Y	6	5	0	0	0	0	6	6
71-25	4	S	.0300	53	106	Y	6	6	0	0	0	0	7	6
71-25	4	S	.0300	54	107	Y	1	5	0	0	0	1	7	5
71-25	4	S	.0300	54	108	Y	5	11	0	0	0	0	5	11
71-25	4	S	.0300	55	109	Y	5	6	0	0	1	0	7	6
71-25	4	S	.0300	55	110	Y	7	2	0	0	0	0	10	4
71-25	4	S	.0300	56	111	Y	8	7	1	0	0	0	8	7
71-25	4	S	.0300	56	112	Y	5	7	0	0	0	0	5	7
71-25	4	S	.0300	57	113	Y	9	5	0	0	0	0	10	5
71-25	4	S	.0300	57	114	Y	5	6	0	1	0	0	6	6
71-25	4	S	.0300	58	115	Y	7	7	0	0	0	0	7	8
71-25	4	S	.0300	58	116	Y	6	7	0	0	0	0	6	7
71-25	4	S	.0300	59	117	Y	10	3	0	0	0	0	10	3
71-25	4	S	.0300	59	118	Y	6	8	0	1	1	0	6	8
71-25	4	S	.0300	60	119	Y	0	1	0	1	0	0	10	13
71-25	4	S	.0300	60	120	Y	2	5	0	1	0	0	6	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
71-25	4	S	.9000	61	121	Y	5	8	2	0	0	0	5	8
71-25	4	S	.9000	61	122	Y	6	9	0	0	0	0	6	9
71-25	4	S	.9000	62	123	Y	7	9	0	0	0	0	7	9
71-25	4	S	.9000	62	124	Y	9	4	0	0	0	0	11	4
71-25	4	S	.9000	63	125	Y	0	9	0	0	0	1	6	10
71-25	4	S	.9000	63	126	Y	7	6	0	0	0	1	7	6
71-25	4	S	.9000	64	127	Y	7	6	0	0	0	0	9	6
71-25	4	S	.9000	64	128	Y	9	6	0	1	0	0	9	6
71-25	4	S	.9000	65	129	Y	7	7	0	0	0	0	7	7
71-25	4	S	.9000	65	130	Y	3	10	0	0	0	0	3	11
71-25	4	S	.9000	66	131	Y	7	6	0	0	0	0	7	6
71-25	4	S	.9000	66	132	Y	8	6	0	0	0	0	8	6
71-25	4	S	.9000	67	133	Y	4	7	0	0	0	0	5	8
71-25	4	S	.9000	67	134	Y	7	6	0	0	0	0	7	6
71-25	4	S	.9000	68	135	Y	6	7	0	0	1	0	6	7
71-25	4	S	.9000	68	136	Y	4	9	0	2	0	0	7	9
71-25	4	S	.9000	69	137	Y	5	9	0	0	0	1	6	9
71-25	4	S	.9000	69	138	Y	6	8	0	0	0	0	6	9
71-25	4	S	.9000	70	139	Y	7	6	0	0	0	1	8	6
71-25	4	S	.9000	70	140	Y	4	6	0	1	0	0	4	10
71-25	4	S	1.4000	71	141	Y	9	3	0	0	0	0	9	4
71-25	4	S	1.4000	71	142	Y	5	7	0	1	0	0	5	7
71-25	4	S	1.4000	72	143	Y	4	5	0	0	0	0	4	5
71-25	4	S	1.4000	72	144	Y	4	9	0	0	0	0	4	9
71-25	4	S	1.4000	73	145	Y	4	6	0	0	0	0	4	6
71-25	4	S	1.4000	73	146	Y	4	8	0	0	0	0	5	8
71-25	4	S	1.4000	74	147	Y	5	6	0	0	0	0	5	8
71-25	4	S	1.4000	74	148	Y	9	3	1	0	0	0	9	3
71-25	4	S	1.4000	75	149	Y	7	6	0	0	0	0	8	6
71-25	4	S	1.4000	75	150	Y	8	5	0	0	1	0	8	5
71-25	4	S	1.4000	76	151	Y	3	7	0	1	0	0	5	9
71-25	4	S	1.4000	76	152	Y	5	6	0	4	0	0	5	6
71-25	4	S	1.4000	77	153	Y	3	8	0	0	0	2	3	8
71-25	4	S	1.4000	77	154	Y	2	6	0	0	0	0	5	6
71-25	4	S	1.4000	78	155	Y	5	5	0	0	1	0	7	7
71-25	4	S	1.4000	78	156	Y	6	8	0	1	0	0	6	8
71-25	4	S	1.4000	79	157	Y	6	6	0	0	0	0	6	6
71-25	4	S	1.4000	79	158	Y	8	4	1	1	0	1	8	5
71-25	4	S	1.4000	80	159	Y	6	6	1	0	0	0	7	7
71-25	4	S	1.4000	80	160	Y	5	6	0	0	0	0	5	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM25	4	S	.0002	11	21	Y	3	1	3	1	0	0	5	7
TEM25	4	S	.0002	11	22	Y	1	2	0	0	0	0	3	8
TEM25	4	S	.0002	12	23	Y	3	2	3	2	0	0	4	3
TEM25	4	S	.0002	12	24	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM25	4	S	.0002	13	25	Y	2	7	2	7	0	0	4	7
TEM25	4	S	.0002	13	26	Y	1	2	1	2	0	0	4	9
TEM25	4	S	.0002	14	27	Y	2	2	2	2	0	0	6	5
TEM25	4	S	.0002	14	28	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM25	4	S	.0002	15	29	Y	5	3	5	3	0	0	5	12
TEM25	4	S	.0002	15	30	Y	5	3	5	3	0	0	5	7
TEM25	4	S	.0002	16	31	Y	1	2	1	2	0	0	11	19
TEM25	4	S	.0002	16	32	Y	2	2	2	2	0	0	8	6
TEM25	4	S	.0002	17	33	Y	3	2	0	0	3	2	7	7
TEM25	4	S	.0002	17	34	Y	3	3	3	3	0	0	8	5
TEM25	4	S	.0002	18	35	Y	1	3	1	3	0	0	5	7
TEM25	4	S	.0002	18	36	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM25	4	S	.0002	19	37	Y	3	2	0	0	3	2	8	14
TEM25	4	S	.0002	19	38	Y	1	0	1	0	0	0	7	5
TEM25	4	S	.0002	20	39	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM25	4	S	.0002	20	40	Y	1	4	1	4	0	0	4	7
CNTRL25	4	M	0.0000	1	1	Y	4	9	0	0	0	0	7	13
CNTRL25	4	M	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	4	M	0.0000	2	3	Y	6	7	0	0	1	0	9	10
CNTRL25	4	M	0.0000	2	4	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	4	M	0.0000	3	5	Y	4	5	0	0	0	0	8	6
CNTRL25	4	M	0.0000	3	6	Y	7	4	0	0	0	0	8	4
CNTRL25	4	M	0.0000	4	7	Y	7	7	0	0	0	0	9	8
CNTRL25	4	M	0.0000	4	8	Y	3	5	0	0	0	0	3	5
CNTRL25	4	M	0.0000	5	9	Y	4	6	0	0	0	0	4	8
CNTRL25	4	M	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	4	M	0.0000	6	11	Y	9	3	0	0	1	0	9	3
CNTRL25	4	M	0.0000	6	12	Y	5	5	0	0	0	0	5	6
CNTRL25	4	M	0.0000	7	13	Y	4	8	0	0	0	0	4	9
CNTRL25	4	M	0.0000	7	14	Y	4	8	0	0	0	0	4	9
CNTRL25	4	M	0.0000	8	15	Y	10	3	0	0	0	0	10	4
CNTRL25	4	M	0.0000	8	16	Y	6	6	0	1	3	0	6	6
CNTRL25	4	M	0.0000	9	17	Y	8	6	0	0	1	1	9	6
CNTRL25	4	M	0.0000	9	18	Y	8	3	0	0	0	0	8	4
CNTRL25	4	M	0.0000	10	19	Y	4	6	0	0	0	0	5	10
CNTRL25	4	M	0.0000	10	20	Y	2	1	0	0	0	0	4	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-25	4	M	.0300	41	81	Y	6	7	0	0	0	3	6	7
71-25	4	M	.0300	41	82	Y	6	8	0	0	0	0	6	8
71-25	4	M	.0300	42	83	Y	9	7	0	0	4	3	9	7
71-25	4	M	.0300	42	84	Y	6	7	0	3	2	1	7	8
71-25	4	M	.0300	43	85	Y	4	9	0	0	0	0	4	9
71-25	4	M	.0300	43	86	Y	9	5	0	1	1	0	9	5
71-25	4	M	.0300	44	87	Y	4	8	0	1	0	0	4	10
71-25	4	M	.0300	44	88	Y	6	9	0	0	0	2	6	9
71-25	4	M	.0300	45	89	Y	4	10	0	0	0	3	4	10
71-25	4	M	.0300	45	90	Y	1	2	0	0	0	0	4	4
71-25	4	M	.0300	46	91	Y	7	7	0	0	2	1	7	7
71-25	4	M	.0300	46	92	Y	3	4	1	1	0	0	4	5
71-25	4	M	.0300	47	93	Y	5	7	0	0	0	2	5	7
71-25	4	M	.0300	47	94	Y	8	7	0	0	0	0	8	7
71-25	4	M	.0300	48	95	Y	7	6	0	0	0	0	7	6
71-25	4	M	.0300	48	96	Y	9	9	0	0	0	0	9	9
71-25	4	M	.0300	49	97	Y	2	6	0	0	1	1	6	7
71-25	4	M	.0300	49	98	Y	8	4	0	0	1	2	8	4
71-25	4	M	.0300	50	99	Y	6	7	0	0	1	2	6	8
71-25	4	M	.0300	50	100	Y	6	2	4	0	0	0	6	4
71-25	4	M	.2500	51	101	Y	4	8	0	0	0	0	4	8
71-25	4	M	.2500	51	102	Y	7	7	0	0	0	0	7	7
71-25	4	M	.2500	52	103	Y	5	9	0	0	0	0	6	9
71-25	4	M	.2500	52	104	Y	3	8	0	1	0	0	3	8
71-25	4	M	.2500	53	105	Y	5	4	0	0	0	0	5	6
71-25	4	M	.2500	53	106	Y	4	7	0	0	0	1	4	7
71-25	4	M	.2500	54	107	Y	4	8	0	0	0	0	4	8
71-25	4	M	.2500	54	108	Y	6	6	1	0	1	0	6	6
71-25	4	M	.2500	55	109	Y	7	5	0	0	0	1	7	5
71-25	4	M	.2500	55	110	Y	0	6	0	0	0	0	7	6
71-25	4	M	.2500	56	111	Y	1	8	0	0	0	3	2	9
71-25	4	M	.2500	56	112	Y	5	8	0	0	0	0	6	8
71-25	4	M	.2500	57	113	Y	3	8	0	0	0	0	3	8
71-25	4	M	.2500	57	114	Y	2	8	0	0	0	2	2	9
71-25	4	M	.2500	58	115	Y	3	9	0	0	0	0	3	10
71-25	4	M	.2500	58	116	Y	7	6	0	0	2	0	7	7
71-25	4	M	.2500	59	117	Y	6	6	0	0	0	0	6	6
71-25	4	M	.2500	59	118	Y	4	7	0	0	0	0	4	7
71-25	4	M	.2500	60	119	Y	7	7	0	0	0	0	7	9
71-25	4	M	.2500	60	120	Y	7	5	0	0	0	0	8	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-25	4	M	.5000	61	121	Y	7	6	0	0	0	0	7	6
71-25	4	M	.5000	61	122	Y	5	7	1	2	0	0	5	7
71-25	4	M	.5000	62	123	Y	7	4	0	0	0	0	8	5
71-25	4	M	.5000	62	124	Y	5	5	0	0	0	0	6	6
71-25	4	M	.5000	63	125	Y	4	8	0	0	0	0	4	8
71-25	4	M	.5000	63	126	Y	3	8	0	0	0	0	3	8
71-25	4	M	.5000	64	127	Y	8	6	0	0	0	0	8	6
71-25	4	M	.5000	64	128	Y	0	4	0	1	0	0	8	4
71-25	4	M	.5000	65	129	Y	5	4	1	1	0	0	6	5
71-25	4	M	.5000	65	130	Y	7	7	0	0	1	0	7	7
71-25	4	M	.5000	66	131	Y	5	7	0	0	0	0	5	7
71-25	4	M	.5000	66	132	Y	6	6	2	0	0	0	6	6
71-25	4	M	.5000	67	133	Y	6	5	0	0	0	0	6	5
71-25	4	M	.5000	67	134	Y	7	4	0	0	0	0	7	4
71-25	4	M	.5000	68	135	Y	4	9	0	0	0	0	5	9
71-25	4	M	.5000	68	136	Y	5	7	0	0	2	0	6	7
71-25	4	M	.5000	69	137	Y	6	7	0	0	0	0	7	8
71-25	4	M	.5000	69	138	Y	6	6	1	0	0	0	6	6
71-25	4	M	.5000	70	139	Y	8	5	0	0	0	0	8	6
71-25	4	M	.5000	70	140	Y	4	10	0	0	0	0	4	10

