Study of mutagenic effects of **Calcium Carrogeenan** FDA Compound #71-5 STUDY OF MUTAGENIC EFFECTS OF CALCIUM CARROGEENAN (71-5) #14

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STUDY OF MUTAGENIC EFFECTS OF CALCIUM CARROGEENAN (FDA No. 71-5)

Prepared for:

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

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Submitted by:

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Approved:

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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 calcium carrogeenan (FDA No. 71-5).

Three methods are used for evaluating 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 were 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 being consideration here--and as will be the case for the remaining 12 compounds--single and repeated oral administrations 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

Calcium carrogeenan (71-5) did not produce any measurable 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

Calcium carrogeenan showed little effect on the induction of abnormalities in metaphase chromosomes of bone marrow cells from rats fed this compound. Significant abnormalities were induced in the anaphase figures of human embryonic lung when the cells were exposed to the test compound *in vitro*.

Dominant Lethal Gene Test

No consistent responses occurred to suggest that calcium carrogeenan is mutagenic to the rat as a result of this experimental procedure. The positive reference compound, TEM, generally produced mutagenic responses from the second through the fifth weeks of the experiment, as expected from this known mutagen.

RESULTS AND DISCUSSION

Host-Mediated Assay

Table 1 presents a summary of the host-mediated assay results for calcium carrogeenan (71-5). Table 2 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. However, only three significant figures are used for calculations and reporting the results as summarized in Table 1. Table 3 summarizes the data obtained in the *in vitro* tests.

As can be seen from the results summarized in Table 1, 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

Table 4 indicates that calcium carrogeenan exhibits only a slight adverse effect on bone marrow metaphase chromosomes. At 6 hours, the maximal dose value (4.0%) is somewhat elevated with respect to the negative control value (1.3%). Although no effects may be noted at 24 and 48 hours, aberrant cells increased progressively with increased doses in animals treated on a subacute regimen. Only the intermediate and maximal dose values are markedly elevated over the negative control value, however.

Table 5 indicates that dosages are not dependent on time for expression of their effect, except for the maximal dosage level. Thus, the negative, low, and intermediate dose values remain relatively steady throughout the treatment period. The maximal dose value, however, is increased at 6 hours in animals treated subacutely.

Calcium carrogeenan therefore seems to elicit both an immediate and delayed adverse effect, particularly at the maximal dose, although in all cases the effect is slight.

According to Table 6, intermediate and maximal doses elicit a two-fold to threefold increase in abnormal anaphase figures over the negative control. This is mainly due to large increases in the number of multipolar cells as well as those categorized as "other" during scoring, together with a less dramatic increase in the percentage of cells with acentric fragments. (Cells scored as "other" indicate definitely abnormal anaphase figures that cannot be classified in any of the categories listed.) An increase in compound abnormalities also contributes to the positive response seen at these two dose levels. Thus, calcium carrogeenan in the

same way as the positive control, appears to affect the spindle apparatus adversely as well as the chromosomes at the highest doses.

Although these results seem relatively straightforward, analysis of individual scoring at the three dose levels indicates a noticeable discrepancy at the two highest doses, suggesting that perhaps an error occurred in which half the intermediate tubes and half the maximal tubes were reversed (see Table 7). If this were the case, one dose would yield about 9% aberrant cells, while the other would yield on the order of 50%, the individual scores then being in excellent agreement. If this error did occur, calcium carrogeenan would yield significant abnormalities in in vitro tests at one dose level while having no effect at the other two levels. Due to this unaccountable discrepancy, we propose to do further in vitro tests of calcium carrogeenan and to submit the results as an addendum to this report at a future date.

Dominant Lethal Gene Test

Single and multiple dose LD_{50} values are presented in Table 8. Ten g/kg of bodyweight of calcium carrogeenan given orally as a suspension in corn oil caused no deaths. There was an average weight loss of 7 g one week after dosing but an overall gain of 3 g ten days after dosing. No other effects, except transient depression of the animals for a few hours following dosing, were evident. Daily doses of 5 g/kg for five days caused no observable effects. The maximum dose of calcium carrogeenan used in these mutagenic assays was 5 g/kg of bodyweight.

In Table 9, summary data of average implantations per pregnant female showed that calcium carrogeenan had no effect on this parameter for single-dose animals, while the TEM-treated group had a marked drop in implants during the second, third, and fourth weeks. The number of implants during the first week for the intermediate (2.5 g/kg) and maximum dose (5 g/kg) groups in the multiple-treated calcium carrogeenan rats was significantly less than that of the controls, but was comparable to the controls throughout the remaining six weeks of the experiment. Taking into account the time required for sperm development and maturation, these first-week responses appear to be more closely related to the stress of heavy dosing, rather than to a metabolic effect.

Dead implants per pregnant female are summarized in Table 10. Again the TEM group was markedly affected through the sixth week. Data for the treated rats showed no statistical differences from the controls throughout the first six weeks for both single- and multiple-treated animals. Females bred to males singly treated with calcium carrogeenan in the low dose group (30 mg/kg) at seven weeks and the mid-dose group (2.5 g/kg) at eight weeks had a significant increase in dead implants. The opposite effect, a significant decrease in dead implants, was seen in the mid-dose group (2.5 g/kg) at seven weeks with females mated to males multiply treated with the compound.

Similar types of scattered responses were obtained in statistical

treatment of: dead implants per total implants (see Table 11), corpora lutea per pregnant female (see Table 12), and pre-implantation loss per pregnant female (see Table 13).

Careful review and statistical evaluation of the data do not show calcium carrogeenan (FDA Compound No. 71-5) to be a mutagen in the rat by this dominant lethal gene test.

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TABLE 1

HOST MEDIATED ASSAY
SUMMARY OF DATA

Compound No.: 71-5 (Calcium carrogeenan)

A. Acute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	5.51×10^{-8}	2.00	3.46×10^{-8}	0.92	5.49×10^{-5}	0.57
Intermediate	3.37×10^{-8}	1.23	4.94×10^{-8}	1.31	5.06×10^{-5}	0.52
Low Level	1.95×10^{-8}	0.71	2.86×10^{-8}	0.76	1.14×10^{-4}	1.18
Control (+)	2.43×10^{-6} ✓	88.36	3.15×10^{-6} ✓	83.55	3.85×10^{-4} ✓	3.97
Control (-)	2.75×10^{-8} ✓	1.00	3.77×10^{-8} ✓	1.00	9.69×10^{-5} ✓	1.00

B. Subacute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G46		TA 1530		D-3	
	MF	MFt/MFc	MF	MFt/MFc	RF	RFt/RFc
Maximum	5.91×10^{-8}	1.47	6.24×10^{-7}	8.62	1.58×10^{-4}	1.60
Intermediate	3.10×10^{-8}	0.77	4.09×10^{-7}	5.64	9.17×10^{-5}	0.93
Low Level	4.99×10^{-8}	1.24	4.05×10^{-8}	0.56	1.34×10^{-4}	1.36
Control (-)	4.02×10^{-8} ✓	1.00	7.24×10^{-8} ✓	1.00	9.86×10^{-5} ✓	1.00

TABLE 2

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5 (calcium carrogeenan)

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	.571083333330ex 04	.143000000000ex 10	.399358974356ex-05
2	.110083333333ex 04	.435000000000ex 09	.253065134098ex-05
3	.202166666666ex 04	.750000000000ex 09	.269555555554ex-05
4	.238500000000ex 04	.710000000000ex 09	.335915492957ex-05
5	.166250000000ex 04	.103833333333ex 10	.160112359551ex-05
6	.143083333333ex 04	.147500000000ex 10	.970056497172ex-06
7	.169250000000ex 04	.900000000000ex 09	.188055555555ex-05
8	.259583333333ex 04	.895000000000ex 09	.290037243947ex-05
9	.125000000000ex 04	.445000000000ex 09	.280898876404ex-05
10	.114250000000ex 04	.748333333330ex 09	.152672605791ex-05
			.242667744790ex-05

B. Subacute

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

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.128333333333ex 03	.170000000000ex 10	.754901960782ex-07
2	.108333333333ex 02	.102333333333ex 10	.105863192182ex-07
3	.100000000000ex 02	.635000000000ex 09	.157480314960ex-07
4	.341666666666ex 02	.127666666666ex 10	.267624020888ex-07
5	.408333333333ex 02	.102666666666ex 10	.397727272729ex-07
6	.200000000000ex 02	.114666666666ex 10	.174418604652ex-07
7	.100000000000ex 02	.146333333333ex 10	.683371298407ex-08
			.275193213715ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.466666666666ex 02	.848333333330ex 09	.550098231828ex-07
2	.283333333333ex 02	.571666666665ex 09	.495626822158ex-07
3	.666666666665ex 01	.581666666665ex 09	.114613180515ex-07
4	.131666666666ex 03	.119166666666ex 10	.110489510489ex-06
5	.150000000000ex 02	.603333333330ex 09	.248618784531ex-07
6	.833333333330ex 01	.110333333333ex 10	.755287009062ex-08
7	.266666666666ex 02	.117000000000ex 10	.227920227919ex-07
			.402471578960ex-07

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.108333333333ex 03	.101166666666ex 10	.107084019769ex-06
2	.125000000000ex 02	.143333333333ex 10	.872093023257ex-08
3	.333333333333ex 01	.700000000000ex 09	.476190476190ex-08
4	.500000000000ex 01	.216666666666ex 08	.230769230769ex-06
5	.108333333333ex 02	.128500000000ex 10	.843060959789ex-08
6	.158333333333ex 02	.998333333330ex 09	.158597662771ex-07
7	.108333333333ex 02	.110166666666ex 10	.983356[illegible]7657ex-08
			.550657209830ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 02	.495000000000ex 09	.336700336698ex-07
2	.145000000000ex 03	.468333333333ex 09	.309608540925ex-06
3	.300000000000ex 02	.166666666666ex 10	.180000000000ex-07
4	.200000000000ex 02	.100000000000ex 10	.200000000000ex-07
5	.150000000000ex 02	.616666666665ex 09	.243243243243ex-07
6	.200000000000ex 02	.936666666665ex 09	.213523131672ex-07
7	.200000000000ex 02	.482500000000ex 09	.414507772020ex-07
8	.500000000000ex 01	.113666666666ex 10	.439882697949ex-08
			.591006020332ex-07

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.125000000000ex 02	.101333333333ex 10	.123355263158ex-07
2	.833333333330ex 01	.112833333333ex 10	.738552437222ex-08
3	.191666666666ex 02	.911666666665ex 09	.210237659963ex-07
4	.108333333333ex 02	.157333333333ex 10	.688559322033ex-08
5	.250000000000ex 01	.183333333333ex 08	.136363636363ex-06
6	.200000000000ex 02	.568333333330ex 09	.351906158359ex-07
7	.642857142855ex 01	.383333333333ex 09	.167701863353ex-07
			.337078354910ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.200000000000ex 02	.448333333333ex 09	.446096654275ex-07
2	.350000000000ex 02	.116833333333ex 10	.299572039943ex-07
3	.450000000000ex 02	.153333333333ex 10	.293478260870ex-07
4	.666666666665ex 01	.181666666666ex 09	.366972477064ex-07
5	.216666666666ex 02	.146500000000ex 10	.147895335608ex-07
6	.233333333333ex 02	.708333333330ex 09	.329411764706ex-07
7	.300000000000ex 02	.104666666666ex 10	.286624203823ex-07
			.310007248037ex-07