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL25	5	S	0.0000	1	1	Y	7	5	0	0	1	1	7	5
CNTRL25	5	S	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	5	S	0.0000	2	3	Y	5	6	0	0	2	0	5	6
CNTRL25	5	S	0.0000	2	4	Y	1	4	1	1	0	0	6	4
CNTRL25	5	S	0.0000	3	5	Y	4	4	0	0	0	0	8	6
CNTRL25	5	S	0.0000	3	6	Y	0	1	0	0	0	0	2	6
CNTRL25	5	S	0.0000	4	7	Y	6	7	0	0	0	0	7	7
CNTRL25	5	S	0.0000	4	8	Y	6	7	0	0	0	0	6	8
CNTRL25	5	S	0.0000	5	9	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	5	S	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	5	S	0.0000	6	11	Y	5	7	0	0	0	0	5	7
CNTRL25	5	S	0.0000	6	12	Y	9	6	0	0	0	0	10	6
CNTRL25	5	S	0.0000	7	13	Y	8	3	0	0	0	0	8	3
CNTRL25	5	S	0.0000	7	14	Y	5	9	0	0	0	0	5	9
CNTRL25	5	S	0.0000	8	15	Y	6	6	0	0	1	4	6	7
CNTRL25	5	S	0.0000	8	16	Y	6	5	0	0	0	1	6	5
CNTRL25	5	S	0.0000	9	17	Y	9	4	0	0	0	0	9	4
CNTRL25	5	S	0.0000	9	18	Y	6	4	0	0	2	0	7	4
CNTRL25	5	S	0.0000	10	19	Y	4	4	0	0	0	0	6	6
CNTRL25	5	S	0.0000	10	20	Y	2	6	0	0	0	0	2	7
71-25	5	S	.0300	51	101	Y	5	10	0	0	0	0	5	10
71-25	5	S	.0300	51	102	Y	8	5	2	2	0	0	8	5
71-25	5	S	.0300	52	103	Y	7	5	0	0	0	0	7	5
71-25	5	S	.0300	52	104	Y	6	6	0	0	0	0	6	7
71-25	5	S	.0300	53	105	Y	3	8	0	0	0	0	3	8
71-25	5	S	.0300	53	106	Y	3	7	0	0	0	0	3	7
71-25	5	S	.0300	54	107	Y	9	5	0	0	0	0	9	5
71-25	5	S	.0300	54	108	Y	4	7	0	0	0	0	4	7
71-25	5	S	.0300	55	109	Y	5	6	0	0	0	0	5	6
71-25	5	S	.0300	55	110	Y	5	7	0	0	0	0	5	8
71-25	5	S	.0300	56	111	Y	6	6	0	0	0	0	6	7
71-25	5	S	.0300	56	112	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	5	S	.0300	57	113	Y	5	8	0	0	0	0	5	8
71-25	5	S	.0300	57	114	Y	4	6	4	2	0	0	4	7
71-25	5	S	.0300	58	115	Y	4	3	1	1	0	0	7	6
71-25	5	S	.0300	58	116	Y	2	7	0	2	0	0	2	7
71-25	5	S	.0300	59	117	Y	8	3	0	0	1	0	8	3
71-25	5	S	.0300	59	118	Y	9	5	1	1	0	0	9	5
71-25	5	S	.0300	60	119	Y	6	5	0	0	0	0	7	6
71-25	5	S	.0300	60	120	Y	5	6	0	0	0	0	5	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-25 IONOL C.P.

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
71-25	5	S	.9000	61	121	Y	6	8	0	0	1	3	10	9
71-25	5	S	.9000	61	122	Y	9	3	0	0	0	0	9	3
71-25	5	S	.9000	62	123	Y	5	6	0	0	0	1	6	6
71-25	5	S	.9000	62	124	Y	1	0	0	0	0	0	5	4
71-25	5	S	.9000	63	125	Y	9	6	0	0	1	0	9	6
71-25	5	S	.9000	63	126	Y	2	8	2	3	0	0	2	9
71-25	5	S	.9000	64	127	Y	0	5	0	0	0	0	5	8
71-25	5	S	.9000	64	128	Y	7	6	0	0	0	0	8	6
71-25	5	S	.9000	65	129	Y	7	3	0	0	0	0	8	6
71-25	5	S	.9000	65	130	Y	8	5	0	0	0	0	8	6
71-25	5	S	.9000	66	131	Y	8	6	0	1	0	0	8	6
71-25	5	S	.9000	66	132	Y	5	7	1	1	1	3	5	9
71-25	5	S	.9000	67	133	Y	5	6	0	0	1	0	5	7
71-25	5	S	.9000	67	134	Y	7	7	0	1	0	0	9	7
71-25	5	S	.9000	68	135	Y	6	7	0	0	0	0	6	7
71-25	5	S	.9000	68	136	Y	7	7	1	0	0	0	7	7
71-25	5	S	.9000	69	137	Y	5	5	0	0	0	1	8	5
71-25	5	S	.9000	69	138	Y	9	4	0	0	0	0	9	7
71-25	5	S	.9000	70	139	Y	2	2	0	0	0	1	8	7
71-25	5	S	.9000	70	140	Y	8	5	0	0	0	0	8	5
71-25	5	S	1.4000	71	141	Y	5	5	0	0	0	0	6	5
71-25	5	S	1.4000	71	142	Y	8	7	0	0	0	1	8	7
71-25	5	S	1.4000	72	143	Y	6	3	0	0	0	0	6	4
71-25	5	S	1.4000	72	144	Y	3	10	0	0	0	2	3	10
71-25	5	S	1.4000	73	145	Y	7	5	0	0	0	0	7	6
71-25	5	S	1.4000	73	146	Y	6	8	0	0	0	0	6	8
71-25	5	S	1.4000	74	147	Y	8	3	0	0	4	1	11	3
71-25	5	S	1.4000	74	148	Y	6	1	0	0	1	0	6	7
71-25	5	S	1.4000	75	149	Y	5	3	1	1	0	0	7	4
71-25	5	S	1.4000	75	150	Y	6	7	0	0	0	0	6	7
71-25	5	S	1.4000	76	151	Y	6	4	0	0	0	0	6	4
71-25	5	S	1.4000	76	152	Y	5	8	1	1	0	0	5	8
71-25	5	S	1.4000	77	153	Y	4	5	2	3	1	0	5	6
71-25	5	S	1.4000	77	154	Y	6	5	0	0	0	0	7	7
71-25	5	S	1.4000	78	155	Y	7	5	0	1	0	0	8	5
71-25	5	S	1.4000	78	156	Y	7	3	0	0	0	0	7	5
71-25	5	S	1.4000	79	157	Y	3	10	0	1	0	0	3	10
71-25	5	S	1.4000	79	158	Y	5	6	0	0	0	0	5	6
71-25	5	S	1.4000	80	159	Y	7	5	0	0	0	0	7	5
71-25	5	S	1.4000	80	160	Y	5	6	2	1	0	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
TEM25	5	S	.0002	11	21	Y	5	7	0	0	1	0	5	7
TEM25	5	S	.0002	11	22	Y	9	7	0	0	2	1	9	9
TEM25	5	S	.0002	12	23	Y	5	6	1	0	0	0	5	6
TEM25	5	S	.0002	12	24	Y	0	4	0	0	0	0	8	6
TEM25	5	S	.0002	13	25	Y	3	8	3	4	0	0	3	8
TEM25	5	S	.0002	13	26	Y	4	6	2	2	0	0	4	6
TEM25	5	S	.0002	14	27	Y	9	8	0	0	3	0	9	8
TEM25	5	S	.0002	14	28	Y	3	6	0	0	0	0	3	6
TEM25	5	S	.0002	15	29	Y	5	0	4	0	0	0	9	1
TEM25	5	S	.0002	15	30	Y	5	6	0	1	2	0	5	6
TEM25	5	S	.0002	16	31	Y	7	6	1	0	0	0	7	6
TEM25	5	S	.0002	16	32	Y	7	5	4	2	2	1	8	5
TEM25	5	S	.0002	17	33	Y	1	4	1	4	0	0	1	7
TEM25	5	S	.0002	17	34	Y	8	6	2	0	0	0	8	6
TEM25	5	S	.0002	18	35	Y	3	10	0	1	0	0	4	10
TEM25	5	S	.0002	18	36	Y	5	2	4	2	0	0	8	2
TEM25	5	S	.0002	19	37	Y	2	7	1	2	0	0	2	8
TEM25	5	S	.0002	19	38	Y	2	0	1	0	0	0	6	4
TEM25	5	S	.0002	20	39	Y	4	9	0	2	2	1	4	10
TEM25	5	S	.0002	20	40	Y	4	6	0	4	0	0	6	6
CNTRL25	5	M	0.0000	1	1	Y	7	5	0	0	1	1	7	5
CNTRL25	5	M	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	5	M	0.0000	2	3	Y	5	6	0	0	2	0	5	6
CNTRL25	5	M	0.0000	2	4	Y	1	4	1	1	0	0	6	4
CNTRL25	5	M	0.0000	3	5	Y	4	4	0	0	0	0	8	6
CNTRL25	5	M	0.0000	3	6	Y	0	1	0	0	0	0	2	6
CNTRL25	5	M	0.0000	4	7	Y	6	7	0	0	0	0	7	7
CNTRL25	5	M	0.0000	4	8	Y	6	7	0	0	0	0	6	8
CNTRL25	5	M	0.0000	5	9	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	5	M	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	5	M	0.0000	6	11	Y	5	7	0	0	0	0	5	7
CNTRL25	5	M	0.0000	6	12	Y	9	6	0	0	0	0	10	6
CNTRL25	5	M	0.0000	7	13	Y	8	3	0	0	0	0	8	3
CNTRL25	5	M	0.0000	7	14	Y	5	9	0	0	0	0	5	9
CNTRL25	5	M	0.0000	8	15	Y	6	6	0	0	1	4	6	7
CNTRL25	5	M	0.0000	8	16	Y	6	5	0	0	0	1	6	5
CNTRL25	5	M	0.0000	9	17	Y	9	4	0	0	0	0	9	4
CNTRL25	5	M	0.0000	9	18	Y	6	4	0	0	2	0	7	4
CNTRL25	5	M	0.0000	10	19	Y	4	4	0	0	0	0	6	6
CNTRL25	5	M	0.0000	10	20	Y	2	6	0	0	0	0	2	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
71-25	5	M	.0300	41	81	Y	2	7	0	0	0	0	2	7
71-25	5	M	.0300	41	82	Y	7	3	1	0	0	0	12	12
71-25	5	M	.0300	42	83	Y	5	7	0	0	1	3	5	8
71-25	5	M	.0300	42	84	Y	8	7	0	0	0	0	8	7
71-25	5	M	.0300	43	85	Y	7	5	0	0	0	0	7	6
71-25	5	M	.0300	43	86	Y	7	8	0	0	2	0	7	8
71-25	5	M	.0300	44	87	Y	6	7	0	0	0	0	6	7
71-25	5	M	.0300	44	88	Y	4	9	0	0	0	1	4	13
71-25	5	M	.0300	45	89	Y	6	5	0	0	0	0	7	5
71-25	5	M	.0300	45	90	Y	10	6	0	0	1	0	10	6
71-25	5	M	.0300	46	91	Y	0	7	0	0	0	0	6	7
71-25	5	M	.0300	46	92	Y	5	7	0	0	0	0	5	7
71-25	5	M	.0300	47	93	Y	4	7	0	0	0	0	5	7
71-25	5	M	.0300	47	94	Y	5	9	0	0	0	0	7	9
71-25	5	M	.0300	48	95	Y	7	6	0	1	0	0	8	6
71-25	5	M	.0300	48	96	Y	3	9	1	0	0	0	3	9
71-25	5	M	.0300	49	97	Y	8	7	0	0	0	0	8	7
71-25	5	M	.0300	49	98	Y	5	7	0	0	0	0	5	7
71-25	5	M	.0300	50	99	Y	6	7	0	0	0	0	6	9
71-25	5	M	.0300	50	100	Y	4	11	0	0	0	0	4	11
71-25	5	M	.2500	51	101	Y	8	4	0	0	8	4	8	4
71-25	5	M	.2500	51	102	Y	8	2	0	0	0	0	9	5
71-25	5	M	.2500	52	103	Y	4	6	0	0	0	0	4	6
71-25	5	M	.2500	52	104	Y	7	7	0	0	0	0	7	7
71-25	5	M	.2500	53	105	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	5	M	.2500	53	106	Y	7	6	0	0	0	0	7	6
71-25	5	M	.2500	54	107	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	5	M	.2500	54	108	Y	4	9	1	0	0	0	4	9
71-25	5	M	.2500	55	109	Y	4	0	2	0	0	0	6	5
71-25	5	M	.2500	55	110	Y	7	6	0	0	0	0	8	9
71-25	5	M	.2500	56	111	Y	1	7	0	1	0	0	6	7
71-25	5	M	.2500	56	112	Y	6	5	0	0	0	0	7	5
71-25	5	M	.2500	57	113	Y	4	9	0	0	0	0	5	9
71-25	5	M	.2500	57	114	Y	6	6	0	0	0	0	6	6
71-25	5	M	.2500	58	115	Y	6	7	0	0	0	1	6	8
71-25	5	M	.2500	58	116	Y	6	5	0	0	0	0	6	5
71-25	5	M	.2500	59	117	Y	10	3	0	0	0	0	10	3
71-25	5	M	.2500	59	118	Y	7	6	0	0	1	0	7	7
71-25	5	M	.2500	60	119	Y	7	7	0	0	0	0	7	7
71-25	5	M	.2500	60	120	Y	7	5	0	0	0	0	7	5

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-25	5	M	.5000	61	121	Y	5	7	0	0	0	0	5	7
71-25	5	M	.5000	61	122	Y	6	8	0	0	0	0	6	8
71-25	5	M	.5000	62	123	Y	7	3	0	0	0	0	9	3
71-25	5	M	.5000	62	124	Y	7	6	0	0	0	0	7	6
71-25	5	M	.5000	63	125	Y	7	7	0	0	0	0	7	8
71-25	5	M	.5000	63	126	Y	7	9	0	0	0	0	8	11
71-25	5	M	.5000	64	127	Y	5	8	0	0	0	0	5	8
71-25	5	M	.5000	64	128	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	5	M	.5000	65	129	Y	8	7	0	0	0	0	8	7
71-25	5	M	.5000	65	130	Y	1	3	0	0	0	1	6	6
71-25	5	M	.5000	66	131	Y	8	2	0	0	0	0	9	4
71-25	5	M	.5000	66	132	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	5	M	.5000	67	133	Y	4	7	0	0	0	0	4	9
71-25	5	M	.5000	67	134	Y	6	8	1	0	0	0	6	8
71-25	5	M	.5000	68	135	Y	7	6	0	0	0	0	8	6
71-25	5	M	.5000	68	136	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	5	M	.5000	69	137	Y	4	10	0	0	0	4	4	10
71-25	5	M	.5000	69	138	Y	7	7	0	0	0	0	7	8
71-25	5	M	.5000	70	139	Y	9	3	1	0	0	0	9	3
71-25	5	M	.5000	70	140	Y	4	8	0	0	0	1	4	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL25	6	S	0.0000	1	1	Y	5	4	0	0	0	0	6	7
CNTRL25	6	S	0.0000	1	2	Y	0	1	0	0	0	1	3	8
CNTRL25	6	S	0.0000	2	3	Y	4	8	0	0	0	0	4	8
CNTRL25	6	S	0.0000	2	4	Y	3	8	0	0	0	0	4	9
CNTRL25	6	S	0.0000	3	5	Y	4	6	0	0	0	0	7	7
CNTRL25	6	S	0.0000	3	6	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	6	S	0.0000	4	7	Y	1	0	0	0	0	0	6	4
CNTRL25	6	S	0.0000	4	8	Y	7	6	1	0	0	0	7	7
CNTRL25	6	S	0.0000	5	9	Y	7	6	0	0	0	0	7	6
CNTRL25	6	S	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	6	S	0.0000	6	11	Y	5	3	2	0	0	0	8	5
CNTRL25	6	S	0.0000	6	12	Y	7	8	0	0	1	2	7	8
CNTRL25	6	S	0.0000	7	13	Y	6	6	0	0	0	0	6	6
CNTRL25	6	S	0.0000	7	14	Y	8	4	0	0	0	0	9	4
CNTRL25	6	S	0.0000	8	15	Y	8	4	0	0	0	0	8	5
CNTRL25	6	S	0.0000	8	16	Y	6	6	0	1	0	0	7	6
CNTRL25	6	S	0.0000	9	17	Y	5	9	0	0	0	0	5	10
CNTRL25	6	S	0.0000	9	18	Y	6	7	0	0	0	0	6	7
CNTRL25	6	S	0.0000	10	19	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	6	S	0.0000	10	20	Y	3	8	0	0	0	0	3	8
71-25	6	S	.0300	51	101	Y	3	8	0	0	0	0	5	9
71-25	6	S	.0300	51	102	Y	5	6	0	0	0	0	5	6
71-25	6	S	.0300	52	103	Y	5	1	0	0	0	0	6	5
71-25	6	S	.0300	52	104	Y	5	3	0	0	1	0	5	8
71-25	6	S	.0300	53	105	Y	8	4	0	0	0	0	8	4
71-25	6	S	.0300	53	106	Y	8	2	0	0	0	0	9	3
71-25	6	S	.0300	54	107	Y	3	6	0	0	0	0	3	7
71-25	6	S	.0300	54	108	Y	8	5	0	0	0	0	8	5
71-25	6	S	.0300	55	109	Y	6	6	0	0	0	0	6	6
71-25	6	S	.0300	55	110	Y	3	11	0	1	0	2	3	11
71-25	6	S	.0300	56	111	Y	7	7	0	1	0	0	7	8
71-25	6	S	.0300	56	112	Y	6	3	0	0	0	0	7	4
71-25	6	S	.0300	57	113	Y	6	8	0	0	2	2	6	8
71-25	6	S	.0300	57	114	Y	11	4	1	2	0	0	11	4
71-25	6	S	.0300	58	115	Y	3	10	0	0	0	0	3	10
71-25	6	S	.0300	58	116	Y	5	8	0	0	0	0	5	8
71-25	6	S	.0300	59	117	Y	5	7	0	0	0	0	5	8
71-25	6	S	.0300	59	118	Y	3	10	0	0	0	1	4	10
71-25	6	S	.0300	60	119	Y	5	7	0	0	0	0	6	7
71-25	6	S	.0300	60	120	Y	5	8	0	0	1	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
71-25	6	S	.9000	61	121	Y	7	3	0	0	0	0	7	3
71-25	6	S	.9000	61	122	Y	4	7	0	0	0	0	4	7
71-25	6	S	.9000	62	123	Y	6	5	0	0	0	0	6	7
71-25	6	S	.9000	62	124	Y	6	6	0	1	0	0	7	8
71-25	6	S	.9000	63	125	Y	3	8	0	0	0	0	4	8
71-25	6	S	.9000	63	126	Y	2	9	0	1	0	0	2	9
71-25	6	S	.9000	64	127	Y	6	5	0	0	0	0	8	5
71-25	6	S	.9000	64	128	Y	6	5	0	0	0	0	7	5
71-25	6	S	.9000	65	129	Y	5	6	0	0	0	0	5	7
71-25	6	S	.9000	65	130	Y	8	4	0	0	0	0	8	4
71-25	6	S	.9000	66	131	Y	6	5	0	1	0	0	6	5
71-25	6	S	.9000	66	132	Y	9	5	1	1	0	3	10	5
71-25	6	S	.9000	67	133	Y	5	9	0	0	0	0	5	9
71-25	6	S	.9000	67	134	Y	6	5	0	0	0	0	6	5
71-25	6	S	.9000	68	135	Y	5	7	0	0	1	0	5	9
71-25	6	S	.9000	68	136	Y	5	5	0	0	0	0	5	6
71-25	6	S	.9000	69	137	Y	3	6	0	0	0	0	3	10
71-25	6	S	.9000	69	138	Y	8	4	0	0	0	0	8	4
71-25	6	S	.9000	70	139	Y	4	6	0	0	1	0	4	7
71-25	6	S	.9000	70	140	Y	3	8	0	1	0	0	4	9
71-25	6	S	1.4000	71	141	Y	6	8	1	0	0	0	6	8
71-25	6	S	1.4000	71	142	Y	4	7	0	0	0	0	4	7
71-25	6	S	1.4000	72	143	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	6	S	1.4000	72	144	Y	7	6	1	0	0	0	7	6
71-25	6	S	1.4000	73	145	Y	6	8	0	0	0	0	7	8
71-25	6	S	1.4000	73	146	Y	4	7	0	0	0	0	4	7
71-25	6	S	1.4000	74	147	Y	5	7	0	0	1	0	5	7
71-25	6	S	1.4000	74	148	Y	8	6	0	0	0	0	9	6
71-25	6	S	1.4000	75	149	Y	6	6	0	0	0	1	6	6
71-25	6	S	1.4000	75	150	Y	4	7	0	0	0	0	4	7
71-25	6	S	1.4000	76	151	Y	8	5	0	0	0	0	8	6
71-25	6	S	1.4000	76	152	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	6	S	1.4000	77	153	Y	4	7	0	0	0	0	4	8
71-25	6	S	1.4000	77	154	Y	7	5	0	0	0	0	7	5
71-25	6	S	1.4000	78	155	Y	6	6	1	0	0	0	6	6
71-25	6	S	1.4000	78	156	Y	2	7	0	0	0	0	2	9
71-25	6	S	1.4000	79	157	Y	4	8	0	0	0	0	4	10
71-25	6	S	1.4000	79	158	Y	10	4	0	0	0	1	12	4
71-25	6	S	1.4000	80	159	Y	3	6	1	1	0	0	4	9
71-25	6	S	1.4000	80	160	Y	4	6	0	0	0	0	4	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
TEM25	6	S	.0002	11	21	Y	2	1	2	1	0	0	6	5
TEM25	6	S	.0002	11	22	Y	3	11	1	0	0	0	3	11
TEM25	6	S	.0002	12	23	Y	7	6	0	0	0	0	7	6
TEM25	6	S	.0002	12	24	Y	4	6	0	0	0	1	5	6
TEM25	6	S	.0002	13	25	Y	9	3	1	0	0	0	9	3
TEM25	6	S	.0002	13	26	Y	3	7	0	0	0	0	5	7
TEM25	6	S	.0002	14	27	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM25	6	S	.0002	14	28	Y	6	6	0	0	1	0	7	6
TEM25	6	S	.0002	15	29	Y	6	3	0	0	0	0	7	3
TEM25	6	S	.0002	15	30	Y	3	8	0	0	0	2	5	8
TEM25	6	S	.0002	16	31	Y	8	4	0	0	0	0	8	4
TEM25	6	S	.0002	16	32	Y	3	3	0	0	2	1	4	9
TEM25	6	S	.0002	17	33	Y	2	9	0	0	0	0	2	10
TEM25	6	S	.0002	17	34	Y	9	5	2	1	0	1	9	5
TEM25	6	S	.0002	18	35	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM25	6	S	.0002	18	36	Y	5	7	1	1	0	0	5	7
TEM25	6	S	.0002	19	37	Y	3	8	0	0	0	0	4	8
TEM25	6	S	.0002	19	38	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM25	6	S	.0002	20	39	Y	5	5	0	0	0	0	5	7
TEM25	6	S	.0002	20	40	Y	6	4	0	0	0	1	8	4
CNTRL25	6	M	0.0000	1	1	Y	5	4	0	0	0	0	6	7
CNTRL25	6	M	0.0000	1	2	Y	0	1	0	0	0	1	3	8
CNTRL25	6	M	0.0000	2	3	Y	4	8	0	0	0	0	4	8
CNTRL25	6	M	0.0000	2	4	Y	3	8	0	0	0	0	4	9
CNTRL25	6	M	0.0000	3	5	Y	4	6	0	0	0	0	7	7
CNTRL25	6	M	0.0000	3	6	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	6	M	0.0000	4	7	Y	1	0	0	0	0	0	6	4
CNTRL25	6	M	0.0000	4	8	Y	7	6	1	0	0	0	7	7
CNTRL25	6	M	0.0000	5	9	Y	7	6	0	0	0	0	7	6
CNTRL25	6	M	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	6	M	0.0000	6	11	Y	5	3	2	0	0	0	8	5
CNTRL25	6	M	0.0000	6	12	Y	7	8	0	0	1	2	7	8
CNTRL25	6	M	0.0000	7	13	Y	6	6	0	0	0	0	6	6
CNTRL25	6	M	0.0000	7	14	Y	8	4	0	0	0	0	9	4
CNTRL25	6	M	0.0000	8	15	Y	8	4	0	0	0	0	8	5
CNTRL25	6	M	0.0000	8	16	Y	6	6	0	1	0	0	7	6
CNTRL25	6	M	0.0000	9	17	Y	5	9	0	0	0	0	5	10
CNTRL25	6	M	0.0000	9	18	Y	6	7	0	0	0	0	6	7
CNTRL25	6	M	0.0000	10	19	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	6	M	0.0000	10	20	Y	3	8	0	0	0	0	3	8

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-25 IONOL C.P.