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.308333333333ex 02	.137000000000ex 10	.225060827250ex-07
2	.133333333333ex 02	.123666666666ex 10	.107816711590ex-07
3	.141666666666ex 02	.114833333333ex 10	.123367198838ex-07
4	.133333333333ex 02	.168833333333ex 10	.789733464955ex-08
5	.933333333330ex 02	.187666666666ex 10	.497335701598ex-07
6	.750000000000ex 01	.535000000000ex 09	.140186915887ex-07
			.195456783608ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.183333333333ex 02	.605000000000ex 09	.303030303029ex-07
2	.233333333333ex 02	.121000000000ex 10	.192837465564ex-07
3	.126666666666ex 03	.673333333330ex 09	.188118811881ex-06
4	.216666666666ex 02	.901666666665ex 09	.240295748613ex-07
5	.166666666666ex 02	.310000000000ex 09	.537634408600ex-07
6	.233333333333ex 02	.816666666665ex 09	.285714285714ex-07
7	.183333333333ex 02	.555000000000ex 09	.330330330329ex-07
8	.200000000000ex 02	.890000000000ex 09	.224719101123ex-07
			.499468720220ex-07

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.168583333333ex 04	.608333333330ex 09	.277123287672ex-05
2	.307750000000ex 04	.821666666665ex 09	.374543610548ex-05
3	.122166666666ex 04	.758333333330ex 09	.161098901098ex-05
4	.131400000000ex 04	.430000000000ex 09	.305581395348ex-05
5	.116166666666ex 04	.465000000000ex 09	.249820788529ex-05
6	.160833333333ex 04	.461666666666ex 09	.348375451263ex-05
7	.138300000000ex 04	.320000000000ex 09	.432187500000ex-05
8	.201000000000ex 04	.730000000000ex 09	.275342465753ex-05
9	.150083333333ex 04	.365000000000ex 09	.411187214610ex-05
			.315028957200ex-05

B. Subacute

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

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.116666666666ex 02	.126666666666ex 10	.921052631578ex-08
2	.158333333333ex 02	.998333333330ex 09	.158597662771ex-07
3	.108333333333ex 02	.107666666666ex 10	.100619195046ex-07
4	.500000000000ex 01	.216666666666ex 08	.230769230769ex-06
5	.416666666666ex 01	.691666666665ex 09	.602409638554ex-08
6	.125000000000ex 02	.145000000000ex 10	.862068965517ex-08
7	.108333333333ex 02	.127500000000ex 10	.849673202611ex-08
8	.116666666666ex 02	.903333333330ex 09	.129151291512ex-07
			.377447612603ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.383333333333ex 02	.746666666665ex 09	.513392857143ex-07
2	.883333333330ex 02	.119500000000ex 10	.739191073916ex-07
3	.118333333333ex 03	.783333333330ex 09	.151063829787ex-06
4	.683333333330ex 02	.938333333330ex 09	.728241563054ex-07
5	.133333333333ex 02	.735000000000ex 09	.181405895691ex-07
6	.113333333333ex 03	.154166666666ex 10	.735135135136ex-07
7	.118333333333ex 03	.143000000000ex 10	.827505827503ex-07
8	.166666666666ex 02	.313333333333ex 09	.531914893615ex-07
9	.105000000000ex 03	.141000000000ex 10	.744680851063ex-07
			.723567377217ex-07

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.108333333333ex 02	.159500000000ex 10	.679205851617ex-08
2	.291666666666ex 02	.451666666666ex 10	.645756457564ex-08
3	.500000000000ex 02	.740000000000ex 09	.675675675675ex-07
4	.241666666666ex 02	.668333333330ex 09	.361596009975ex-07
5	.833333333330ex 01	.240000000000ex 09	.347222222220ex-07
6	.200000000000ex 02	.305000000000ex 09	.655737704918ex-07
7	.416666666666ex 01	.365000000000ex 09	.114155251141ex-07
8	.141666666666ex 02	.296666666666ex 09	.477528089886ex-07
			.345551398088ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.108333333333ex 04	.895000000000ex 09	.121042830539ex-05
2	.140000000000ex 04	.688333333330ex 09	.203389830509ex-05
3	.900000000000ex 02	.403333333333ex 09	.223140495867ex-06
4	.616666666665ex 02	.615000000000ex 09	.100271002709ex-06
5	.106666666666ex 03	.110833333333ex 10	.962406015034ex-07
6	.883333333330ex 02	.111833333333ex 10	.789865871832ex-07
			.623827549620ex-06

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.266666666666ex 02	.618333333330ex 09	.431266846362ex-07
2	.225000000000ex 02	.955000000000ex 09	.235602094240ex-07
3	.183333333333ex 02	.725000000000ex 09	.252873563217ex-07
4	.291666666666ex 02	.855000000000ex 09	.341130604287ex-07
5	.183333333333ex 02	.866666666665ex 09	.211538461538ex-07
6	.131666666666ex 03	.800000000000ex 09	.164582333332ex-06
7	.308333333333ex 02	.905000000000ex 09	.340699815837ex-07
			.494134959825ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency	$\times 10^{-6}$
1	.533333333330ex 02	.585000000000ex 09	.911680911675ex-07	[illegible]
2	.200000000000ex 03	.595000000000ex 09	.336134453781ex-06	[illegible]
3	.106666666666ex 03	.393333333333ex 09	.271186440676ex-06	0.271
4	.188333333333ex 03	.900000000000ex 09	.209259259258ex-06	[illegible]
5	.148333333333ex 03	.625000000000ex 09	.237333333332ex-06	0.237
6	.383333333333ex 02	.890000000000ex 09	.430711610486ex-07	[illegible]
7	.126333333333ex 04	.676666666665ex 09	.186699507389ex-05	[illegible]
8	.433333333333ex 03	.898333333330ex 09	.482374768090ex-06	0.482
9	.103333333333ex 03	.703333333330ex 09	.146919431279ex-06	0.147
			.409382445833ex-06	

all 0.409

$10^{-6}, 10^{-7}$ 0.223

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.258333333333ex 02	.590000000000ex 09	.437853107344ex-07
2	.241666666666ex 02	.698333333330ex 09	.346062052506ex-07
3	.233333333333ex 02	.861666666665ex 09	.270793036750ex-07
4	.183333333333ex 02	.781666666665ex 09	.234541577825ex-07
5	.191666666666ex 02	.845000000000ex 09	.226824457592ex-07
6	.191666666666ex 02	.708333333330ex 09	.270588235294ex-07
7	.175000000000ex 02	.820000000000ex 09	.213414634146ex-07
			.285725300205ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency	$\times 10^{-7}$
1	.183333333333ex 02	.104333333333ex 10	.175718849840ex-07	0.176
2	.333333333333ex 01	.785000000000ex 09	.424628450105ex-08	0.042
3	.416666666666ex 02	.975000000000ex 09	.427350427349ex-07	[illegible]
4	.133333333333ex 02	.940000000000ex 09	.141843971630ex-07	0.142
5	.216666666666ex 02	.875000000000ex 09	.247619047618ex-07	[illegible]
6	.316666666666ex 02	.107000000000ex 10	.295950155762ex-07	0.296
7	.116666666666ex 02	.793333333330ex 09	.147058823529ex-07	[illegible]
8	.136666666666ex 03	.863333333330ex 09	.158301158300ex-06	[illegible]
9	.333333333333ex 02	.566666666665ex 09	.588235294118ex-07	[illegible]
			.405472333092ex-07	

Tcl 0.405
$10^7/10^8$ 0.25[illegible]

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.272222222222ex 05	.688333333330ex 08	.395480225990ex-03
2	.170000000000ex 05	.748333333330ex 08	.227171492205ex-03
3	.188888888888ex 05	.134166666666ex 09	.140786749482ex-03
4	.222222222222ex 05	.116833333333ex 09	.190204469805ex-03
5	.305000000000ex 05	.476666666666ex 08	.639860139851ex-03
6	.355000000000ex 05	.580000000000ex 08	.612068965517ex-03
7	.340000000000ex 05	.561666666665ex 08	.605341246292ex-03
8	.515000000000ex 05	.165833333333ex 09	.310552763819ex-03
9	.275000000000ex 05	.808333333330ex 08	.340206185558ex-03
			.384630248723ex-03

B. Subacute

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

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.222222222222ex 04	.480000000000ex 08	.462962962962ex-04
2	.312500000000ex 04	.458333333333ex 08	.681818181818ex-04
3	.300000000000ex 04	.308333333333ex 08	.972972972974ex-04
4	.222222222222ex 04	.303333333333ex 08	.732600732600ex-04
5	.200000000000ex 04	.221666666666ex 08	.902255639100ex-04
6	.450000000000ex 04	.408333333333ex 08	.110204081632ex-03
7	.363636363636ex 04	.201666666666ex 08	.180315552216ex-03
8	.450000000000ex 04	.411666666666ex 08	.109311740890ex-03
			.968865529603ex-04

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.272727272727ex 04	.445000000000ex 08	.612870275791ex-04
2	.850000000000ex 04	.371666666666ex 08	.228699551569ex-03
3	.400000000000ex 04	.278333333333ex 08	.143712574850ex-03
4	.250000000000ex 04	.396666666666ex 08	.630252100841ex-04
5	.400000000000ex 04	.553333333330ex 08	.722891566269ex-04
6	.450000000000ex 04	.656666666665ex 08	.685279187818ex-04
7	.600000000000ex 04	.601666666665ex 08	.997229916900ex-04
8	.500000000000ex 04	.395000000000ex 08	.126582278481ex-03
9	.150000000000ex 04	.645000000000ex 08	.232558139534ex-04
			.985669470681ex-04

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.400000000000ex 04	.101666666666ex 09	.393442622953ex-04
2	.200000000000ex 04	.600000000000ex 08	.333333333333ex-04
3	.450000000000ex 04	.841666666665ex 08	.534653465347ex-04
4	.150000000000ex 04	.668333333330ex 08	.224438902744ex-04
5	.100000000000ex 04	.458333333333ex 08	.218181818181ex-04
6	.400000000000ex 04	.463333333333ex 08	.863309352518ex-04
7	.450000000000ex 04	.353333333333ex 08	.127358490566ex-03
			.548706342960ex-04

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.450000000000ex 04	.258333333333ex 08	.174193548387ex-03
2	.350000000000ex 04	.128333333333ex 08	.272727272727ex-03
3	.400000000000ex 04	.393333333333ex 08	.101694915254ex-03
4	.250000000000ex 04	.248333333333ex 08	.100671140939ex-03
5	.500000000000ex 04	.363333333333ex 08	.137614678899ex-03
6	.500000000000ex 04	.250000000000ex 08	.200000000000ex-03
7	.400000000000ex 04	.280000000000ex 08	.142857142857ex-03
8	.400000000000ex 04	.385000000000ex 08	.103896103896ex-03
9	.800000000000ex 04	.415000000000ex 08	.192771084337ex-03
10	.450000000000ex 04	.296666666666ex 08	.151685393258ex-03
			.157811128053ex-03

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-23

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	.300000000000ex 04	.463333333333ex 08	.647482014388ex-04
2	.150000000000ex 04	.383333333333ex 08	.391304347826ex-04
3	.300000000000ex 04	.600000000000ex 08	.500000000000ex-04
4	.100000000000ex 04	.945000000000ex 08	.105820105820ex-04
5	.100000000000ex 04	.223333333333ex 08	.447761194030ex-04
6	.250000000000ex 04	.458333333333ex 08	.545454545454ex-04
7	.250000000000ex 04	.543333333330ex 08	.460122699389ex-04
8	.250000000000ex 04	.263333333333ex 08	.949367088608ex-04
			.505913999436ex-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	.580000000000ex 08	.431034482758ex-04
2	.450000000000ex 04	.248333333333ex 08	.181208053691ex-03
3	.200000000000ex 04	.360000000000ex 08	.555555555555ex-04
4	.250000000000ex 04	.253333333333ex 08	.986842105264ex-04
5	.250000000000ex 04	.226666666666ex 08	.110294117647ex-03
6	.100000000000ex 04	.547500000000ex 07	.182648401826ex-03
7	.100000000000ex 04	.268333333333ex 08	.372670807453ex-04
8	.450000000000ex 04	.511666666665ex 08	.879478827364ex-04
9	.450000000000ex 04	.731666666665ex 08	.615034168566ex-04
10	.300000000000ex 04	.506666666665ex 08	.592105263159ex-04
			.917422694172ex-04

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-5

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	.277777777777ex 04	.336666666666ex 08	.825082508250ex-04
2	.277777777777ex 04	.340000000000ex 08	.816993464050ex-04
3	.500000000000ex 03	.181666666666ex 08	.275229357799ex-04
4	.350000000000ex 04	.225000000000ex 08	.155555555555ex-03
5	.400000000000ex 04	.368333333333ex 08	.108597285067ex-03
6	.350000000000ex 04	.151500000000ex 08	.231023102310ex-03
			.114484412656ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.350000000000ex 04	.161666666666ex 08	.216494845361ex-03
2	.450000000000ex 04	.400000000000ex 08	.112500000000ex-03
3	.150000000000ex 04	.258333333333ex 08	.580645161291ex-04
4	.400000000000ex 04	.281666666666ex 08	.142011834319ex-03
5	.400000000000ex 04	.518333333330ex 08	.771704180069ex-04
6	.900000000000ex 04	.415000000000ex 08	.216867469879ex-03
7	.600000000000ex 04	.530000000000ex 08	.113207547169ex-03
			.133759518694ex-03

ERRATUM

TABLE 3

HOST-MEDIATED ASSAY
IN VITRO MUTAGENICITY OF COMPOUND 71-5 (Calcium carrogeenan)

Salmonella typhimurium G-46

5% w/v 71-5	EMS
negative	positive

Salmonella typhimurium TA-1530

5% w/v 71-5	EMS
negative	positive

Saccharomyces cerevisiae D-3

Compound	Concentration	Survival (%)	Recombinants/10^5 Survivors	RFt/RFc
71-5	5% w/v	43%	8.00	3.45
EMS	1% w/v	62%	89.60	38.62
Control (-)	--	100%	2.32	1

TABLE 3

HOST-MEDIATED ASSAY
IN VITRO MUTAGENICITY OF COMPOUND 71-5 (Calcium carrogeenan)

Salmonella typhimurium G-46

5% w/v 71-5	EMS
negative	positive

Salmonella typhimurium TA-1530

5% w/v 71-5	EMS
negative	positive

Saccharomyces cerevisiae D-3

Compound	Concentration	Survival (%)	~~Recombinants/10^5 Survivors~~ Recomb. Frequency	RFt/RFc
71-5	5% w/v	43%	8.0×10^{-4}	3.45
EMS	1% w/v	62%	8.96×10^{-3}	38.62
Control (-)	--	100%	2.32×10^{-4} ✓	1

Table 4

CYTOGENETIC ASSAY
METAPHASE SUMMARY SHEET BY TIME OF SACRIFICE
Compound 71-5

Dosage (mg/kg)	Time*	Mitotic Index (%)	No. of Animals	No. of Cells	Cells with Breaks (%)	Cells with Rearrangements (%)	Cells with More than One Type of Aber. (%)	Cells with Aber. (%)
TEM (0.5 mg/kg)	6	1.23%	5	250	9.6%	0.4%	0	10.0%
Negative Control	6	2.03	3	150	0.7	0.7	0	1.3
30 mg/kg	6	2.22	5	250	0.8	0	0	0.8
2500 mg/kg	6	2.33	5	250	2.0	0	0	2.0
5000 mg/kg	6	1.96	5	250	4.0	0	0	4.0
Negative Control	24	2.80	3	150	2.0	0	0	2.0
30 mg/kg	24	2.20	5	250	1.2	0	0	1.2
2500 mg/kg	24	2.00	5	250	1.6	0.8	0	2.4
5000 mg/kg	24	2.60	5	250	0.8	0.4	0	1.2
Negative Control	48	2.13	3	150	0.7	0	0	0.7
30 mg/kg	48	1.55	5	243	1.2	0	0	1.2
2500 mg/kg	48	1.89	5	250	0.8	0	0	0.8
5000 mg/kg	48	1.36	5	250	0.4	0	0	0.4
Negative Control	SA**	1.73	3	150	0	0.7	0	0.7
30 mg/kg	SA	2.27	5	244	1.2	0.4	0	1.6
2500 mg/kg	SA	2.12	5	250	2.4	1.2	0	3.6
5000 mg/kg	SA	2.16	5	250	2.8	0	0	2.8

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

Table 5

CYTOGENETIC ASSAY
METAPHASE SUMMARY SHEET BY DOSE LEVELS
Compound 71-5

Dosage (mg/kg)	Time*	Mitotic Index (%)	No. of Animals	No. of Cells	Cells with Breaks (%)	Cells with Rearrangements (%)	Cells with More than One Type of Aber. (%)	Cells with Aber. (%)
TEM (0.5 mg/kg)	6	1.23%	5	250	9.6%	0.4%	0	10.0%
Negative Control	6	2.03	3	150	0.7	0.7	0	1.3
	24	2.80	3	150	2.0	0	0	2.0
	48	2.13	3	150	0.7	0	0	0.7
	SA	1.73	3	150	0	0.7	0	0.7
30 mg/kg	6	2.22	5	250	0.8	0	0	0.8
	24	2.20	5	250	1.2	0	0	1.2
	48	1.55	5	243	1.2	0	0	1.2
	SA	2.27	5	244	1.2	0.4	0	1.6
2500 mg/kg	6	2.33	5	250	2.0	0	0	2.0
	24	2.00	5	250	1.6	0.8	0	2.4
	48	1.89	5	250	0.8	0	0	0.8
	SA	2.12	5	250	2.4	1.2	0	3.6
5000 mg/kg	6	1.96	5	250	4.0	0	0	4.0
	24	2.60	5	250	0.8	0.4	0	1.2
	48	1.36	5	250	0.4	0	0	0.4
	SA	2.16	5	250	2.8	0	0	2.8

* Time of sacrifice after treatment (hours)

Table 6

CYTOGENETIC ASSAY
ANAPHASE SUMMARY SHEET
Compound 71-5

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	319	6.3	4.4	1.6	0.6	1.6	11.3
10 μg/ml	24	254	4.3	2.4	0.8	2.8	1.2	8.7
100 μg/ml	24	163	9.2	4.9	12.9	9.8	7.4	29.4
1000 μg/ml	24	107	9.3	3.7	3.7	14.0	6.5	24.3
TEM (0.05 μg/ml)	24	55	34.5	9.1	7.3	41.8	25.5	65.5

* Time of harvest after treatment

Table 7

Dose	SCORER A		SCORER B		Mean % Abnormal Cells
	Total Cells Counted	Abnormal Cells (%)	Total Cells Counted	Abnormal Cells (%)	
Negative Control	150	10.0	169	12.4	11.2
10 μg/ml	150	9.3	104	7.7	8.5
100 μg/ml	98	44.9	65	6.2	25.6
1000 μg/ml	77	11.7	30	56.7	34.2
0.05 μg/ml TEM	18	33.0	37	81.1	57.1

DOMINANT LETHAL GENE-RAT

Table 8

ORAL LD_{50}

Compound: Calcium Carrogeenan
FDA NO: 71-5

Single Dose[a]	> 10 g/kg
Multiple Dose[b]	> 5 g/kg

[a] Ten male, Sprague-Dawley rats, weighing 200-250 g each, were fasted overnight and then administered orally specified amounts of the candidate compound suspended in corn oil.

[b] Ten male, nonfasted Sprague-Dawley rats, weighing 200-250 g each, were administered orally specified amounts of the candidate compound suspended in corn oil.

DOMINANT LETHAL GENE-RAT

Table 9

AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	202/16=12.6	183/15=12.2	226/17=13.3	183/15=12.2	203/16=12.7
2	199/16=12.4	124/15= 8.3**	212/18=11.8	180/15=12.0	188/17=11.1
3	224/17=13.2	179/18-9.9**	162/13=12.5	215/17=12.6	231/18=12.8
4	228/18=12.7	74/15=4.9**	236/20=11.8	206/18=11.4	185/16=11.6
5	233/20=11.7	186/17=10.9	237/20=11.9	214/16=13.4*I	267/20=13.4*I
6	234/20=11.7	164/15=10.9	212/18=11.8	220/19=11.6	230/19=12.1
7	223/20=11.2	175/16=10.9	203/17=11.9	216/18=12.0	229/20=11.5
8	228/20=11.4	185/17=10.9	227/19=11.9	230/20=11.5	238/20=11.9
Subacute-Multiple Dose					
1	210/16=13.1		190/15-12.7	170/16=10.6*	164/15=10.9*
2	221/17=13.0		223/16=13.9	196/15=13.1	224/19=11.8
3	217/17=12.8		176/15=11.7	220/19=11.6	220/19-11.6
4	222/17=13.1		213/16=13.3	249/20=12.5	243/20=12.2
5	246/20=12.3		250/20=12.5	223/18=12.4	219/19=11.5
6	230/20=11.5		169/16=10.6	204/16=12.8	237/20=11.9
7	215/18=11.9		224/20=11.2	208/19=10.9	210/20=10.5