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
71-25	6	M	.0300	41	81	Y	6	5	0	0	3	1	7	6
71-25	6	M	.0300	41	82	Y	7	5	0	0	3	1	7	5
71-25	6	M	.0300	42	83	Y	0	4	0	0	0	1	6	4
71-25	6	M	.0300	42	84	Y	7	8	2	2	0	0	7	10
71-25	6	M	.0300	43	85	Y	3	12	0	0	1	2	3	14
71-25	6	M	.0300	43	86	Y	9	4	0	0	0	0	11	4
71-25	6	M	.0300	44	87	Y	5	10	0	0	0	0	5	10
71-25	6	M	.0300	44	88	Y	9	4	1	0	1	0	10	4
71-25	6	M	.0300	45	89	Y	8	8	0	0	1	0	8	8
71-25	6	M	.0300	45	90	Y	8	6	1	0	0	0	8	6
71-25	6	M	.0300	46	91	Y	7	6	0	0	2	3	7	6
71-25	6	M	.0300	46	92	Y	3	2	0	0	0	0	4	16
71-25	6	M	.0300	47	93	Y	4	8	0	0	0	1	4	8
71-25	6	M	.0300	47	94	Y	8	6	0	0	0	0	8	7
71-25	6	M	.0300	48	95	Y	4	7	0	1	0	0	4	7
71-25	6	M	.0300	48	96	Y	5	5	1	1	0	0	6	5
71-25	6	M	.0300	49	97	Y	6	6	0	0	1	1	6	6
71-25	6	M	.0300	49	98	Y	8	5	0	0	1	3	9	5
71-25	6	M	.0300	50	99	Y	7	5	0	0	0	0	10	7
71-25	6	M	.0300	50	100	Y	7	6	0	0	0	0	9	6
71-25	6	M	.2500	51	101	Y	9	6	0	0	0	0	9	6
71-25	6	M	.2500	51	102	Y	5	5	0	0	0	0	5	6
71-25	6	M	.2500	52	103	Y	7	5	2	0	0	0	10	13
71-25	6	M	.2500	52	104	Y	5	4	0	0	0	0	8	4
71-25	6	M	.2500	53	105	Y	0	4	0	0	0	0	6	6
71-25	6	M	.2500	53	106	Y	8	4	1	0	0	0	8	6
71-25	6	M	.2500	54	107	Y	7	6	0	1	0	0	7	6
71-25	6	M	.2500	54	108	Y	6	3	0	0	0	0	6	6
71-25	6	M	.2500	55	109	Y	6	7	0	0	0	0	6	7
71-25	6	M	.2500	55	110	Y	7	3	0	0	0	0	9	4
71-25	6	M	.2500	56	111	Y	8	5	0	0	0	0	8	5
71-25	6	M	.2500	56	112	Y	3	6	1	0	0	0	3	7
71-25	6	M	.2500	57	113	Y	5	8	0	0	0	0	6	8
71-25	6	M	.2500	57	114	Y	0	6	0	0	0	0	6	13
71-25	6	M	.2500	58	115	Y	9	4	0	0	0	0	9	4
71-25	6	M	.2500	58	116	Y	7	1	3	0	0	0	7	5
71-25	6	M	.2500	59	117	Y	8	5	0	0	0	0	9	5
71-25	6	M	.2500	59	118	Y	2	11	0	0	0	0	2	11
71-25	6	M	.2500	60	119	Y	4	8	1	0	0	0	4	8
71-25	6	M	.2500	60	120	Y	7	5	1	0	1	1	7	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-25	6	M	.5000	61	121	Y	6	7	0	0	0	0	6	7
71-25	6	M	.5000	61	122	Y	5	7	0	0	0	1	5	7
71-25	6	M	.5000	62	123	Y	2	8	0	1	1	0	2	8
71-25	6	M	.5000	62	124	Y	1	6	0	0	0	1	6	6
71-25	6	M	.5000	63	125	Y	4	6	0	0	0	0	4	6
71-25	6	M	.5000	63	126	Y	4	7	0	0	0	0	4	7
71-25	6	M	.5000	64	127	Y	4	8	0	0	0	0	4	8
71-25	6	M	.5000	64	128	Y	10	5	0	0	1	0	10	6
71-25	6	M	.5000	65	129	Y	3	8	0	0	0	1	4	8
71-25	6	M	.5000	65	130	Y	0	3	0	1	0	0	5	6
71-25	6	M	.5000	66	131	Y	7	8	0	0	1	2	7	8
71-25	6	M	.5000	66	132	Y	7	7	0	0	0	0	7	7
71-25	6	M	.5000	67	133	Y	5	9	0	0	0	0	5	10
71-25	6	M	.5000	67	134	Y	9	6	0	0	0	0	9	6
71-25	6	M	.5000	68	135	Y	7	6	0	0	0	0	7	6
71-25	6	M	.5000	68	136	Y	2	7	0	3	1	0	4	7
71-25	6	M	.5000	69	137	Y	8	3	0	0	0	0	9	4
71-25	6	M	.5000	69	138	Y	6	5	0	0	0	0	6	5
71-25	6	M	.5000	70	139	Y	8	3	0	0	0	0	10	3
71-25	6	M	.5000	70	140	Y	8	3	0	0	0	2	9	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
CNTRL25	7	S	0.0000	1	1	Y	2	3	0	0	0	0	8	3
CNTRL25	7	S	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	7	S	0.0000	2	3	Y	6	5	0	0	0	0	6	6
CNTRL25	7	S	0.0000	2	4	Y	2	12	0	0	0	0	2	12
CNTRL25	7	S	0.0000	3	5	Y	5	4	0	0	0	0	7	4
CNTRL25	7	S	0.0000	3	6	Y	3	8	0	0	0	0	3	8
CNTRL25	7	S	0.0000	4	7	Y	7	4	0	0	0	0	7	4
CNTRL25	7	S	0.0000	4	8	Y	9	5	0	0	0	0	9	5
CNTRL25	7	S	0.0000	5	9	Y	7	3	0	0	0	1	8	7
CNTRL25	7	S	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	7	S	0.0000	6	11	Y	6	4	0	0	0	0	6	4
CNTRL25	7	S	0.0000	6	12	Y	7	7	1	0	0	0	7	7
CNTRL25	7	S	0.0000	7	13	Y	5	3	0	0	1	0	5	7
CNTRL25	7	S	0.0000	7	14	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	7	S	0.0000	8	15	Y	5	4	1	0	0	0	5	4
CNTRL25	7	S	0.0000	8	16	Y	9	3	0	0	0	0	9	3
CNTRL25	7	S	0.0000	9	17	Y	2	10	0	0	1	0	2	10
CNTRL25	7	S	0.0000	9	18	Y	4	8	0	0	1	4	4	8
CNTRL25	7	S	0.0000	10	19	Y	6	7	0	0	0	0	6	7
CNTRL25	7	S	0.0000	10	20	Y	3	9	0	0	1	1	3	10
71-25	7	S	.0300	51	101	Y	7	4	0	0	0	0	7	4
71-25	7	S	.0300	51	102	Y	6	7	0	0	0	0	6	7
71-25	7	S	.0300	52	103	Y	5	6	0	0	0	0	5	6
71-25	7	S	.0300	52	104	Y	7	6	0	0	0	0	7	6
71-25	7	S	.0300	53	105	Y	10	4	1	0	0	0	11	4
71-25	7	S	.0300	53	106	Y	4	9	0	0	0	0	4	9
71-25	7	S	.0300	54	107	Y	11	4	0	1	0	0	11	4
71-25	7	S	.0300	54	108	Y	7	7	1	0	0	0	7	7
71-25	7	S	.0300	55	109	Y	8	5	0	0	0	0	8	5
71-25	7	S	.0300	55	110	Y	4	6	1	0	0	0	4	9
71-25	7	S	.0300	56	111	Y	3	5	1	0	0	0	7	6
71-25	7	S	.0300	56	112	Y	8	4	0	0	0	0	8	4
71-25	7	S	.0300	57	113	Y	9	6	0	0	0	0	9	6
71-25	7	S	.0300	57	114	Y	3	8	0	0	0	0	3	8
71-25	7	S	.0300	58	115	Y	9	5	0	0	0	0	9	8
71-25	7	S	.0300	58	116	Y	5	8	0	0	0	0	6	8
71-25	7	S	.0300	59	117	Y	6	1	0	0	1	0	7	5
71-25	7	S	.0300	59	118	Y	4	1	0	0	0	0	6	8
71-25	7	S	.0300	60	119	Y	6	5	0	0	0	0	7	5
71-25	7	S	.0300	60	120	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
71-25	7	S	.9000	61	121	Y	6	6	0	0	2	1	6	6
71-25	7	S	.9000	61	122	Y	7	5	0	1	0	0	7	5
71-25	7	S	.9000	62	123	Y	10	3	1	0	0	0	10	4
71-25	7	S	.9000	62	124	Y	6	6	0	0	1	0	7	7
71-25	7	S	.9000	63	125	Y	1	4	0	2	0	0	2	6
71-25	7	S	.9000	63	126	Y	10	3	0	0	0	0	10	4
71-25	7	S	.9000	64	127	Y	2	3	0	1	0	0	6	3
71-25	7	S	.9000	64	128	Y	4	9	0	0	0	1	5	9
71-25	7	S	.9000	65	129	Y	7	5	0	0	0	0	7	5
71-25	7	S	.9000	65	130	Y	7	7	0	0	0	0	7	7
71-25	7	S	.9000	66	131	Y	0	1	0	0	0	0	5	5
71-25	7	S	.9000	66	132	Y	7	5	0	1	1	1	7	5
71-25	7	S	.9000	67	133	Y	7	3	0	0	0	0	7	3
71-25	7	S	.9000	67	134	Y	2	10	0	0	0	2	4	10
71-25	7	S	.9000	68	135	Y	8	5	0	1	0	0	8	5
71-25	7	S	.9000	68	136	Y	5	6	0	1	0	0	5	6
71-25	7	S	.9000	69	137	Y	7	4	0	0	0	0	7	6
71-25	7	S	.9000	69	138	Y	5	7	1	0	0	0	5	7
71-25	7	S	.9000	70	139	Y	0	2	0	0	0	0	5	7
71-25	7	S	.9000	70	140	Y	2	3	0	0	0	0	11	8
71-25	7	S	1.4000	71	141	Y	6	5	0	1	0	0	6	5
71-25	7	S	1.4000	71	142	Y	6	3	1	0	0	0	6	4
71-25	7	S	1.4000	72	143	Y	7	5	0	1	0	0	7	5
71-25	7	S	1.4000	72	144	Y	9	3	0	0	0	0	9	4
71-25	7	S	1.4000	73	145	Y	7	6	0	0	1	1	7	6
71-25	7	S	1.4000	73	146	Y	2	10	0	0	0	0	5	10
71-25	7	S	1.4000	74	147	Y	6	5	0	0	2	1	6	5
71-25	7	S	1.4000	74	148	Y	8	6	0	0	0	0	8	6
71-25	7	S	1.4000	75	149	Y	5	5	0	0	0	0	6	5
71-25	7	S	1.4000	75	150	Y	7	3	0	0	0	0	7	5
71-25	7	S	1.4000	76	151	Y	4	8	0	0	0	0	5	8
71-25	7	S	1.4000	76	152	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	7	S	1.4000	77	153	Y	4	6	0	0	1	2	9	8
71-25	7	S	1.4000	77	154	Y	5	6	0	0	0	4	5	7
71-25	7	S	1.4000	78	155	Y	5	7	0	0	0	0	5	7
71-25	7	S	1.4000	78	156	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	7	S	1.4000	79	157	Y	5	4	0	0	0	0	5	6
71-25	7	S	1.4000	79	158	Y	0	1	0	0	0	0	5	6
71-25	7	S	1.4000	80	159	Y	5	6	0	0	0	0	5	6
71-25	7	S	1.4000	80	160	Y	9	4	0	0	0	0	9	4

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM25	7	S	.0002	11	21	Y	8	6	0	0	0	1	8	6
TEM25	7	S	.0002	11	22	Y	2	1	1	0	0	0	6	7
TEM25	7	S	.0002	12	23	Y	6	6	2	2	0	0	6	6
TEM25	7	S	.0002	12	24	Y	6	7	0	2	0	0	6	7
TEM25	7	S	.0002	13	25	Y	5	10	0	0	0	0	5	10
TEM25	7	S	.0002	13	26	Y	4	8	0	1	0	0	6	8
TEM25	7	S	.0002	14	27	Y	8	8	1	0	0	0	8	8
TEM25	7	S	.0002	14	28	Y	8	4	0	1	0	0	8	5
TEM25	7	S	.0002	15	29	Y	6	7	0	0	0	0	6	7
TEM25	7	S	.0002	15	30	Y	6	5	0	0	3	2	6	5
TEM25	7	S	.0002	16	31	Y	5	8	0	0	2	0	5	8
TEM25	7	S	.0002	16	32	Y	5	8	0	0	1	0	6	8
TEM25	7	S	.0002	17	33	Y	10	3	2	1	0	0	10	3
TEM25	7	S	.0002	17	34	Y	4	8	0	0	0	0	4	8
TEM25	7	S	.0002	18	35	Y	4	7	0	0	0	0	4	8
TEM25	7	S	.0002	18	36	Y	7	5	0	0	0	0	7	6
TEM25	7	S	.0002	19	37	Y	7	6	0	0	3	1	7	6
TEM25	7	S	.0002	19	38	Y	0	3	0	0	0	0	5	9
TEM25	7	S	.0002	20	39	Y	9	6	0	1	1	0	9	6
TEM25	7	S	.0002	20	40	Y	7	4	1	0	0	0	8	4
CNTRL25	7	M	0.0000	1	1	Y	2	3	0	0	0	0	8	3
CNTRL25	7	M	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	7	M	0.0000	2	3	Y	6	5	0	0	0	0	6	6
CNTRL25	7	M	0.0000	2	4	Y	2	12	0	0	0	0	2	12
CNTRL25	7	M	0.0000	3	5	Y	5	+	0	0	0	0	7	4
CNTRL25	7	M	0.0000	3	6	Y	3	8	0	0	0	0	3	8
CNTRL25	7	M	0.0000	4	7	Y	7	4	0	0	0	0	7	4
CNTRL25	7	M	0.0000	4	8	Y	9	5	0	0	0	0	9	5
CNTRL25	7	M	0.0000	5	9	Y	7	3	0	0	0	1	8	7
CNTRL25	7	M	0.0000	5	10	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	7	M	0.0000	6	11	Y	6	4	0	0	0	0	6	4
CNTRL25	7	M	0.0000	6	12	Y	7	7	1	0	0	0	7	7
CNTRL25	7	M	0.0000	7	13	Y	5	3	0	0	1	0	5	7
CNTRL25	7	M	0.0000	7	14	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	7	M	0.0000	8	15	Y	5	4	1	0	0	0	5	4
CNTRL25	7	M	0.0000	8	16	Y	9	3	0	0	0	0	9	3
CNTRL25	7	M	0.0000	9	17	Y	2	10	0	0	1	0	2	10
CNTRL25	7	M	0.0000	9	18	Y	4	8	0	0	1	4	4	8
CNTRL25	7	M	0.0000	10	19	Y	6	7	0	0	0	0	6	7
CNTRL25	7	M	0.0000	10	20	Y	3	9	0	0	1	1	3	10