* Significant at P < 0.05
** Significant at P < 0.01
I Increase over control

DOMINANT LETHAL GENE-RAT

Table 10

AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	15/16=0.94	70/15=4.67**	22/17=1.29	13/15=0.87	16/16=1.00
2	9/16=0.56	103/15=6.87**	13/18=0.72	13/15=0.87	22/17=1.29
3	11/17=0.65	138/18=7.67**	10/13=0.76	15/17=0.88	18/18=1.00
4	16/18=0.89	68/15=4.53**	30/20=1.50	21/18=1.17	29/16=1.81
5	12/20=0.60	70/17=4.12**	23/20=1.15	24/16=1.50	9/20=0.45
6	6/20=0.30	25/15=1.67**	10/18=0.56	13/19=0.68	16/19=0.84
7	10/20=0.50	12/16=0.75	28/17=1.65*	8/18=0.44	8/20=0.40
8	10/20=0.50	15/17=0.88	23/19=1.21	32/20=1.60*	16/20=0.80
Subacute-Multiple Dose					
1	18/16=1.13		11/15=0.73	11/16=0.69	9/15=0.60
2	15/17=0.88		15/16=0.94	11/15=0.73	10/19=0.53
3	23/17=1.35		22/15=1.47	14/19=0.74	25/19=1.32
4	9/17=0.53		5/16=0.31	16/20=0.80	18/20=0.92
5	11/20=0.55		11/20=0.55	13/18=0.72	13/19=0.68
6	14/20=0.70		6/16=0.38	7/16=0.44	4/20=0.20
7	25/18=1.39		14/20=0.70	8/19=0.42*D	14/20=0.70

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

DOMINANT LETHAL GENE-RAT

Table 11

DEAD IMPLANTS/TOTAL IMPLANTS

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	15/202=0.07	70/183=0.38**	22/226=0.10	13/183=0.07	16/203=0.08
2	9/199=0.05	103/124=0.83**	13/212=0.06	13/180=0.07	22/188=0.12
3	11/224=0.05	138/179=0.77**	10/162=0.06	15/215=0.07	18/231=0.08
4	16/228=0.07	68/74=0.92**	30/236=0.13*	21/206=0.10	29/185=0.16
5	12/233=0.05	70/186=0.38**	23/237=0.10	24/124=0.11	9/267=0.03
6	6/234=0.03	25/164=0.15**	10/212=0.05	13/220=0.06	16/230=0.07
7	10/223=0.04	12/175=0.07	28/203=0.14*	8/216=0.04	8/229=0.03
8	10/228=0.04	15/185=0.08	23/227=0.10	32/230=0.14*	16/238=0.07
Subacute-Multiple Dose					
1	18/210=0.09		11/190=0.06	11/170=0.06	9/164=0.05
2	15/221=0.07		15/223=0.07	11/196=0.06	10/224=0.04
3	23/217=0.11		22/176=0.13	14/220=0.06	25/220=0.11
4	9/222=0.04		5/213=0.02	16/249=0.06	18/243=0.07
5	11/246=0.04		11/250=0.04	13/223=0.06	13/219=0.06
6	14/230=0.06		6/169=0.04	7/204=0.03	4/237=0.02
7	25/215=0.12		14/224=0.06	8/208=0.04*D	14/210=0.07

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

DOMINANT LETHAL GENE-RAT

Table 12

AVERAGE COPORA LUTEA PER PREGNANT FEMALE

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	222/16=13.9	229/15=15.3	243/17=14.3	209/15=13.9	222/16=13.9
2	213/16=13.3	188/15=12.5	238/18=13.2	187/15=12.5	212/17=12.5
3	236/17=13.9	279/18=15.5	175/13=13.5	252/17=14.8	252/18=14.0
4	246/18=13.7	192/15=12.8	271/20=13.6	230/18=12.8	220/16=13.8
5	256/20=12.8	241/17=14.2**I	266/20=13.3	221/16=13.8	281/20=14.1**I
6	245/20=12.3	189/15=12.6	224/18=12.4	242/19=12.7	245/19=12.9
7	249/20=12.5	204/16=12.8	229/17=13.5	237/18=13.2	256/20=12.8
8	239/20=12.0	205/17=12.1	234/19=12.3	246/20=12.3	259/20=13.0*I
Subacute-Multiple Dose					
1	222/16=13.9		210/15=14.0	212/16=13.3	199/15=13.3
2	230/17=13.5		232/16=14.5	213/15=14.2	244/19=12.8
3	241/17=14.2		207/15=13.8	245/19=12.9*	259/19=13.6
4	237/17=13.9		223/16=13.9	266/20=13.3	276/20=13.8
5	262/20=13.1		266/20=13.3	238/18=13.2	255/19=13.4
6	268/20=13.4		203/16=12.7	215/16=13.4	260/20=13.0
7	220/18=12.2		248/20=12.4	231/19=12.2	253/20=12.7

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

July 1972

Compound Report No. 2 (Addendum)

STUDY OF MUTAGENIC EFFECTS OF CALCIUM CARROGEENAN (FDA No. 71-5)

Prepared for:

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

Contract No. FDA 71-267

SRI Project LSU-1348

Submitted by:

G. W. Newell and W. A. Maxwell

Approved:

W. A. Skinner, Executive Director
Life Sciences Division

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 is an addendum to the first compound report on tests conducted on calcium carrogeenan (FDA 71-5).

The initial results reported in Compound Report No. 2 in March 1972 showed that calcium carrogeenan had an adverse effect when human embryonic lung cells (WI-38) grown in tissue culture were exposed to this compound. It was also indicated that the slides for the two highest concentrations tested may have been reversed for one of the two individuals evaluating them. Because of the positive response, SRI has repeated the tests on calcium carrogeenan and is reporting the results here.

SUMMARY

Calcium carrogeenan (71-5) has a severe adverse effect on human embryonic lung cells (WI-38) grown in culture. At 24 hours, a possible dose response is exhibited as reported in the original report (March 1972). At 42 hours, extensive chromosome damage is exhibited irrespective of doses tested.

RESULTS AND DISCUSSION

The results of the repeated in vitro tests of Compound 71-5 (calcium carrogeenan) appear in Table 1. The compound exhibits a severe adverse effect on anaphase cells obtained from WI-38 cells grown in culture. At all concentrations, the percentage of cells with acentric fragments or scored as "other" exceeded even the level of the positive controls. At the lowest and highest doses, a sharp increase in the number of multipolar cells was also noted. The percentage of bridges observed was not affected by the compound, indicating that it causes extensive damage to the chromosomes. The positive control cells were exposed to TEM for 24 hours. Cells exposed to Compound 71-5 were exposed for 42 hours. Cells exposed to TEM for periods longer than 24 hours show a very low percentage of anaphase figures.

In the previous report, a possible dose response was indicated when the cells were exposed to the test compound for 24 hours. However, when the cells are treated for 42 hours, anaphase cells at all dose levels are severely affected, and no dose response is seen.

Table 1

CYTOGENETIC ASSAY
ANAPHASE SUMMARY SHEET
Compound 71-5
(Calcium carrogeenan)

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	42	112	3.6	5.4	1.8	0	0	10.7
10 μg/ml	42	144	61.8	4.2	18.1	41.0	36.1	86.1
100 μg/ml	42	118	72.9	4.2	2.5	67.8	55.9	88.1
1000 μg/ml	42	116	55.2	5.2	10.3	69.8	44.8	91.4
TEM @ 0.05 μg/ml	24	55	34.5	9.1	7.3	41.8	25.5	65.5

* Time of harvest after treatment (hours)

August 1972

Compound Report No. 2 (Statistical Addendum--Dominant Lethal Gene Data)

STUDY OF MUTAGENIC EFFECTS OF CALCIUM CARROGEENAN (FDA No. 71-5)

Prepared for:

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

Contract No. FDA 71-267

SRI Project LSU-1348

Submitted by:

G. W. Newell and W. A. Maxwell

Approved:

W. A. Skinner

W. A. Skinner, Executive Director
Life Sciences Division

STATISTICAL SUMMARY

This addendum presents statistical treatment of the dominant lethal gene data for Calcium Carrogeenan, using the procedural outline of Miss Janet Springer, FDA. A description of the statistical procedures and an explanation of how the computations are accomplished were presented as Appendix A of Compound Report No. 8, Guar Gum (71-16). Summary tables of experimental data also are included for reference.

A review of these statistical evaluations continues to support the conclusions presented in the main report: i.e., Calcium Carrogeenan is not a mutagenic substance by the dominant lethal gene test.

DOMINANT LETHAL GENE-RAT

Table 9

AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	202/16=12.6	183/15=12.2	226/17=13.3	183/15=12.2	203/16=12.7
2	199/16=12.4	124/15= 8.3**	212/18=11.8	180/15=12.0	188/17=11.1
3	224/17=13.2	179/18=9.9*	162/13=12.5	215/17=12.6	231/18=12.8
4	228/18=12.7	74/15=4.9**	236/20=11.8	206/18=11.4	185/16=11.6
5	233/20=11.7	186/17=10.9	237/20=11.9	214/16=13.4	267/20=13.4*I
6	234/20=11.7	164/15=10.9	212/18=11.8	220/19=11.6	230/19=12.1
7	223/20=11.2	175/16=10.9	203/17=11.9	216/18=12.0	229/20=11.5
8	228/20=11.4	185/17=10.9	227/19=11.9	230/20=11.5	238/20=11.9
Subacute-Multiple Dose					
1	210/16=13.1		190/15=12.7	170/16=10.6*	164/15=10.9*
2	221/17=13.0		223/16=13.9	196/15=13.1	224/19=11.8
3	217/17=12.8		176/15=11.7	220/19=11.6	220/19=11.6
4	222/17=13.1		213/16=13.3	249/20=12.5	243/20=12.2
5	246/20=12.3		250/20=12.5	223/18=12.4	219/19=11.5
6	230/20=11.5		169/16=10.6	204/16=12.8	237/20=11.9
7	215/18=11.9		224/20=11.2	208/19=10.9	210/20=10.5

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

DOMINANT LETHAL GENE-RAT

Table 10

AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	15/16=0.94	70/15=4.67**	22/17=1.29	13/15=0.87	16/16=1.00
2	9/16=0.56	103/15=6.87**	13/18=0.72	13/15=0.87	22/17=1.29
3	11/17=0.65	138/18=7.67**	10/13=0.76	15/17=0.88	18/18=1.00
4	16/18=0.89	68/15=4.53**	30/20=1.50	21/18=1.17	29/16=1.81
5	12/20=0.60	70/17=4.12**	23/20=1.15	24/16=1.50*	9/20=0.45
6	6/20=0.30	25/15=1.67**	10/18=0.56	13/19=0.68	16/19=0.84
7	10/20=0.50	12/16=0.75	28/17=1.65*	8/18=0.44	8/20=0.40
8	10/20=0.50	15/17=0.88	23/19=1.21	32/20=1.60*	16/20=0.80
Subacute-Multiple Dose					
1	18/16=1.13		11/15=0.73	11/16=0.69	9/15=0.60
2	15/17=0.88		15/16=0.94	11/15=0.73	10/19=0.53
3	23/17=1.35		22/15=1.47	14/19=0.74	25/19=1.32
4	9/17=0.53		5/16=0.31	16/20=0.80	18/20=0.92
5	11/20=0.55		11/20=0.55	13/18=0.72	13/19=0.68
6	14/20=0.70		6/16=0.38	7/16=0.44	4/20=0.20
7	25/18=1.39		14/20=0.70	8/19=0.42*D	14/20=0.70