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-25	7	M	.0300	41	81	Y	8	7	0	0	1	1	8	7
71-25	7	M	.0300	41	82	Y	4	9	0	2	0	0	5	9
71-25	7	M	.0300	42	83	Y	9	6	0	0	0	1	9	6
71-25	7	M	.0300	42	84	Y	6	6	0	0	2	4	7	7
71-25	7	M	.0300	43	85	Y	5	7	0	0	0	0	6	7
71-25	7	M	.0300	43	86	Y	7	6	0	0	1	0	9	6
71-25	7	M	.0300	44	87	Y	6	4	0	1	0	0	6	4
71-25	7	M	.0300	44	88	Y	4	6	0	0	0	0	4	6
71-25	7	M	.0300	45	89	Y	5	10	0	0	0	0	5	10
71-25	7	M	.0300	45	90	Y	7	6	0	0	0	0	7	6
71-25	7	M	.0300	46	91	Y	6	7	0	0	0	0	6	7
71-25	7	M	.0300	46	92	Y	8	3	0	0	0	0	9	4
71-25	7	M	.0300	47	93	Y	5	7	0	0	0	0	5	7
71-25	7	M	.0300	47	94	Y	8	4	0	0	1	0	8	4
71-25	7	M	.0300	48	95	Y	6	7	0	0	0	0	6	7
71-25	7	M	.0300	48	96	Y	1	1	1	0	0	0	6	1
71-25	7	M	.0300	49	97	Y	10	5	0	0	0	0	10	5
71-25	7	M	.0300	49	98	Y	6	8	0	0	0	0	6	8
71-25	7	M	.0300	50	99	Y	10	2	0	0	0	0	10	2
71-25	7	M	.0300	50	100	Y	8	7	0	0	0	0	10	8
71-25	7	M	.2500	51	101	Y	6	7	0	0	0	0	6	8
71-25	7	M	.2500	51	102	Y	6	9	0	0	0	0	6	10
71-25	7	M	.2500	52	103	Y	9	2	1	0	3	0	9	2
71-25	7	M	.2500	52	104	Y	8	5	0	0	0	0	8	6
71-25	7	M	.2500	53	105	Y	6	7	0	0	0	1	6	7
71-25	7	M	.2500	53	106	Y	10	4	0	0	0	0	10	4
71-25	7	M	.2500	54	107	Y	5	6	0	0	0	0	5	6
71-25	7	M	.2500	54	108	Y	4	7	0	1	4	0	5	8
71-25	7	M	.2500	55	109	Y	4	5	0	0	0	0	5	5
71-25	7	M	.2500	55	110	Y	3	2	0	0	0	0	7	7
71-25	7	M	.2500	56	111	Y	2	2	0	0	0	0	6	6
71-25	7	M	.2500	56	112	Y	5	6	0	1	1	0	5	7
71-25	7	M	.2500	57	113	Y	6	4	0	0	0	0	6	4
71-25	7	M	.2500	57	114	Y	4	8	0	0	0	0	6	8
71-25	7	M	.2500	58	115	Y	9	2	0	0	0	0	9	2
71-25	7	M	.2500	58	116	Y	5	7	0	1	0	0	5	7
71-25	7	M	.2500	59	117	Y	7	4	0	0	0	0	7	4
71-25	7	M	.2500	59	118	Y	8	6	0	0	0	0	8	6
71-25	7	M	.2500	60	119	Y	8	3	0	0	0	0	8	3
71-25	7	M	.2500	60	120	Y	5	8	0	1	0	0	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
71-25	7	M	.5000	61	121	Y	5	6	0	0	0	0	5	6
71-25	7	M	.5000	61	122	Y	10	6	0	0	1	0	10	6
71-25	7	M	.5000	62	123	Y	0	6	0	0	0	0	6	7
71-25	7	M	.5000	62	124	Y	5	7	0	0	0	0	5	7
71-25	7	M	.5000	63	125	Y	5	7	0	0	1	0	5	8
71-25	7	M	.5000	63	126	Y	7	4	0	0	0	0	7	5
71-25	7	M	.5000	64	127	Y	6	8	0	0	2	2	6	8
71-25	7	M	.5000	64	128	Y	8	7	0	0	0	0	9	7
71-25	7	M	.5000	65	129	Y	7	6	1	0	0	0	8	6
71-25	7	M	.5000	65	130	Y	4	9	0	0	0	0	4	10
71-25	7	M	.5000	66	131	Y	10	2	1	0	0	0	10	2
71-25	7	M	.5000	66	132	Y	3	9	0	0	0	0	7	9
71-25	7	M	.5000	67	133	Y	7	5	0	0	0	0	7	5
71-25	7	M	.5000	67	134	Y	3	0	2	0	0	0	6	7
71-25	7	M	.5000	68	135	Y	2	0	1	0	0	0	7	3
71-25	7	M	.5000	68	136	Y	1	6	0	0	0	0	5	7
71-25	7	M	.5000	69	137	Y	5	8	0	0	0	0	6	8
71-25	7	M	.5000	69	138	Y	6	6	0	0	1	0	6	7
71-25	7	M	.5000	70	139	Y	9	4	0	0	1	0	9	4
71-25	7	M	.5000	70	140	Y	5	6	0	1	2	2	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
CNTRL25	8	S	0.0000	1	1	Y	5	7	0	0	1	0	5	7
CNTRL25	8	S	0.0000	1	2	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	8	S	0.0000	2	3	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	8	S	0.0000	2	4	Y	10	4	0	0	1	0	10	5
CNTRL25	8	S	0.0000	3	5	Y	2	5	0	0	0	0	10	5
CNTRL25	8	S	0.0000	3	6	Y	6	5	0	0	0	0	8	5
CNTRL25	8	S	0.0000	4	7	Y	1	0	0	0	0	0	5	7
CNTRL25	8	S	0.0000	4	8	Y	5	7	1	0	0	2	5	9
CNTRL25	8	S	0.0000	5	9	Y	7	5	1	0	0	0	9	5
CNTRL25	8	S	0.0000	5	10	Y	5	7	0	0	0	1	5	7
CNTRL25	8	S	0.0000	6	11	Y	6	0	0	1	0	0	6	8
CNTRL25	8	S	0.0000	6	12	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	8	S	0.0000	7	13	Y	4	5	1	0	0	0	7	7
CNTRL25	8	S	0.0000	7	14	Y	3	9	0	0	0	0	3	9
CNTRL25	8	S	0.0000	8	15	Y	13	2	1	0	0	0	13	2
CNTRL25	8	S	0.0000	8	16	N	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL25	8	S	0.0000	9	17	Y	1	2	0	0	0	0	4	8
CNTRL25	8	S	0.0000	9	18	Y	5	9	0	0	0	0	5	9
CNTRL25	8	S	0.0000	10	19	Y	5	7	0	0	3	1	5	8
CNTRL25	8	S	0.0000	10	20	Y	5	5	0	0	0	0	7	5
71-25	8	S	.0300	51	101	Y	6	8	0	0	0	0	6	8
71-25	8	S	.0300	51	102	Y	5	8	0	0	0	0	5	8
71-25	8	S	.0300	52	103	Y	5	9	0	1	1	0	5	9
71-25	8	S	.0300	52	104	Y	4	8	0	0	0	0	4	8
71-25	8	S	.0300	53	105	Y	6	3	0	0	0	0	8	3
71-25	8	S	.0300	53	106	Y	1	3	0	0	0	1	6	8
71-25	8	S	.0300	54	107	Y	4	8	0	0	2	0	4	8
71-25	8	S	.0300	54	108	Y	6	5	0	0	0	0	7	5
71-25	8	S	.0300	55	109	Y	3	5	0	0	0	0	3	5
71-25	8	S	.0300	55	110	Y	5	10	1	0	0	0	6	10
71-25	8	S	.0300	56	111	Y	5	9	0	0	0	0	6	9
71-25	8	S	.0300	56	112	Y	4	8	0	0	0	1	4	8
71-25	8	S	.0300	57	113	Y	7	5	0	0	0	0	8	6
71-25	8	S	.0300	57	114	Y	10	4	0	1	1	0	11	4
71-25	8	S	.0300	58	115	Y	6	4	1	0	0	1	7	4
71-25	8	S	.0300	58	116	Y	7	6	0	0	0	0	7	6
71-25	8	S	.0300	59	117	Y	7	8	1	0	0	0	9	8
71-25	8	S	.0300	59	118	Y	7	6	0	1	0	0	7	8
71-25	8	S	.0300	60	119	Y	8	4	0	1	0	0	8	4
71-25	8	S	.0300	60	120	Y	8	4	0	0	2	0	8	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
71-25	8	S	.9000	61	121	Y	8	5	0	0	0	0	8	5
71-25	8	S	.9000	61	122	Y	7	5	0	0	0	1	7	5
71-25	8	S	.9000	62	123	Y	8	7	0	0	0	1	8	7
71-25	8	S	.9000	62	124	Y	8	4	0	0	0	0	8	4
71-25	8	S	.9000	63	125	Y	7	6	0	0	0	0	7	6
71-25	8	S	.9000	63	126	Y	4	5	0	0	0	0	4	6
71-25	8	S	.9000	64	127	Y	6	9	0	0	1	1	6	9
71-25	8	S	.9000	64	128	Y	7	4	0	0	3	0	7	5
71-25	8	S	.9000	65	129	Y	9	3	0	0	0	1	9	3
71-25	8	S	.9000	65	130	Y	6	7	0	0	0	0	6	7
71-25	8	S	.9000	66	131	Y	6	5	0	1	3	1	6	6
71-25	8	S	.9000	66	132	Y	8	5	0	0	0	0	8	5
71-25	8	S	.9000	67	133	Y	5	8	0	0	0	0	5	8
71-25	8	S	.9000	67	134	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	8	S	.9000	68	135	Y	7	5	0	0	0	0	7	5
71-25	8	S	.9000	68	136	Y	4	7	0	0	0	0	4	7
71-25	8	S	.9000	69	137	Y	9	5	1	0	0	0	9	6
71-25	8	S	.9000	69	138	N	-0	-0	-0	-0	-0	-0	-0	-0
71-25	8	S	.9000	70	139	Y	4	7	0	0	0	0	4	7
71-25	8	S	.9000	70	140	Y	4	7	0	0	0	0	4	8
71-25	8	S	1.4000	71	141	Y	6	8	0	0	0	2	6	8
71-25	8	S	1.4000	71	142	Y	4	6	0	1	0	0	4	6
71-25	8	S	1.4000	72	143	Y	1	3	0	0	1	0	3	4
71-25	8	S	1.4000	72	144	Y	9	2	1	0	0	0	10	2
71-25	8	S	1.4000	73	145	Y	8	5	0	0	0	0	8	5
71-25	8	S	1.4000	73	146	Y	6	6	0	0	0	0	6	6
71-25	8	S	1.4000	74	147	Y	6	6	0	0	0	0	6	6
71-25	8	S	1.4000	74	148	Y	6	4	0	0	1	0	10	7
71-25	8	S	1.4000	75	149	Y	5	7	0	0	0	0	7	7
71-25	8	S	1.4000	75	150	Y	5	8	0	0	0	0	5	8
71-25	8	S	1.4000	76	151	Y	6	6	0	0	0	1	8	6
71-25	8	S	1.4000	76	152	Y	5	5	0	0	0	0	5	6
71-25	8	S	1.4000	77	153	Y	2	6	0	0	0	1	8	6
71-25	8	S	1.4000	77	154	Y	0	4	0	0	0	1	9	5
71-25	8	S	1.4000	78	155	Y	5	7	1	1	0	0	6	7
71-25	8	S	1.4000	78	156	Y	7	6	0	0	1	1	7	6
71-25	8	S	1.4000	79	157	Y	1	6	0	0	0	0	10	7
71-25	8	S	1.4000	79	158	Y	5	7	0	0	0	0	5	7
71-25	8	S	1.4000	80	159	Y	9	6	0	1	0	0	9	6
71-25	8	S	1.4000	80	160	Y	8	4	0	0	1	0	8	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
TEM25	8	S	.0002	11	21	Y	7	5	0	0	0	0	7	5
TEM25	8	S	.0002	11	22	Y	6	9	1	1	0	0	7	9
TEM25	8	S	.0002	12	23	Y	5	8	0	1	3	1	5	8
TEM25	8	S	.0002	12	24	Y	7	7	0	0	1	1	9	7
TEM25	8	S	.0002	13	25	Y	5	9	0	0	0	0	7	9
TEM25	8	S	.0002	13	26	Y	3	9	0	0	0	2	3	9
TEM25	8	S	.0002	14	27	Y	6	7	1	0	0	0	6	7
TEM25	8	S	.0002	14	28	Y	7	5	0	0	1	0	7	5
TEM25	8	S	.0002	15	29	Y	8	5	0	0	1	0	8	6
TEM25	8	S	.0002	15	30	Y	5	8	0	0	0	0	7	8
TEM25	8	S	.0002	16	31	Y	1	0	0	0	0	0	3	9
TEM25	8	S	.0002	16	32	Y	8	2	0	0	0	0	9	2
TEM25	8	S	.0002	17	33	Y	3	9	0	0	0	1	3	9
TEM25	8	S	.0002	17	34	Y	6	7	0	0	0	0	6	7
TEM25	8	S	.0002	18	35	Y	8	3	1	0	0	0	8	3
TEM25	8	S	.0002	18	36	Y	4	8	0	0	0	0	5	8
TEM25	8	S	.0002	19	37	Y	3	6	0	0	1	2	7	6
TEM25	8	S	.0002	19	38	Y	6	0	0	0	0	0	7	5
TEM25	8	S	.0002	20	39	Y	6	5	0	1	0	0	6	5
TEM25	8	S	.0002	20	40	Y	3	7	0	0	0	1	3	9