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

DOMINANT LETHAL GENE-RAT

Table 11

DEAD IMPLANTS/TOTAL IMPLANTS

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	15/202=0.07	70/183=0.38**	22/226=0.10	13/183=0.07	16/203=0.08
2	9/199=0.05	103/124=0.83**	13/212=0.06	13/180=0.07	22/188=0.12
3	11/224=0.05	138/179=0.77**	10/162=0.06	15/215=0.07	18/231=0.08
4	16/228=0.07	68/74=0.92**	30/236=0.13*	21/206=0.10	29/185=0.16
5	12/233=0.05	70/186=0.38**	23/237=0.10	24/124=0.11	9/267=0.03
6	6/234=0.03	25/164=0.15**	10/212=0.05	13/220=0.06	16/230=0.07
7	10/223=0.04	12/175=0.07	28/203=0.14*	8/216=0.04	8/229=0.03
8	10/228=0.04	15/185=0.08	23/227=0.10	32/230=0.14*	16/238=0.07
Subacute-Multiple Dose					
1	18/210=0.09		11/190=0.06	11/170=0.06	9/164=0.05
2	15/221=0.07		15/223=0.07	11/196=0.06	10/224=0.04
3	23/217=0.11		22/176=0.13	14/220=0.06	25/220=0.11
4	9/222=0.04		5/213=0.02	16/249=0.06	18/243=0.07
5	11/246=0.04		11/250=0.04	13/223=0.06	13/219=0.06
6	14/230=0.06		6/169=0.04	7/204=0.03	4/237=0.02*D
7	25/215=0.12		14/224=0.06	8/208=0.04	14/210=0.07

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

DOMINANT LETHAL GENE-RAT

Table 12

AVERAGE COPORA LUTEA PER PREGNANT FEMALE

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71- 5 (5 g/kg)
Acute-Single Dose					
1	222/16=13.9	229/15=15.3	243/17=14.3	209/15=13.9	222/16=13.9
2	213/16=13.3	188/15=12.5	238/18=13.2	187/15=12.5	212/17=12.5
3	236/17=13.9	279/18=15.5	175/13=13.5	252/17=14.8	252/18=14.0
4	246/18=13.7	192/15=12.8	271/20=13.6	230/18=12.8	220/16=13.8
5	256/20=12.8	241 17=14.2**I	266/20=13.3	221/16=13.8	281/20=14.1**I
6	245/20=12.3	189/15=12.6	224/18=12.4	242/19=12.7	245/19=12.9
7	249/20=12.5	204/16=12.8	229/17=13.5	237/18=13.2	256/20=12.8
8	239/20=12.0	205/17=12.1	234/19=12.3	246/20=12.3	259/20=13.0*I
Subacute-Multiple Dose					
1	222/16=13.9		210/15=14.0	212/16=13.3	199/15=13.3
2	230/17=13.5		232/16=14.5	213/15=14.2	244/19=12.8
3	241/17=14.2		207/15=13.8	245/19=12.9*	259/19=13.6
4	237/17=13.9		223/16=13.9	266/20=13.3	276/20=13.8
5	262/20=13.1		266/20=13.3	238/18=13.2	255/19=13.4
6	268/20=13.4		203/16=12.7	215/16=13.4	260/20=13.0
7	220/18=12.2		248/20=12.4	231/19=12.2	253/20=12.7

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

DOMINANT LETHAL GENE-RAT

Table 13

AVERAGE PREIMPLANTATION LOSS PER PREGNANT FEMALE

Summary

Compound: Calcium Carrogeenan
FDA No: 71-5

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-5 (30 mg/kg)	71-5 (2.5 g/kg)	71-5 (5 g/kg)
Acute-Single Dose					
1	20/16=1.25	46/15=3.07	17/17=1.00	26/15=1.73	19/16=1.19
2	14/16=0.88	64/15=4.27**	26/18=1.44	7/15=0.47	24/17=1.41
3	12/17=0.71	100/18=5.56**	13/13=1.00	37/17=2.18	21/18=1.17
4	18/18=1.00	118/15=7.87**	35/20=1.75	24/18=1.33	35/16=2.19
5	23/20=1.15	55/17=3.24	29/20=1.45	7/16=0.44	14/20=0.70
6	11/20=0.55	25/15=1.67	12/18=0.66	22/19=1.16	15/19=0.79
7	26/20=1.30	29/16=1.81	26/17=1.53	21/18=1.17	27/20=1.35
8	11/20=0.55	20/17=1.18	7/19=0.37	16/20=0.80	21/20=1.05
Subacute-Multiple Dose					
1	12/16=0.75		20/15=1.33	42/16=2.63*	35/15=2.33
2	9/17=0.53		9/16=0.56	17/15=1.13	20/19=1.05
3	24/17=1.41		31/15=2.06	25/19=1.32	39/19=2.05
4	15/17=0.88		10/16=0.63	17/20=0.85	33/20=1.65
5	16/20=0.80		16/20=0.85	15/18=0.83	36/19=1.89
6	38/20=1.90		34/16=2.13	11/16=0.69	23/20=1.15
7	5/18=0.28		24/20=1.20	23/19=1.21	43/20=2.15*

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

Raw Data and Statistical Analyses

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DOMINANT LETHAL GENE STUDY OF COMPOUND 71-5 CALCIUM CARRAGEENAN

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
CNTRL1	1	S	-0.0000	1	1	Y	6	5	0	0	1	0	7	5
CNTRL1	1	S	-0.0000	1	2	N	0	0	0	0	0	0	0	0
CNTRL1	1	S	-0.0000	2	3	Y	4	6	0	0	1	1	5	7
CNTRL1	1	S	-0.0000	2	4	Y	11	6	0	0	0	0	13	13
CNTRL1	1	S	-0.0000	3	5	Y	4	8	0	0	1	0	5	8
CNTRL1	1	S	-0.0000	3	6	Y	7	8	0	0	0	1	7	8
CNTRL1	1	S	-0.0000	4	7	Y	7	6	0	0	0	0	8	6
CNTRL1	1	S	-0.0000	4	8	Y	7	5	0	0	0	0	8	5
CNTRL1	1	S	-0.0000	5	9	Y	6	7	0	0	2	0	6	8
CNTRL1	1	S	-0.0000	5	10	N	0	0	0	0	0	0	0	0
CNTRL1	1	S	-0.0000	6	11	N	0	0	0	0	0	0	0	0
CNTRL1	1	S	-0.0000	6	12	Y	6	8	0	0	0	1	6	8
CNTRL1	1	S	-0.0000	7	13	Y	4	9	0	0	1	0	4	9
CNTRL1	1	S	-0.0000	7	14	N	0	0	0	0	0	0	0	0
CNTRL1	1	S	-0.0000	8	15	Y	8	4	0	0	0	0	8	5
CNTRL1	1	S	-0.0000	8	16	Y	7	8	0	0	0	0	7	8
CNTRL1	1	S	-0.0000	9	17	Y	8	4	0	0	2	0	8	4
CNTRL1	1	S	-0.0000	9	18	Y	4	7	0	0	1	3	4	9
CNTRL1	1	S	-0.0000	10	19	Y	4	6	0	0	0	0	4	6
CNTRL1	1	S	-0.0000	10	20	Y	4	8	0	0	0	0	4	9
71-5	1	S	.0300	21	41	Y	5	8	0	0	0	5	5	8
71-5	1	S	.0300	21	42	Y	8	2	0	0	0	0	10	2
71-5	1	S	.0300	22	43	Y	6	7	0	0	0	0	5	8
71-5	1	S	.0300	22	44	Y	8	7	1	0	0	0	9	7
71-5	1	S	.0300	23	45	Y	5	7	0	0	1	0	6	7
71-5	1	S	.0300	23	46	Y	3	9	0	0	1	2	3	10
71-5	1	S	.0300	24	47	Y	4	8	0	0	1	0	4	8
71-5	1	S	.0300	24	48	Y	3	11	0	0	0	0	3	11
71-5	1	S	.0300	25	49	Y	9	6	0	0	1	0	9	6
71-5	1	S	.0300	25	50	N	0	0	0	0	0	0	0	0
71-5	1	S	.0300	26	51	Y	6	2	0	0	1	0	7	6
71-5	1	S	.0300	26	52	N	0	0	0	0	0	0	0	0
71-5	1	S	.0300	27	53	Y	6	9	0	0	0	0	6	10
71-5	1	S	.0300	27	54	Y	10	6	0	0	0	0	10	6
71-5	1	S	.0300	28	55	Y	10	2	0	0	0	1	10	2
71-5	1	S	.0300	28	56	Y	5	9	0	0	0	0	5	13
71-5	1	S	.0300	29	57	N	0	0	0	0	0	0	0	0
71-5	1	S	.0300	29	58	Y	6	8	0	0	0	3	6	9
71-5	1	S	.0300	30	59	Y	6	8	0	0	0	0	7	8
71-5	1	S	.0300	30	60	Y	8	9	0	0	3	2	8	9