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

SINGLE TREATMENT

WEEK	VEHICLE CONTROL				71-25 .03 G/KG				71-25 .9 G/KG				71-25 1.4 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
1	12	20	.60	0.00	20	20	1.00	7.66	20	20	1.00	7.66	10	20	.50	.10	20	20	1.00	7.66
2	14	20	.70	0.00	20	20	1.00	4.90	20	20	1.00	4.90	20	20	1.00	4.90	20	20	1.00	4.90
3	16	20	.80	0.00	20	20	1.00	2.50	19	20	.95	.91	20	20	1.00	2.50	20	20	1.00	2.50
4	17	20	.85	0.00	20	20	1.00	1.44	20	20	1.00	1.44	20	20	1.00	1.44	16	20	.80	0.00
5	17	20	.85	0.00	19	20	.95	.28	20	20	1.00	1.44	20	20	1.00	1.44	20	20	1.00	1.44
6	17	20	.85	0.00	20	20	1.00	1.44	20	20	1.00	1.44	18	20	.90	0.00	17	20	.85	.20
7	17	20	.85	0.00	20	20	1.00	1.44	20	20	1.00	1.44	18	20	.90	0.00	20	20	1.00	1.44
8	16	20	.80	0.00	20	20	1.00	2.50	18	20	.90	.20	20	20	1.00	2.50	20	20	1.00	2.50

MULTIPLE TREATMENT

					71-25 .03 G/KG				71-25 .25 G/KG				71-25 .5 G/KG			
1	12	20	.60	0.00	20	20	1.00	7.66	17	20	.85	2.01	19	20	.95	5.16
2	14	20	.70	0.00	20	20	1.00	4.90	20	20	1.00	4.90	20	20	1.00	4.90
3	16	20	.80	0.00	20	20	1.00	2.50	19	20	.95	.91	20	20	1.00	2.50
4	17	20	.85	0.00	20	20	1.00	1.44	20	20	1.00	1.44	20	20	1.00	1.44
5	17	20	.85	0.00	20	20	1.00	1.44	18	20	.90	0.00	17	20	.85	.20
6	17	20	.85	0.00	20	20	1.00	1.44	20	20	1.00	1.44	20	20	1.00	1.44
7	17	20	.85	0.00	20	20	1.00	1.44	20	20	1.00	1.44	20	20	1.00	1.44

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

SINGLE TREATMENT

WEEK	.03 G/KG N PRG	.03 G/KG N MTD	.9 G/KG N PRG	.9 G/KG N MTD	1.4 G/KG N PRG	1.4 G/KG N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
1	20	20	20	20	10	20	24.00	14.55	9.45
2	20	20	20	20	20	20	0.00	0.00	0.00
3	20	20	19	20	20	20	2.03	.05	1.99
4	20	20	20	20	20	20	0.00	0.00	0.00
5	19	20	20	20	20	20	2.03	1.77	.26
6	20	20	20	20	18	20	4.14	2.51	1.63
7	20	20	20	20	18	20	4.14	2.51	1.63
8	20	20	18	20	20	20	4.14	.10	4.04

MULTIPLE TREATMENT

	.03 G/KG		.25 G/KG		.5 G/KG				
1	20	20	17	20	19	20	3.75	.32	3.43
2	20	20	20	20	20	20	0.00	0.00	0.00
3	20	20	19	20	20	20	2.03	.00	2.03
4	20	20	20	20	20	20	0.00	0.00	0.00
5	20	20	18	20	17	20	3.05	2.90	.15
6	20	20	20	20	20	20	0.00	0.00	0.00
7	20	20	20	20	20	20	0.00	0.00	0.00

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

SINGLE TREATMENT

WEEK	.03 G/KG N PRG	.03 G/KG N MTD	.9 G/KG N PRG	.9 G/KG N MTD	1.4 G/KG N PRG	1.4 G/KG N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
1	20	20	20	20	10	20	24.00	8.30	15.70
2	20	20	20	20	20	20	0.00	0.00	0.00
3	20	20	19	20	20	20	2.03	.34	1.70
4	20	20	20	20	20	20	0.00	0.00	0.00
5	19	20	20	20	20	20	2.03	2.01	.02
6	20	20	20	20	18	20	4.14	1.43	2.71
7	20	20	20	20	18	20	4.14	1.43	2.71
8	20	20	18	20	20	20	4.14	.58	3.46

MULTIPLE TREATMENT

	.03 G/KG		.25 G/KG		.5 G/KG				
1	20	20	17	20	19	20	3.75	1.26	2.49
2	20	20	20	20	20	20	0.00	0.00	0.00
3	20	20	19	20	20	20	2.03	.16	1.87
4	20	20	20	20	20	20	0.00	0.00	0.00
5	20	20	18	20	17	20	3.05	3.03	.03
6	20	20	20	20	20	20	0.00	0.00	0.00
7	20	20	20	20	20	20	0.00	0.00	0.00

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

SINGLE TREATMENT

WEEK	CONTROL N PRG	CONTROL N MTD	.03 G/KG N PRG	.03 G/KG N MTD	.9 G/KG N PRG	.9 G/KG N MTD	1.4 G/KG N PRG	1.4 G/KG N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
1	12	20	20	20	20	20	10	20	23.80	2.51	21.29
2	14	20	20	20	20	20	20	20	19.46	6.23	13.23
3	16	20	20	20	19	20	20	20	9.17	2.44	6.73
4	17	20	20	20	20	20	20	20	9.35	2.99	6.36
5	17	20	19	20	20	20	20	20	6.32	3.94	2.38
6	17	20	20	20	20	20	18	20	5.75	.01	5.75
7	17	20	20	20	20	20	18	20	5.75	.01	5.75
8	16	20	20	20	18	20	20	20	7.93	1.46	6.46

MULTIPLE TREATMENT

WEEK	CONTROL N PRG	CONTROL N MTD	.03 G/KG N PRG	.03 G/KG N MTD	.25 G/KG N PRG	.25 G/KG N MTD	.5 G/KG N PRG	.5 G/KG N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
1	12	20	20	20	17	20	19	20	14.90	2.89	12.01
2	14	20	20	20	20	20	20	20	19.46	6.12	13.34
3	16	20	20	20	19	20	20	20	9.17	2.78	6.39
4	17	20	20	20	20	20	20	20	9.35	2.94	6.41
5	17	20	20	20	18	20	17	20	3.33	.67	2.67
6	17	20	20	20	20	20	20	20	9.35	2.94	6.41
7	17	20	20	20	20	20	20	20	9.35	2.94	6.41

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

SINGLE TREATMENT

WEEK	CONTROL			71-25 .03 G/KG					71-25 .9 G/KG					71-25 1.4 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
1	12	10.00	4.20	20	11.80	1.44	30	1.768	20	9.70	3.28	30	.226	10	10.80	1.75	20	.561	20	10.05	3.66	30	.035
2	14	11.64	1.74	20	10.90	2.22	32	1.046	20	12.30	1.78	32	1.070	20	12.20	2.24	32	.780	20	7.65	3.30	32	4.135
3	16	11.88	1.86	20	12.35	1.93	34	.747	19	13.00	1.89	33	1.770	20	10.45	2.95	34	1.683	20	8.40	2.84	34	4.224
4	17	11.06	2.63	20	11.30	3.45	35	.236	20	13.10	1.62	35	2.887	20	11.40	1.47	35	.497	16	4.81	2.10	31	7.497
5	17	10.41	3.52	19	11.53	1.87	34	1.205	20	11.10	3.71	35	.576	20	11.20	2.04	35	.849	20	10.20	3.97	35	.170
6	17	10.53	3.97	20	11.95	2.14	35	1.383	20	11.25	1.21	35	.772	18	11.89	1.60	33	1.342	17	10.59	2.74	32	.050
7	17	11.00	2.37	20	11.80	2.65	35	.960	20	10.00	3.99	35	.906	18	10.72	2.78	33	.317	20	11.85	3.31	35	.882
8	16	10.12	3.98	20	11.95	2.63	34	1.652	18	12.28	1.53	32	2.128	20	10.80	2.98	34	.582	20	11.30	3.15	34	.990

MULTIPLE TREATMENT

				71-25 .03 G/KG					71-25 .25 G/KG					71-25 .5 G/KG				
1	12	10.00	4.20	20	11.90	1.83	30	1.775	17	11.76	2.02	27	1.511	19	12.26	1.97	29	2.035
2	14	11.64	1.74	20	11.25	1.68	32	.661	20	10.95	3.59	32	.667	20	11.90	1.52	32	.458
3	16	11.88	1.86	20	12.40	2.06	34	.793	19	12.47	2.78	33	.734	20	10.40	2.93	34	1.751
4	17	11.06	2.63	20	12.35	3.45	35	1.260	20	11.50	1.93	35	.587	20	11.65	2.23	35	.740
5	17	10.41	3.52	20	12.55	2.24	35	2.240	18	11.61	2.45	33	1.175	17	12.41	2.72	32	1.855
6	17	10.53	3.97	20	12.15	3.03	35	1.407	20	10.95	2.76	35	.378	20	11.40	2.89	35	.770
7	17	11.00	2.37	20	12.35	2.91	35	1.530	20	11.20	2.73	35	.236	20	11.00	3.68	35	0.000

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	50	.65	.55	10.76	2.54	-1.229	11.561	-1.898	48	6.1068	.2297	.4193	.3004	.1221
	LOG DOSE	50	-1.38	1.76	10.76	2.54	-.463	10.122	-2.357	48	5.8843	.2254	.0386	.1909	.1177
2	DOSE	60	.78	.57	11.80	2.15	1.023	11.006	2.145	58	4.3706	.1772	.2273	.2109	.0728
	LOG DOSE	60	-1.09	1.73	11.80	2.15	.366	12.200	2.346	58	4.3085	.1759	.0244	.1008	.0718
3	DOSE	59	.77	.58	11.92	2.52	-1.157	12.811	-2.067	57	6.0155	.2058	.3131	.2898	.1020
	LOG DOSE	59	-1.11	1.74	11.92	2.52	-.242	11.647	-1.279	57	6.2859	.2104	.0357	.1505	.1065
4	DOSE	60	.78	.57	11.93	2.46	.296	11.704	.523	58	6.1388	.2076	.3193	.2949	.1023
	LOG DOSE	60	-1.09	1.73	11.93	2.46	.217	12.170	1.175	58	6.0243	.2057	.0341	.1410	.1004
5	DOSE	59	.79	.57	11.27	2.64	-.264	11.480	-.428	57	7.0940	.2363	.3802	.3571	.1202
	LOG DOSE	59	-1.05	1.72	11.27	2.64	-.100	11.166	-.492	57	7.0868	.2362	.0415	.1659	.1201
6	DOSE	58	.76	.57	11.69	1.70	-.149	11.802	-.373	56	2.9287	.1464	.1590	.1412	.0505
	LOG DOSE	58	-1.14	1.74	11.69	1.70	-.093	11.583	-.719	56	2.9091	.1459	.0168	.0721	.0502
7	DOSE	58	.76	.57	10.84	3.24	-.962	11.571	-1.280	56	10.4027	.2974	.5647	.5014	.1794
	LOG DOSE	58	-1.14	1.74	10.84	3.24	-.382	10.409	-1.567	56	10.2574	.2953	.0594	.2542	.1769
8	DOSE	58	.77	.58	11.66	2.52	-.713	12.206	-1.243	56	6.3098	.2155	.3287	.3049	.1088
	LOG DOSE	58	-1.13	1.75	11.66	2.52	-.158	11.477	-.825	56	6.4061	.2172	.0366	.1569	.1105
							MULTIPLE TREATMENTS								
1	DOSE	56	.26	.20	11.98	1.91	.788	11.786	.601	54	3.6971	.1605	1.7170	.1788	.0660
	LOG DOSE	56	-1.91	1.23	11.98	1.91	.086	12.146	.407	54	3.7105	.1608	.0443	.2276	.0663
2	DOSE	60	.26	.19	11.37	2.44	1.438	10.993	.874	58	5.9890	.2153	2.7075	.2828	.0998
	LOG DOSE	60	-1.86	1.21	11.37	2.44	.144	11.634	.542	58	6.0373	.2162	.0702	.3442	.1006
3	DOSE	59	.26	.20	11.75	2.75	-4.344	12.876	-2.453	57	6.9378	.2242	3.1366	.3299	.1176
	LOG DOSE	59	-1.87	1.22	11.75	2.75	-.541	10.733	-1.864	57	7.2293	.2289	.0843	.4175	.1225
4	DOSE	60	.26	.19	11.83	2.60	-1.442	12.208	-.821	58	6.8230	.2207	3.0845	.3222	.1137
	LOG DOSE	60	-1.86	1.21	11.83	2.60	-.285	11.304	-1.013	58	6.7824	.2201	.0789	.3867	.1130
5	DOSE	55	.25	.19	12.20	2.45	-.315	12.278	-.182	53	6.1245	.2029	3.0169	.2958	.1114
	LOG DOSE	55	-1.94	1.22	12.20	2.45	-.152	11.904	-.556	53	6.0928	.2023	.0752	.3947	.1108
6	DOSE	60	.26	.19	11.50	2.89	-1.519	11.895	-.779	58	8.4120	.2522	3.8029	.3973	.1402
	LOG DOSE	60	-1.86	1.21	11.50	2.89	-.337	10.873	-1.082	58	8.3319	.2510	.0969	.4750	.1389
7	DOSE	60	.26	.19	11.52	3.14	-2.825	12.251	-1.348	58	9.7125	.2706	4.3908	.4587	.1619
	LOG DOSE	60	-1.86	1.21	11.52	3.14	-.495	10.596	-1.475	58	9.6546	.2698	.1123	.5504	.1609