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-5 CALCIUM CARRAGEENAN

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
71-5	1	S	2.5000	31	61	Y	7	5	0	0	0	0	7	6
71-5	1	S	2.5000	31	62	Y	3	9	0	0	0	4	3	9
71-5	1	S	2.5000	32	63	Y	4	9	0	0	0	1	4	10
71-5	1	S	2.5000	32	64	Y	6	6	0	0	1	0	6	6
71-5	1	S	2.5000	33	65	Y	9	6	0	0	0	0	9	7
71-5	1	S	2.5000	33	66	N	0	0	0	0	0	0	0	0
71-5	1	S	2.5000	34	67	N	0	0	0	0	0	0	0	0
71-5	1	S	2.5000	34	68	Y	6	4	0	0	0	0	7	6
71-5	1	S	2.5000	35	69	Y	5	8	0	0	0	0	5	8
71-5	1	S	2.5000	35	70	Y	4	7	0	0	0	2	5	8
71-5	1	S	2.5000	36	71	Y	6	8	0	0	1	0	7	10
71-5	1	S	2.5000	36	72	Y	9	5	0	0	1	0	10	5
71-5	1	S	2.5000	37	73	N	0	0	0	0	0	0	0	0
71-5	1	S	2.5000	37	74	Y	6	5	0	0	1	0	7	6
71-5	1	S	2.5000	38	75	Y	10	5	0	0	0	1	10	5
71-5	1	S	2.5000	38	76	Y	6	8	0	0	1	0	6	9
71-5	1	S	2.5000	39	77	Y	5	9	0	0	0	0	5	9
71-5	1	S	2.5000	39	78	N	0	0	0	0	0	0	0	0
71-5	1	S	2.5000	40	79	Y	3	0	0	0	0	0	3	11
71-5	1	S	2.5000	40	80	N	-0	-0	-0	-0	-0	-0	-0	-0
71-5	1	S	5.0000	41	81	Y	11	2	0	0	0	0	11	2
71-5	1	S	5.0000	41	82	Y	9	5	0	0	1	1	9	5
71-5	1	S	5.0000	42	83	N	0	0	0	0	0	0	0	0
71-5	1	S	5.0000	42	84	N	0	0	0	0	0	0	0	0
71-5	1	S	5.0000	43	85	Y	3	10	0	0	0	0	3	11
71-5	1	S	5.0000	43	86	Y	8	6	0	0	0	0	8	6
71-5	1	S	5.0000	44	87	Y	5	6	0	0	0	1	6	6
71-5	1	S	5.0000	44	88	Y	7	8	0	0	1	0	6	11
71-5	1	S	5.0000	45	89	Y	11	4	0	0	2	0	11	4
71-5	1	S	5.0000	45	90	Y	10	5	0	0	0	0	10	5
71-5	1	S	5.0000	46	91	N	0	0	0	0	0	0	0	0
71-5	1	S	5.0000	46	92	Y	10	3	0	0	1	0	10	3
71-5	1	S	5.0000	47	93	Y	11	5	0	0	2	1	11	6
71-5	1	S	5.0000	47	94	Y	6	5	0	0	0	0	9	6
71-5	1	S	5.0000	48	95	N	0	0	0	0	0	0	0	0
71-5	1	S	5.0000	48	96	Y	8	[illegible]	0	0	2	0	8	5
71-5	1	S	5.0000	49	97	Y	6	5	0	0	1	1	6	5
71-5	1	S	5.0000	49	98	Y	6	8	0	0	0	0	6	9
71-5	1	S	5.0000	50	99	Y	2	0	1	0	0	0	2	9
71-5	1	S	5.0000	50	100	Y	7	6	0	0	1	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
TEM	1	S	.0002	11	21	Y	7	7	0	0	3	5	7	7
TEM	1	S	.0002	11	22	Y	4	8	0	0	0	2	5	9
TEM	1	S	.0002	12	23	Y	6	5	0	0	3	0	6	6
TEM	1	S	.0002	12	24	Y	3	6	1	0	1	2	4	7
TEM	1	S	.0002	13	25	N	0	0	0	0	0	0	0	0
TEM	1	S	.0002	13	26	Y	1	0	1	0	0	0	9	10
TEM	1	S	.0002	14	27	Y	3	9	0	0	0	3	3	10
TEM	1	S	.0002	14	28	N	0	0	0	0	0	0	0	0
TEM	1	S	.0002	15	29	N	0	0	0	0	0	0	0	0
TEM	1	S	.0002	15	30	Y	7	3	0	0	1	2	7	5
TEM	1	S	.0002	16	31	N	0	0	0	0	0	0	0	0
TEM	1	S	.0002	16	32	Y	5	10	0	0	1	4	13	10
TEM	1	S	.0002	17	33	Y	6	8	0	0	3	4	6	9
TEM	1	S	.0002	17	34	Y	6	9	0	0	2	4	8	13
TEM	1	S	.0002	18	35	Y	7	7	0	0	1	1	7	9
TEM	1	S	.0002	18	36	Y	8	6	0	0	3	5	9	6
TEM	1	S	.0002	19	37	N	0	0	0	0	0	0	0	0
TEM	1	S	.0002	19	38	Y	7	6	0	0	0	0	7	6
TEM	1	S	.0002	20	39	Y	4	10	0	0	2	5	4	11
TEM	1	S	.0002	20	40	Y	9	6	0	0	6	5	10	6
CNTRL1	1	M	-0.0000	1	1	Y	7	5	0	0	0	1	8	5
CNTRL1	1	M	-0.0000	1	2	N	0	0	0	0	0	0	0	0
CNTRL1	1	M	-0.0000	2	3	Y	5	9	0	0	0	1	6	9
CNTRL1	1	M	-0.0000	2	4	Y	8	5	0	0	0	0	8	6
CNTRL1	1	M	-0.0000	3	5	Y	4	7	0	0	0	0	6	8
CNTRL1	1	M	-0.0000	3	6	Y	6	9	0	0	4	3	6	9
CNTRL1	1	M	-0.0000	4	7	Y	9	6	0	0	1	0	9	6
CNTRL1	1	M	-0.0000	4	8	Y	4	9	0	0	1	1	5	9
CNTRL1	1	M	-0.0000	5	9	Y	8	6	0	0	2	1	9	6
CNTRL1	1	M	-0.0000	5	10	Y	3	9	0	0	0	1	3	9
CNTRL1	1	M	-0.0000	6	11	Y	8	4	0	0	0	1	8	5
CNTRL1	1	M	-0.0000	6	12	Y	8	6	0	0	0	0	8	6
CNTRL1	1	M	-0.0000	7	13	N	0	0	0	0	0	0	0	0
CNTRL1	1	M	-0.0000	7	14	N	0	0	0	0	0	0	0	0
CNTRL1	1	M	-0.0000	8	15	Y	5	10	0	0	0	0	5	10
CNTRL1	1	M	-0.0000	8	16	N	0	0	0	0	0	0	0	0
CNTRL1	1	M	-0.0000	9	17	Y	10	3	0	0	0	0	10	3
CNTRL1	1	M	-0.0000	9	18	Y	8	5	0	0	0	0	8	6
CNTRL1	1	M	-0.0000	10	19	Y	3	8	0	0	0	0	3	9
CNTRL1	1	M	-0.0000	10	20	Y	5	8	0	0	0	1	6	8

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-5 CALCIUM CARRAGEENAN

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

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-5 CALCIUM CARRAGEENAN

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
71-5	1	M	5.0000	31	61	Y	6	8	0	0	0	0	6	8
71-5	1	M	5.0000	31	62	Y	5	6	0	0	0	0	11	9
71-5	1	M	5.0000	32	63	N	0	0	0	0	0	0	0	0
71-5	1	M	5.0[illegible]	32	64	Y	5	8	0	0	0	0	5	[illegible]
71-5	1	M	5.[illegible]	33	65	Y	7	6	0	0	0	0	7	[illegible]
71-5	1	M	5.0000	33	66	Y	6	6	0	0	0	1	[illegible]	6
71-5	1	M	5.0000	34	67	Y	7	8	0	0	1	1	[illegible]	8
71-5	1	M	5.0000	34	68	Y	0	6	0	0	0	1	[illegible]	6
71-5	1	M	5.0000	35	69	Y	5	4	0	0	0	0	[illegible]	5
71-5	1	M	5.0000	35	70	Y	8	3	0	0	0	0	10	3
71-5	1	M	5.0000	36	71	Y	7	7	0	0	0	1	7	8
71-5	1	M	5.0000	36	72	Y	2	7	0	0	0	0	3	8
71-5	1	M	5.0000	37	73	Y	4	7	0	0	1	0	5	7
71-5	1	M	5.0000	37	74	Y	6	6	0	0	0	3	6	6
71-5	1	M	5.0000	38	75	N	0	0	0	0	0	0	0	0
71-5	1	M	5.0000	38	76	N	0	0	0	0	0	0	0	0
71-5	1	M	5.0000	39	77	N	0	0	0	0	0	0	0	0
71-5	1	M	5.0000	39	78	Y	0	1	0	0	0	0	2	10
71-5	1	M	5.0000	40	79	N	0	0	0	0	0	0	0	0
71-5	1	M	5.0000	40	80	Y	7	6	0	0	0	0	7	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-5 CALCIUM CARRAGEENAN

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
CNTRL1	2	S	-0.0000	1	1	Y	3	7	0	0	0	1	4	7
CNTRL1	2	S	-0.0000	1	2	N	0	0	0	0	0	0	0	0
CNTRL1	2	S	-0.0000	2	3	Y	10	2	0	0	0	0	10	2
CNTRL1	2	S	-0.0000	2	4	Y	6	4	0	0	0	0	9	4
CNTRL1	2	S	-0.0000	3	5	N	0	0	0	0	0	0	0	0
CNTRL1	2	S	-0.0000	3	6	Y	6	9	0	0	0	2	6	9
CNTRL1	2	S	-0.0000	4	7	Y	9	5	0	0	1	0	9	6
CNTRL1	2	S	-0.0000	4	8	N	0	0	0	0	0	0	0	0
CNTRL1	2	S	-0.0000	5	9	Y	3	10	0	0	0	0	3	10
CNTRL1	2	S	-0.0000	5	10	Y	7	5	0	0	1	1	8	6
CNTRL1	2	S	-0.0000	6	11	Y	6	7	0	0	1	0	6	9
CNTRL1	2	S	-0.0000	6	12	Y	3	10	0	0	0	0	3	10
CNTRL1	2	S	-0.0000	7	13	Y	5	6	0	0	0	0	5	7
CNTRL1	2	S	-0.0000	7	14	Y	8	3	0	0	0	0	8	3
CNTRL1	2	S	-0.0000	8	15	Y	7	5	0	0	0	1	7	6
CNTRL1	2	S	-0.0000	8	16	Y	8	6	0	0	0	0	9	6
CNTRL1	2	S	-0.0000	9	17	Y	7	8	0	0	0	0	7	8
CNTRL1	2	S	-0.0000	9	18	N	0	0	0	0	0	0	0	0
CNTRL1	2	S	-0.0000	10	19	Y	3	9	0	0	0	0	3	10
CNTRL1	2	S	-0.0000	10	20	Y	5	7	0	0	0	1	6	7
71-5	2	S	.0300	21	41	Y	6	8	0	0	0	0	6	8
71-5	2	S	.0300	21	42	Y	5	7	0	0	0	0	7	7
71-5	2	S	.0300	22	43	Y	6	4	0	0	1	0	6	4
71-5	2	S	.0300	22	44	Y	6	8	0	0	0	1	6	8
71-5	2	S	.0300	23	45	Y	0	10	0	0	0	2	4	10
71-5	2	S	.0300	23	46	Y	5	4	0	0	0	1	5	5
71-5	2	S	.0300	24	47	Y	4	8	0	0	0	0	5	8
71-5	2	S	.0300	24	48	Y	5	8	0	0	0	0	7	9
71-5	2	S	.0300	25	49	Y	5	6	0	0	0	0	6	10
71-5	2	S	.0300	25	50	N	0	0	0	0	0	0	0	0
71-5	2	S	.0300	26	51	Y	4	4	0	0	0	1	5	4
71-5	2	S	.0300	26	52	Y	4	8	0	0	0	0	4	8
71-5	2	S	.0300	27	53	Y	7	5	0	0	0	0	8	5
71-5	2	S	.0300	27	54	Y	5	6	0	0	1	0	6	7
71-5	2	S	.0300	28	55	N	0	0	0	0	0	0	0	0
71-5	2	S	.0300	28	56	Y	3	11	0	0	0	0	4	12
71-5	2	S	.0300	29	57	Y	7	6	0	0	1	0	8	6
71-5	2	S	.0300	29	58	Y	2	11	0	0	0	1	2	11
71-5	2	S	.0300	30	59	Y	12	1	0	0	2	0	13	2
71-5	2	S	.0300	30	60	Y	2	9	0	0	0	2	2	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
71-5	2	S	2.5000	31	61	Y	8	6	0	0	0	0	8	6
71-5	2	S	2.5000	31	62	Y	7	6	0	0	0	0	7	6
71-5	2	S	2.5000	32	63	Y	6	4	0	0	0	0	6	5
71-5	2	S	2.5000	32	64	N	0	0	0	0	0	0	0	0
71-5	2	S	2.5000	33	65	Y	4	7	0	0	0	0	4	7
71-5	2	S	2.5000	33	66	Y	5	8	0	0	0	0	5	8
71-5	2	S	2.5000	34	67	Y	5	8	0	0	0	2	5	8
71-5	2	S	2.5000	34	68	Y	8	5	0	0	0	0	8	5
71-5	2	S	2.5000	35	69	Y	6	5	0	0	2	1	6	5
71-5	2	S	2.5000	35	70	Y	6	3	0	0	0	0	10	3
71-5	2	S	2.5000	36	71	Y	5	8	0	0	1	2	5	8
71-5	2	S	2.5000	36	72	Y	5	6	0	0	2	1	5	6
71-5	2	S	2.5000	37	73	Y	7	4	0	0	0	0	7	5
71-5	2	S	2.5000	37	74	Y	6	6	0	0	0	0	6	6
71-5	2	S	2.5000	38	75	N	0	0	0	0	0	0	0	0
71-5	2	S	2.5000	38	76	Y	3	9	0	0	0	1	3	10
71-5	2	S	2.5000	39	77	N	0	0	0	0	0	0	0	0
71-5	2	S	2.5000	39	78	N	0	0	0	0	0	0	0	0
71-5	2	S	2.5000	40	79	Y	7	7	0	0	0	1	7	7
71-5	2	S	2.5000	40	80	N	0	0	0	0	0	0	0	0
71-5	2	S	5.0000	41	81	Y	5	8	0	0	1	0	7	9
71-5	2	S	5.0000	41	82	Y	7	4	0	0	0	0	7	4
71-5	2	S	5.0000	42	83	Y	7	6	0	0	2	3	7	6
71-5	2	S	5.0000	42	84	Y	6	7	0	0	0	0	6	7
71-5	2	S	5.0000	43	85	Y	4	3	0	0	1	1	8	4
71-5	2	S	5.0000	43	86	Y	5	8	0	0	0	0	5	8
71-5	2	S	5.0000	44	87	Y	6	8	0	0	2	0	6	8
71-5	2	S	5.0000	44	88	Y	4	7	0	0	1	0	4	8
71-5	2	S	5.0000	45	89	Y	2	0	0	0	2	0	4	7
71-5	2	S	5.0000	45	90	Y	3	8	0	0	0	0	3	9
71-5	2	S	5.0000	46	91	Y	4	6	0	0	0	0	4	6
71-5	2	S	5.0000	46	92	Y	5	5	0	0	0	1	5	5
71-5	2	S	5.0000	47	93	Y	7	3	0	0	0	1	7	3
71-5	2	S	5.0000	47	94	N	0	0	0	0	0	0	0	0
71-5	2	S	5.0000	48	95	Y	5	8	0	0	1	2	5	8
71-5	2	S	5.0000	48	96	Y	2	11	0	0	1	3	2	11
71-5	2	S	5.0000	49	97	Y	3	7	0	0	0	0	7	8
71-5	2	S	5.0000	49	98	Y	5	9	0	0	0	0	5	9
71-5	2	S	5.0000	50	99	N	0	0	0	0	0	0	0	0
71-5	2	S	5.0000	50	100	N	-0	-0	-0	-0	-0	-0	-0	-0

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM	2	S	.0002	11	21	Y	5	6	0	0	2	2	5	7
TEM	2	S	.0002	11	22	Y	3	3	0	0	3	3	7	4
TEM	2	S	.0002	12	23	Y	3	4	0	0	3	4	8	6
TEM	2	S	.0002	12	24	Y	5	6	0	0	1	4	5	8
TEM	2	S	.0002	13	25	Y	6	7	0	0	5	6	6	9
TEM	2	S	.0002	13	26	N	0	0	0	0	0	0	0	0
TEM	2	S	.0002	14	27	N	0	0	0	0	0	0	0	0
TEM	2	S	.0002	14	28	Y	4	6	0	0	3	6	5	7
TEM	2	S	.0002	15	29	Y	4	[illegible]	0	0	3	2	6	5
TEM	2	S	.0002	15	30	N	0	0	0	0	0	0	0	0
TEM	2	S	.0002	16	31	Y	1	2	0	0	1	1	7	11
TEM	2	S	.0002	16	32		2	5	0	0	2	5	3	11
TEM	2	S	.0002	17	33	[illegible]	3	5	0	0	3	5	4	7
TEM	2	S	.0002	17	34	Y	3	2	0	0	3	2	4	7
TEM	2	S	.0002	18	35	Y	7	4	0	0	6	4	7	5
TEM	2	S	.0002	18	36	Y	5	7	0	0	5	7	5	9
TEM	2	S	.0002	19	37	Y	3	6	0	0	3	6	3	7
TEM	2	S	.0002	19	38	N	0	0	0	0	0	0	0	0
TEM	2	S	.0002	20	39	N	0	0	0	0	0	0	0	0
TEM	2	S	.0002	20	40	Y	1	2	0	0	1	2	4	7
CNTRL1	2	M	-0.0000	1	1	Y	4	11	0	0	0	0	4	11
CNTRL1	2	M	-0.0000	1	2	Y	9	4	0	0	0	0	10	4
CNTRL1	2	M	-0.0000	2	3	Y	7	5	0	0	3	0	9	5
CNTRL1	2	M	-0.0000	2	4	Y	3	9	0	0	0	0	3	9
CNTRL1	2	M	-0.0000	3	5	Y	7	5	3	0	0	2	7	5
CNTRL1	2	M	-0.0000	3	6	Y	4	6	0	0	0	0	4	7
CNTRL1	2	M	-0.0000	4	7	N	0	0	0	0	0	0	0	0
CNTRL1	2	M	-0.0000	4	8	Y	3	10	0	1	0	0	3	11
CNTRL1	2	M	-0.0000	5	9	Y	5	10	0	1	0	0	6	10
CNTRL1	2	M	-0.0000	5	10	N	0	0	0	0	0	0	0	0
CNTRL1	2	M	-0.0000	6	11	Y	3	9	0	1	0	0	3	10
CNTRL1	2	M	-0.0000	6	12	Y	9	6	0	1	0	0	9	6
CNTRL1	2	M	-0.0000	7	13	N	0	0	0	0	0	0	0	0
CNTRL1	2	M	-0.0000	7	14	Y	8	4	0	0	0	0	8	4
CNTRL1	2	M	-0.0000	8	15	Y	3	12	0	0	0	1	3	12
CNTRL1	2	M	-0.0000	8	16	Y	7	5	0	0	0	0	8	5
CNTRL1	2	M	-0.0000	9	17	Y	10	4	0	0	0	0	10	4
CNTRL1	2	M	-0.0000	9	18	Y	4	10	0	0	0	0	4	10
CNTRL1	2	M	-0.0000	10	19	Y	7	5	0	0	1	0	7	6
CNTRL1	2	M	-0.0000	10	20	Y	6	7	0	1	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
71-5	2	M	.0300	11	21	N	0	0	0	0	0	0	0	0
71-5	2	M	.0300	11	22	Y	8	5	0	0	0	0	8	5
71-5	2	M	.0300	12	23	Y	6	7	0	0	0	0	6	7
71-5	2	M	.0300	12	24	Y	6	8	0	1	1	0	6	8
71-5	2	M	.0300	13	25	Y	10	6	0	0	1	0	10	6
71-5	2	M	.0300	13	26	Y	2	12	0	0	0	1	2	12
71-5	2	M	.0300	14	27	Y	10	6	0	0	1	1	10	7
71-5	2	M	.0300	14	28	Y	7	9	0	1	0	0	7	10
71-5	2	M	.0300	15	29	N	0	0	0	0	0	0	0	0
71-5	2	M	.0300	15	30	N	0	0	0	0	0	0	0	0
71-5	2	M	.0300	16	31	Y	6	4	0	1	0	0	8	4
71-5	2	M	.0300	16	32	N	0	0	0	0	0	0	0	0
71-5	2	M	.0300	17	33	Y	8	7	0	0	0	0	8	7
71-5	2	M	.0300	17	34	Y	8	9	0	0	1	2	8	9
71-5	2	M	.0300	18	35	Y	5	7	0	0	0	0	5	8
71-5	2	M	.0300	18	36	Y	7	5	1	1	0	0	7	5
71-5	2	M	.0300	19	37	Y	6	7	0	0	0	0	6	7
71-5	2	M	.0300	19	38	Y	7	8	0	0	0	0	7	10
71-5	2	M	.0300	20	39	Y	4	9	1	0	0	1	5	10
71-5	2	M	.0300	20	40	Y	9	5	0	0	0	0	9	5
71-5	2	M	2.5000	21	41	Y	8	9	0	0	0	0	12	9
71-5	2	M	2.5000	21	42	Y	6	4	0	0	0	0	6	4
71-5	2	M	2.5000	22	43	Y	4	9	0	0	0	0	5	9
71-5	2	M	2.5000	22	44	Y	10	2	0	0	0	0	12	3
71-5	2	M	2.5000	23	45	Y	6	6	0	0	2	1	6	6
71-5	2	M	2.5000	23	46	Y	4	8	1	0	0	0	4	8
71-5	2	M	2.5000	24	47	Y	9	7	0	1	1	0	9	8
71-5	2	M	2.5000	24	48	N	0	0	0	0	0	0	0	0
71-5	2	M	2.5000	25	49	N	0	0	0	0	0	0	0	0
71-5	2	M	2.5000	25	50	N	0	0	0	0	0	0	0	0
71-5	2	M	2.5000	26	51	N	0	0	0	0	0	0	0	0
71-5	2	M	2.5000	26	52	Y	3	9	2	2	0	0	3	9
71-5	2	M	2.5000	27	53	Y	6	6	0	0	0	0	6	6
71-5	2	M	2.5000	27	54	Y	9	4	0	0	0	0	9	4
71-5	2	M	2.5000	28	55	Y	7	8	0	0	1	0	7	8
71-5	2	M	2.5000	28	56	Y	9	4	0	0	0	0	9	4
71-5	2	M	2.5000	29	57	Y	6	6	0	0	0	0	6	6
71-5	2	M	2.5000	29	58	Y	5	8	0	0	0	0	11	9
71-5	2	M	2.5000	30	59	Y	5	9	0	0	0	0	6	9
71-5	2	M	2.5000	30	60	N	0	0	0	0	0	0	0	0