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

WEEK	X	N	XBAR	SD X	UBAR	SD U	B	A	TB	DF	VARU.X	CV U	VARB	VARA	VARUBAR
							SINGLE TREATMENT								
1	DOSE	62	.53	.55	10.61	2.90	-.701	10.982	-1.044	60	8.4253	.2735	.4511	.2606	.1359
2	DOSE	74	.63	.60	11.77	2.07	.807	11.262	2.032	72	4.1126	.1723	.1577	.1181	.0556
3	DOSE	75	.61	.60	11.91	2.38	-.816	12.404	-1.797	73	5.5144	.1972	.2061	.1500	.0735
4	DOSE	77	.61	.60	11.74	2.51	.540	11.414	1.123	75	6.2784	.2134	.2307	.1660	.0815
5	DOSE	76	.61	.60	11.08	2.86	.150	10.987	.270	74	8.2828	.2598	.3081	.2247	.1090
6	DOSE	75	.58	.59	11.43	2.42	.339	11.229	.710	73	5.9092	.2127	.2280	.1565	.0788
7	DOSE	75	.58	.59	10.88	3.05	-.743	11.314	-1.244	73	9.2548	.2796	.3571	.2452	.1234
8	DOSE	74	.61	.60	11.32	2.94	.043	11.298	.075	72	8.7523	.2612	.3281	.2385	.1183
							MULTIPLE TREATMENTS								
1	DOSE	68	.21	.20	11.63	2.54	2.397	11.127	1.595	66	6.3290	.2163	2.2586	.1937	.0931
2	DOSE	74	.21	.20	11.42	2.32	.794	11.252	.589	72	5.4186	.2039	1.8187	.1540	.0732
3	DOSE	75	.20	.20	11.77	2.57	-3.274	12.443	-2.292	73	6.2508	.2124	2.0402	.1688	.0833
4	DOSE	77	.20	.20	11.66	2.61	-.158	11.696	-.113	75	6.9218	.2256	2.2275	.1813	.0899
5	DOSE	72	.19	.20	11.78	2.82	1.807	11.437	1.078	70	7.9318	.2391	2.8086	.2104	.1102
6	DOSE	77	.20	.20	11.29	3.16	-.006	11.287	-.003	75	10.1029	.2816	3.2511	.2647	.1312
7	DOSE	77	.20	.20	11.40	2.98	-1.439	11.694	-.850	75	8.9078	.2617	2.8666	.2333	.1157

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

SINGLE TREATMENT

WEEK	CONTROL			71-25 .03 G/KG					71-25 .9 G/KG					71-25 1.4 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
1	12	.77	.67	20	.61	.26	30	.968	20	.68	.65	30	.399	10	.54	.29	20	1.015	20	.94	.66	30	.678
2	14	.57	.39	20	.63	.37	32	.519	20	.43	.36	32	1.043	20	.47	.35	32	.717	20	1.22	.67	32	3.255
3	16	.58	.34	20	.56	.33	34	.230	19	.51	.26	33	.767	20	.72	.56	34	.834	20	1.21	.43	34	4.782
4	17	.84	.45	20	.72	.60	35	.683	20	.56	.36	35	2.154	20	.55	.33	35	2.316	16	1.80	.42	31	6.374
5	17	.74	.58	19	.46	.32	34	1.808	20	.85	.60	35	.560	20	.62	.37	35	.743	20	.76	.60	35	.086
6	17	.84	.69	20	.56	.35	35	1.609	20	.60	.29	35	1.419	18	.55	.31	33	1.626	17	.73	.49	32	.656
7	17	.56	.45	20	.59	.48	35	.174	20	.82	.70	35	1.321	18	.69	.55	33	.733	20	.58	.56	35	.106
9	16	.95	.69	20	.57	.41	34	2.070	18	.39	.19	32	3.324	20	.72	.57	34	1.081	20	.68	.55	34	1.303

MULTIPLE TREATMENT

				71-25 .03 G/KG					71-25 .25 G/KG					71-25 .5 G/KG				
1	12	.77	.67	20	.49	.34	30	1.626	17	.46	.34	27	1.640	19	.52	.34	29	1.389
2	14	.57	.39	20	.61	.32	32	.397	20	.71	.56	32	.806	20	.61	.35	32	.341
3	16	.58	.34	20	.67	.33	34	.766	19	.54	.44	33	.335	20	.75	.56	34	1.032
4	17	.84	.45	20	.54	.45	35	2.019	20	.56	.36	35	2.125	20	.53	.41	35	2.201
5	17	.74	.58	20	.57	.43	35	.984	18	.60	.46	33	.803	17	.58	.44	32	.906
6	17	.84	.69	20	.69	.50	35	.776	20	.80	.54	35	.215	20	.59	.46	35	1.331
7	17	.56	.45	20	.51	.42	35	.371	20	.61	.48	35	.313	20	.75	.61	35	1.079

T-TEST OF THE (TRANSFORMED) NUMBER OF DEAD IMPLANTS.

SINGLE TREATMENT

WEEK	CONTROL			71-25 .03 G/KG					71-25 .9 G/KG					71-25 1.4 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
1	12	.41	.23	20	.36	.19	30	.571	20	.57	.35	30	1.481	10	.37	.16	20	.443	20	.90	.48	30	3.365
2	14	.52	.27	20	.49	.24	32	.428	20	.57	.39	32	.360	20	.63	.33	32	.981	20	1.70	.61	32	6.772
3	16	.43	.22	20	.48	.27	34	.557	19	.47	.27	33	.443	20	.45	.31	34	.160	20	1.55	.57	34	7.383
4	17	.40	.28	20	.47	.22	35	.840	20	.45	.22	35	.538	20	.54	.31	35	1.386	16	1.28	.49	31	6.400
5	17	.53	.36	19	.52	.41	34	.012	20	.57	.37	35	.401	20	.61	.41	35	.641	20	1.08	.50	35	3.829
6	17	.42	.24	20	.46	.29	35	.503	20	.45	.26	35	.331	18	.44	.21	33	.198	17	.62	.33	32	1.984
7	17	.50	.32	20	.38	.18	35	1.418	20	.59	.30	35	.845	18	.52	.34	33	.179	20	.68	.36	35	1.603
8	16	.54	.29	20	.53	.26	34	.041	18	.50	.33	32	.361	20	.54	.24	34	.041	20	.59	.31	34	.516

MULTIPLE TREATMENT

				71-25 .03 G/KG					71-25 .25 G/KG					71-25 .5 G/KG				
1	12	.41	.23	20	.42	.33	30	.155	17	.43	.22	27	.303	19	.50	.32	29	.860
2	14	.52	.27	20	.41	.25	32	1.305	20	.53	.49	32	.066	20	.49	.37	32	.256
3	16	.43	.22	20	.55	.35	34	1.180	19	.54	.34	33	1.091	20	.69	.46	34	2.022
4	17	.40	.28	20	.80	.41	35	3.449	20	.47	.30	35	.762	20	.47	.29	35	.715
5	17	.53	.36	20	.43	.26	35	.978	18	.54	.62	33	.066	17	.41	.26	32	1.047
6	17	.42	.24	20	.72	.38	35	2.827	20	.45	.28	35	.344	20	.53	.32	35	1.128
7	17	.50	.32	20	.49	.32	35	.083	20	.47	.35	35	.268	20	.54	.34	35	.377

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

SINGLE TREATMENT

WEEK	VEHICLE CONTROL				71-25 .03 G/KG				71-25 .9 G/KG				71-25 1.4 G/KG				TEM .2 MG/KG			
	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ
1	3	12	.25	0.00	4	20	.20	.01	9	20	.45	.57	2	10	.20	.05	15	20	.75	5.72
2	7	14	.50	0.00	9	20	.45	.00	9	20	.45	.00	13	20	.65	.27	19	20	.95	6.94
3	6	16	.38	0.00	8	20	.40	.04	8	19	.42	.00	5	20	.25	.20	18	20	.90	8.79
4	4	17	.24	0.00	10	20	.50	1.73	9	20	.45	1.04	10	20	.50	1.73	15	16	.94	13.89
5	6	17	.35	0.00	6	19	.32	.01	11	20	.55	.75	10	20	.50	.32	18	20	.90	9.79
6	5	17	.29	0.00	7	20	.35	.00	7	20	.35	.00	7	18	.39	.05	10	17	.59	1.91
7	7	17	.41	0.00	6	20	.30	.13	12	20	.60	.66	7	18	.39	.04	14	20	.70	2.05
8	9	16	.56	0.00	11	20	.55	.07	7	18	.39	.45	12	20	.60	.01	12	20	.60	.01

MULTIPLE TREATMENT

					71-25 .03 G/KG				71-25 .25 G/KG				71-25 .5 G/KG			
1	3	12	.25	0.00	4	20	.20	.01	6	17	.35	.03	8	19	.42	.34
2	7	14	.50	0.00	5	20	.25	1.29	6	20	.30	.68	7	20	.35	.27
3	6	16	.38	0.00	10	20	.50	.17	10	19	.53	.31	12	20	.60	1.01
4	4	17	.24	0.00	14	20	.70	6.19	7	20	.35	.16	7	20	.35	.16
5	6	17	.35	0.00	7	20	.35	.11	6	18	.33	.05	5	17	.29	0.00
6	5	17	.29	0.00	14	20	.70	4.54	7	20	.35	.00	9	20	.45	.40
7	7	17	.41	0.00	8	20	.40	.07	6	20	.30	.13	10	20	.50	.04

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

SINGLE TREATMENT

WEEK	.03 G/KG N WDI	.03 G/KG N PRG	.9 G/KG N WDI	.9 G/KG N PRG	1.4 G/KG N WDI	1.4 G/KG N PRG	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
1	4	20	9	20	2	10	3.57	.50	3.07
2	9	20	9	20	13	20	2.14	1.29	.84
3	8	20	8	19	5	20	1.50	.76	.74
4	10	20	9	20	10	20	.13	.00	.13
5	6	19	11	20	10	20	2.37	1.65	.72
6	7	20	7	20	7	18	.08	.05	.03
7	6	20	12	20	7	18	3.86	.80	3.06
8	11	20	7	18	12	20	1.82	.01	1.81

MULTIPLE TREATMENT

	.03 G/KG N WDI	.03 G/KG N PRG	.25 G/KG N WDI	.25 G/KG N PRG	.5 G/KG N WDI	.5 G/KG N PRG	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
1	4	20	6	17	8	19	2.29	2.16	.13
2	5	20	6	20	7	20	.48	.48	.00
3	10	20	10	19	12	20	.43	.41	.02
4	14	20	7	20	7	20	6.56	4.71	1.85
5	7	20	6	18	5	17	.13	.13	.00
6	14	20	7	20	9	20	5.20	2.31	2.89
7	8	20	6	20	10	20	1.67	.47	1.20

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

SINGLE TREATMENT

WEEK	.03 G/KG N WDI	.03 G/KG N PRG	.9 G/KG N WDI	.9 G/KG N PRG	1.4 G/KG N WDI	1.4 G/KG N PRG	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
1	4	20	9	20	2	10	3.57	1.26	2.31
2	9	20	9	20	13	20	2.14	.74	1.40
3	8	20	8	19	5	20	1.50	.38	1.12
4	10	20	9	20	10	20	.13	.02	.11
5	6	19	11	20	10	20	2.37	2.15	.23
6	7	20	7	20	7	18	.08	.03	.05
7	6	20	12	20	7	18	3.86	1.74	2.12
8	11	20	7	18	12	20	1.82	.05	1.77

MULTIPLE TREATMENT

	.03 G/KG		.25 G/KG		.5 G/KG				
1	4	20	6	17	8	19	2.29	2.28	.01
2	5	20	6	20	7	20	.48	.44	.04
3	10	20	10	19	12	20	.43	.32	.12
4	14	20	7	20	7	20	6.56	6.20	.37
5	7	20	6	18	5	17	.13	.10	.03
6	14	20	7	20	9	20	5.20	3.92	1.28
7	8	20	6	20	10	20	1.67	.09	1.57

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

	CONTROL		.03 G/KG		.9 G/KG		1.4 G/KG				
WEEK	N WDI	N PRG	N WDI	N PRG	N WDI	N PRG	N WDI	N PRG	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
							SINGLE TREATMENT				
1	3	12	4	20	9	20	2	10	3.76	.63	3.13
2	7	14	9	20	9	20	13	20	2.15	1.07	1.08
3	6	16	8	20	8	19	5	20	1.51	.66	.86
4	4	17	10	20	9	20	10	20	3.46	.88	2.58
5	6	17	6	19	11	20	10	20	2.99	2.25	.73
6	5	17	7	20	7	20	7	18	.35	.22	.13
7	7	17	6	20	12	20	7	18	3.89	.69	3.20
8	9	16	11	20	7	18	12	20	1.93	.00	1.92
							MULTIPLE TREATMENT				
			.03 G/KG		.25 G/KG		.5 G/KG				
1	3	12	4	20	6	17	8	19	2.59	2.36	.22
2	7	14	5	20	6	20	7	20	2.48	.02	2.46
3	6	16	10	20	10	19	12	20	1.84	1.37	.47
4	4	17	14	20	7	20	7	20	9.64	.88	8.77
5	6	17	7	20	6	18	5	17	.17	.17	.01
6	5	17	14	20	7	20	9	20	7.51	.23	7.28
7	7	17	8	20	6	20	10	20	1.67	.28	1.39

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

WEEK	B	A	CHISQ	DF
	SINGLE TREATMENT			
1	.289	4.635	2.13	1
2	.187	5.131	1.41	1
3	-.137	4.563	1.16	1
4	-.032	4.943	.11	1
5	.333	5.040	.23	1
6	.037	4.665	.05	1
7	.299	4.969	2.10	1
8	-.050	5.019	1.77	1
	MULTIPLE TREATMENT			
1	.522	4.950	.00	1
2	.221	4.651	.03	1
3	.176	5.250	.12	1
4	-.801	4.268	.37	1
5	-.106	4.462	.03	1
6	-.633	4.493	1.33	1
7	.096	4.824	1.56	1

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

SINGLE TREATMENT

WEEK	CONTROL			71-25 .03 G/KG					71-25 .9 G/KG					71-25 1.4 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
1	12	.50	.39	20	.38	.21	30	1.139	20	.63	.34	30	.944	10	.38	.16	20	.926	20	1.08	.56	30	3.127
2	14	.55	.29	20	.52	.27	32	.326	20	.60	.42	32	.372	20	.65	.34	32	.934	20	2.34	.50	32	12.109
3	16	.46	.24	20	.50	.29	34	.538	19	.49	.29	33	.349	20	.49	.33	34	.385	20	2.14	.71	34	9.057
4	17	.44	.27	20	.60	.48	35	1.184	20	.47	.24	35	.369	20	.56	.31	35	1.198	16	2.56	.55	31	14.067
5	17	.59	.41	19	.55	.44	34	.310	20	.66	.41	35	.528	20	.66	.46	35	.434	20	1.26	.66	35	3.641
6	17	.57	.54	20	.48	.29	35	.655	20	.47	.28	35	.748	18	.45	.23	33	.841	17	.75	.61	32	.918
7	17	.53	.33	20	.42	.22	35	1.242	20	.67	.32	35	1.368	18	.58	.37	33	.397	20	.74	.37	35	1.770
8	16	.64	.30	20	.57	.29	34	.651	18	.51	.35	32	1.139	20	.61	.30	34	.242	20	.64	.32	34	.061

MULTIPLE TREATMENT

				71-25 .03 G/KG					71-25 .25 G/KG					71-25 .5 G/KG				
1	12	.50	.39	20	.45	.38	30	.386	17	.45	.24	27	.449	19	.51	.32	29	.070
2	14	.55	.29	20	.43	.28	32	1.221	20	.61	.61	32	.318	20	.52	.38	32	.281
3	16	.46	.24	20	.59	.37	34	1.202	19	.58	.38	33	1.167	20	.77	.51	34	2.269
4	17	.44	.27	20	.85	.43	35	3.391	20	.49	.31	35	.564	20	.50	.33	35	.623
5	17	.59	.41	20	.45	.27	35	1.233	18	.59	.66	33	.019	17	.45	.31	32	1.177
6	17	.57	.54	20	.78	.39	35	1.344	20	.51	.32	35	.449	20	.58	.39	35	.079
7	17	.53	.33	20	.54	.41	35	.082	20	.50	.36	35	.246	20	.65	.49	35	.863

CONTROL GROUP ANOVA FOR THE NUMBER OF PREGNANT FEMALES

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	F
				SINGLE TREATMENT					
1	2.800	9	.311	2.000	10	.200	4.800	19	1.556
2	2.200	9	.244	2.000	10	.200	4.200	19	1.222
3	2.200	9	.244	1.000	10	.100	3.200	19	2.444
4	1.050	9	.117	1.500	10	.150	2.550	19	.778
5	2.050	9	.228	.500	10	.050	2.550	19	4.556
6	1.050	9	.117	1.500	10	.150	2.550	19	.778
7	1.050	9	.117	1.500	10	.150	2.550	19	.778
8	1.200	9	.133	2.000	10	.200	3.200	19	.667
				MULTIPLE TREATMENT					
1	2.800	9	.311	2.000	10	.200	4.800	19	1.556
2	2.200	9	.244	2.000	10	.200	4.200	19	1.222
3	2.200	9	.244	1.000	10	.100	3.200	19	2.444
4	1.050	9	.117	1.500	10	.150	2.550	19	.778
5	2.050	9	.228	.500	10	.050	2.550	19	4.556
6	1.050	9	.117	1.500	10	.150	2.550	19	.778
7	1.050	9	.117	1.500	10	.150	2.550	19	.778

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	133.672	7	19.096	61.500	4	15.375	195.172	11	1.242
2	19.802	8	2.475	19.500	5	3.900	39.302	13	.635
3	15.000	8	1.875	37.000	7	5.286	52.000	15	.355
4	61.280	9	6.809	50.000	7	7.143	111.280	16	.953
5	141.750	8	17.719	56.500	8	7.063	198.250	16	2.509
6	122.982	9	13.665	129.500	7	18.500	252.482	16	.739
7	70.250	9	7.806	24.000	7	3.429	94.250	16	2.277
8	103.940	9	11.549	135.500	6	22.583	239.440	15	.511
				MULTIPLE TREATMENT					
1	133.672	7	19.096	61.500	4	15.375	195.172	11	1.242
2	19.802	8	2.475	19.500	5	3.900	39.302	13	.635
3	15.000	8	1.875	37.000	7	5.286	52.000	15	.355
4	61.280	9	6.809	50.000	7	7.143	111.280	16	.953
5	141.750	8	17.719	56.500	8	7.063	198.250	16	2.509
6	122.982	9	13.665	129.500	7	18.500	252.482	16	.739
7	70.250	9	7.806	24.000	7	3.429	94.250	16	2.277

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	74.297	7	10.614	14.500	4	3.625	88.797	11	2.928
2	19.000	8	2.375	21.000	5	4.200	40.000	13	.565
3	10.438	8	1.305	10.500	7	1.500	20.938	15	.870
4	102.570	9	11.397	18.000	7	2.571	120.570	16	4.432
5	67.025	8	8.378	19.000	8	2.375	86.025	16	3.528
6	92.382	9	10.265	65.500	7	9.357	157.882	16	1.097
7	64.530	9	7.170	3.000	7	.429	67.530	16	16.730
8	97.000	9	10.778	114.000	6	19.000	211.000	15	.567
				MULTIPLE TREATMENT					
1	74.297	7	10.614	14.500	4	3.625	88.797	11	2.928
2	19.000	8	2.375	21.000	5	4.200	40.000	13	.565
3	10.438	8	1.305	10.500	7	1.500	20.938	15	.870
4	102.570	9	11.397	18.000	7	2.571	120.570	16	4.432
5	67.025	8	8.378	19.000	8	2.375	86.025	16	3.528
6	92.382	9	10.265	65.500	7	9.357	157.882	16	1.097
7	64.530	9	7.170	3.000	7	.429	67.530	16	16.730

CONTROL GROUP ANOVA FOR THE NUMBER OF DEAD IMPLANTS PER PREGNANT FEMALE

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	F
				SINGLE TREATMENT					
1	2.172	7	.310	2.500	4	.625	4.672	11	.496
2	6.914	8	.864	5.500	5	1.100	12.414	13	.786
3	3.938	8	.492	2.000	7	.286	5.938	15	1.723
4	7.742	9	.860	10.500	7	1.500	18.242	16	.574
5	20.543	8	2.568	10.000	8	1.250	30.543	16	2.054
6	10.320	9	1.147	2.000	7	.286	12.320	16	4.013
7	14.530	9	1.614	11.000	7	1.571	25.530	16	1.027
8	6.760	9	.751	13.000	6	2.167	19.760	15	.347
				MULTIPLE TREATMENT					
1	2.172	7	.310	2.500	4	.625	4.672	11	.496
2	6.914	8	.864	5.500	5	1.100	12.414	13	.786
3	3.938	8	.492	2.000	7	.286	5.938	15	1.723
4	7.742	9	.860	10.500	7	1.500	18.242	16	.574
5	20.543	8	2.568	10.000	8	1.250	30.543	16	2.054
6	10.320	9	1.147	2.000	7	.286	12.320	16	4.013
7	14.530	9	1.614	11.000	7	1.571	25.530	16	1.027

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

	BETWEEN MALES			WITHIN MALES			TOTAL		
WEEK	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	F
				SINGLE TREATMENT					
1	.904	7	.129	.019	4	.005	.923	11	27.077
2	.048	8	.006	.035	5	.007	.083	13	.857
3	.032	8	.004	.016	7	.002	.048	15	1.737
4	.051	9	.006	.069	7	.010	.121	16	.577
5	.221	8	.028	.097	8	.012	.318	16	2.287
6	.459	9	.051	.508	7	.073	.966	16	.703
7	.105	9	.012	.078	7	.011	.184	16	1.049
8	.059	9	.007	.093	6	.015	.152	15	.426
				MULTIPLE TREATMENT					
1	.017	7	.002	.019	4	.005	.036	11	.498
2	.048	8	.006	.035	5	.007	.083	13	.857
3	.032	8	.004	.016	7	.002	.048	15	1.737
4	.051	9	.006	.069	7	.010	.121	16	.577
5	.221	8	.028	.097	8	.012	.318	16	2.287
6	.459	9	.051	.508	7	.073	.966	16	.703
7	.105	9	.012	.078	7	.011	.184	16	1.049

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

WEEK	CONTROL			71-25 .03 G/KG					71-25 .9 G/KG					71-25 1.4 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	12	11.92	2.31	20	12.85	1.46	30	1.404	20	11.40	1.70	30	.727	10	11.50	1.51	20	.488	20	13.40	2.68	30	1.590
2	14	12.79	1.42	20	12.10	2.00	32	1.101	20	13.15	2.32	32	.521	20	13.00	2.15	32	.325	20	11.95	1.85	32	1.420
3	16	12.94	1.34	20	13.55	3.19	34	.718	19	13.74	1.63	33	1.567	20	12.25	1.65	34	1.347	20	12.45	1.73	34	.925
4	17	13.59	2.96	20	13.60	2.60	35	.013	20	14.30	1.08	35	1.002	20	12.35	1.46	35	1.652	16	13.87	5.37	31	.192
5	17	12.06	2.05	19	12.16	1.54	34	.165	20	13.65	2.08	35	2.334	20	12.40	1.39	35	.601	20	12.05	2.58	35	.011
6	17	12.82	1.33	20	12.90	1.45	35	.166	20	12.30	1.42	35	1.150	18	12.83	1.54	33	.020	17	12.24	1.03	32	1.438
7	17	12.12	1.58	20	13.20	1.54	35	2.106	20	12.45	2.35	35	.495	18	12.33	1.71	33	.387	20	13.25	1.21	35	2.471
8	16	13.31	1.20	20	13.10	2.05	34	.367	18	12.56	1.38	32	1.698	20	12.95	2.24	34	.584	20	12.95	1.64	34	.741

MULTIPLE TREATMENT

				71-25 .03 G/KG					71-25 .25 G/KG					71-25 .5 G/KG				
1	12	11.92	2.31	20	12.70	1.69	30	1.105	17	12.41	1.50	27	.700	19	13.16	1.57	29	1.782
2	14	12.79	1.42	20	12.35	1.39	32	.892	20	12.70	2.11	32	.132	20	13.20	1.47	32	.818
3	16	12.94	1.34	20	13.85	1.50	34	1.903	19	13.53	1.65	33	1.146	20	12.40	2.58	34	.754
4	17	13.59	2.96	20	13.30	2.32	35	.332	20	12.50	1.54	35	1.434	20	12.60	1.23	35	1.364
5	17	12.06	2.05	20	14.15	3.00	35	2.434	18	12.94	1.59	33	1.435	17	13.65	1.77	32	2.423
6	17	12.82	1.33	20	14.15	2.50	35	1.962	20	13.55	2.86	35	.962	20	12.55	1.73	35	.531
7	17	12.12	1.58	20	13.15	2.35	35	1.541	20	12.55	1.67	35	.805	20	13.05	1.67	35	1.737

September 1972

Compound Report No. 14 (Erratum)

STUDY OF MUTAGENIC EFFECTS OF IONOL, C.P. (71-25)

Prepared for:

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

Contract No. FDA 71-267

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Submitted by:

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Approved:

W. A. Skinner

W. A. Skinner, Executive Director
Life Sciences Division

ERRATUM

Table 5

CYTOGENETIC ASSAY
METAPHASE SUMMARY SHEET BY TIME OF SACRIFICE
Ionol (71-25)

Dosage	Time*	Mitotic Index (%)	No. of Animals	No. of Cells	Cells with Breaks (%)	Cells with Rearrange-ments (%)	Cells with More than One Type of Aber. (%)	Cells with Aber. (%)
TEM (0.5 mg/kg)	24	1.85	5	250	41.6	28.4	27.2	42.8
Negative Control	6	2.65	3	150	1.3	0	0	1.3
30 mg/kg	6	1.70	5	250	0.4	0	0	0.4
900 mg/kg	6	1.40	5	250	0.4	0	0	0.4
1400 mg/kg	6	2.10	5	236	0.8	0	0	0.8
Negative Control	24	1.60	3	150	1.3	0	0	1.3
30 mg/kg	24	3.75	5	250	0	0	0	0
900 mg/kg	24	1.60	5	250	1.2	0	0	1.2
1400 mg/kg	24	2.20	5	250	1.2	0	0	1.2
Negative Control	48	1.60	3	150	0	0	0	0
30 mg/kg	48	2.85	5	250	1.6	0	0	1.6
900 mg/kg	48	2.20	5	250	0.4	0	0	0.4
1400 mg/kg	48	2.50	5	250	1.6	0	0	1.6
Negative Control	SA**	2.20	3	150	0	0	0	0
30 mg/kg	SA	2.10	5	250	0.4	0	0	0.4
250 mg/kg	SA	2.05	5	250	1.2	0	0	1.2
500 mg/kg	SA	3.05	5	250	0.4	0	0	0.4

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