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-5 CALCIUM CARRAGEENAN

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
71-5	2	M	5.0000	31	61	Y	6	7	0	0	0	0	7	7
71-5	2	M	5.0000	31	62	Y	9	4	2	0	0	1	9	5
71-5	2	M	5.0000	32	63	Y	5	5	0	0	0	0	5	5
71-5	2	M	5.0000	32	64	Y	8	6	0	1	0	0	10	6
71-5	2	M	5.0000	33	65	Y	8	8	0	0	0	0	8	8
71-5	2	M	5.0000	33	66	Y	7	5	1	0	0	0	7	5
71-5	2	M	5.0000	34	67	Y	3	8	0	0	0	0	3	9
71-5	2	M	5.0000	34	68	Y	5	6	0	0	0	0	5	6
71-5	2	M	5.0000	35	69	Y	8	4	0	0	0	0	8	4
71-5	2	M	5.0000	35	70	Y	6	2	0	0	0	0	6	5
71-5	2	M	5.0000	36	71	N	0	0	0	0	0	0	0	0
71-5	2	M	5.0000	36	72	Y	6	7	0	0	0	0	6	8
71-5	2	M	5.0000	37	73	Y	3	8	0	0	0	0	6	9
71-5	2	M	5.0000	37	74	Y	0	8	0	0	0	0	4	8
71-5	2	M	5.0000	38	75	Y	4	9	0	0	0	0	4	9
71-5	2	M	5.0000	38	76	Y	5	7	2	0	1	2	5	7
71-5	2	M	5.0000	39	77	Y	8	6	0	0	0	0	8	6
71-5	2	M	5.0000	39	78	Y	7	4	0	0	0	0	7	4
71-5	2	M	5.0000	40	79	Y	5	4	0	0	0	0	5	6
71-5	2	M	5.0000	40	80	Y	7	6	0	0	0	0	7	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL1	3	S	-0.0000	1	1	Y	6	7	0	0	0	0	6	7
CNTRL1	3	S	-0.0000	1	2	Y	4	10	0	0	0	0	4	10
CNTRL1	3	S	-0.0000	2	3	Y	6	2	1	0	0	1	7	7
CNTRL1	3	S	-0.0000	2	4	Y	7	5	0	0	0	0	8	4
CNTRL1	3	S	-0.0000	3	5	Y	6	5	0	0	0	0	7	6
CNTRL1	3	S	-0.0000	3	6	Y	8	7	0	0	0	0	8	7
CNTRL1	3	S	-0.0000	4	7	Y	7	9	0	1	0	0	7	9
CNTRL1	3	S	-0.0000	4	8	Y	10	4	2	0	0	0	10	4
CNTRL1	3	S	-0.0000	5	9	Y	7	5	0	0	0	0	7	5
CNTRL1	3	S	-0.0000	5	10	Y	6	8	1	0	0	0	6	8
CNTRL1	3	S	-0.0000	6	11	N	0	0	0	0	0	0	0	0
CNTRL1	3	S	-0.0000	6	12	Y	5	10	1	1	0	0	5	10
CNTRL1	3	S	-0.0000	7	13	Y	7	5	0	0	0	1	9	5
CNTRL1	3	S	-0.0000	7	14	Y	6	6	0	0	0	0	6	7
CNTRL1	3	S	-0.0000	8	15	Y	9	7	0	0	0	0	9	7
CNTRL1	3	S	-0.0000	8	16	Y	10	4	1	0	0	0	10	4
CNTRL1	3	S	-0.0000	9	17	Y	2	12	0	0	0	0	2	13
CNTRL1	3	S	-0.0000	9	18	N	0	0	0	0	0	0	0	0
CNTRL1	3	S	-0.0000	10	19	N	0	0	0	0	0	0	0	0
CNTRL1	3	S	-0.0000	10	20	Y	6	6	1	0	0	0	6	6
71-5	3	S	.0300	21	41	N	0	0	0	0	0	0	0	0
71-5	3	S	.0300	21	42	Y	6	8	0	0	0	0	6	8
71-5	3	S	.0300	22	43	Y	7	7	0	0	0	0	7	7
71-5	3	S	.0300	22	44	N	0	0	0	0	0	0	0	0
71-5	3	S	.0300	23	45	N	0	0	0	0	0	0	0	0
71-5	3	S	.0300	23	46	Y	7	5	0	0	1	0	8	5
71-5	3	S	.0300	24	47	Y	6	7	0	1	0	0	6	8
71-5	3	S	.0300	24	48	Y	8	4	0	0	0	0	8	4
71-5	3	S	.0300	25	49	Y	5	6	0	0	0	1	6	6
71-5	3	S	.0300	25	50	N	0	0	0	0	0	0	0	0
71-5	3	S	.0300	26	51	N	0	0	0	0	0	0	0	0
71-5	3	S	.0300	26	52	Y	4	3	0	0	0	0	6	7
71-5	3	S	.0300	27	53	Y	6	7	0	0	0	0	6	9
71-5	3	S	.0300	27	54	Y	6	4	0	0	0	0	8	4
71-5	3	S	.0300	28	55	Y	11	4	1	1	1	0	11	4
71-5	3	S	.0300	28	56	N	0	0	0	0	0	0	0	0
71-5	3	S	.0300	29	57	Y	6	8	0	0	1	0	6	8
71-5	3	S	.0300	29	58	Y	9	5	0	0	0	0	9	5
71-5	3	S	.0300	30	59	Y	7	6	1	0	0	2	7	6
71-5	3	S	.0300	30	60	N	0	0	0	0	0	0	0	0

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	3	S	2.5000	31	61	Y	8	6	0	0	2	0	8	6
71-5	3	S	2.5000	31	62	Y	6	7	1	0	0	0	6	8
71-5	3	S	2.5000	32	63	Y	8	4	2	1	1	0	10	4
71-5	3	S	2.5000	32	64	Y	4	9	0	0	0	0	4	9
71-5	3	S	2.5000	33	65	Y	9	7	0	0	2	1	10	7
71-5	3	S	2.5000	33	66	Y	0	11	0	1	0	0	6	11
71-5	3	S	2.5000	34	67	Y	5	12	0	0	0	0	5	12
71-5	3	S	2.5000	34	68	Y	5	10	0	0	0	0	6	11
71-5	3	S	2.5000	35	69	Y	8	7	0	0	0	1	8	7
71-5	3	S	2.5000	35	70	Y	5	8	0	0	0	0	5	10
71-5	3	S	2.5000	36	71	Y	6	5	1	0	0	0	7	6
71-5	3	S	2.5000	36	72	Y	5	7	0	0	0	0	5	7
71-5	3	S	2.5000	37	73	Y	2	9	0	0	0	0	4	11
71-5	3	S	2.5000	37	74	Y	9	7	0	0	0	0	10	7
71-5	3	S	2.5000	38	75	Y	6	7	0	0	0	0	6	7
71-5	3	S	2.5000	38	76	N	0	0	0	0	0	0	0	0
71-5	3	S	2.5000	39	77	Y	4	8	0	1	0	0	5	8
71-5	3	S	2.5000	39	78	N	0	0	0	0	0	0	0	0
71-5	3	S	2.5000	40	79	N	0	0	0	0	0	0	0	0
71-5	3	S	2.5000	40	80	Y	0	1	0	1	0	0	9	7
71-5	3	S	5.0000	41	81	Y	3	8	0	0	0	0	3	11
71-5	3	S	5.0000	41	82	Y	7	7	0	0	0	1	8	8
71-5	3	S	5.0000	42	83	Y	4	8	0	0	0	0	4	9
71-5	3	S	5.0000	42	84	Y	6	7	0	0	0	0	6	7
71-5	3	S	5.0000	43	85	N	0	0	0	0	0	0	0	0
71-5	3	S	5.0000	43	86	Y	2	11	0	3	0	0	2	11
71-5	3	S	5.0000	44	87	Y	5	8	0	0	1	3	5	8
71-5	3	S	5.0000	44	88	Y	8	6	0	0	0	0	9	7
71-5	3	S	5.0000	45	89	N	0	0	0	0	0	0	0	0
71-5	3	S	5.0000	45	91	Y	4	11	0	1	0	0	4	12
71-5	3	S	5.0000	46	91	Y	7	8	1	1	0	1	8	8
71-5	3	S	5.0000	46	92	Y	7	6	0	0	0	0	7	6
71-5	3	S	5.0000	47	93	Y	11	2	0	0	1	0	11	2
71-5	3	S	5.0000	47	94	Y	8	5	1	2	0	0	8	5
71-5	3	S	5.0000	48	95	Y	9	4	0	0	1	0	9	4
71-5	3	S	5.0000	48	96	Y	2	8	0	0	0	0	3	9
71-5	3	S	5.0000	49	97	Y	8	5	0	0	0	0	8	5
71-5	3	S	5.0000	49	98	Y	4	9	0	0	0	0	5	10
71-5	3	S	5.0000	50	99	Y	8	5	0	0	0	0	8	5
71-5	3	S	5.0000	50	100	Y	8	2	0	1	0	0	11	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM	3	S	.2000	11	21	Y	5	6	1	5	2	1	7	9
TEM	3	S	.2000	11	22	Y	2	5	0	0	2	5	5	7
TEM	3	S	.2000	12	23	Y	7	10	3	3	0	0	7	10
TEM	3	S	.2000	12	24	N	0	0	0	0	0	0	0	0
TEM	3	S	.2000	13	25	N	0	0	0	0	0	0	0	0
TEM	3	S	.2000	13	26	Y	5	7	2	6	0	0	5	8
TEM	3	S	.2000	14	27	Y	1	0	1	0	0	0	15	19
TEM	3	S	.2000	14	28	Y	9	5	6	4	1	0	9	5
TEM	3	S	.2000	15	29	Y	2	7	0	0	0	6	3	7
TEM	3	S	.2000	15	30	Y	6	8	5	7	0	0	6	9
TEM	3	S	.2000	16	31	Y	4	7	3	6	0	0	5	9
TEM	3	S	.2000	16	32	Y	5	6	2	3	0	1	6	6
TEM	3	S	.2000	17	33	Y	7	4	2	1	2	2	7	6
TEM	3	S	.2000	17	34	Y	6	7	6	6	0	0	7	8
TEM	3	S	.2000	18	35	Y	6	6	5	5	0	0	7	7
TEM	3	S	.2000	18	36	Y	5	6	0	0	5	6	5	6
TEM	3	S	.2000	19	37	Y	1	1	1	1	0	0	7	7
TEM	3	S	.2000	19	38	Y	2	5	2	5	0	0	2	9
TEM	3	S	.2000	20	39	Y	2	0	2	0	0	0	10	20
TEM	3	S	.2000	20	40	Y	5	9	4	7	0	1	5	9
CNTRL1	3	M	-0.0000	1	1	N	0	0	0	0	0	0	0	0
CNTRL1	3	M	-0.0000	1	2	Y	12	3	0	0	0	0	13	3
CNTRL1	3	M	-0.0000	2	3	Y	9	6	0	1	0	0	9	6
CNTRL1	3	M	-0.0000	2	4	Y	6	8	0	0	2	4	6	9
CNTRL1	3	M	-0.0000	3	5	Y	6	9	1	0	0	0	7	9
CNTRL1	3	M	-0.0000	3	6	Y	8	5	0	0	0	0	9	6
CNTRL1	3	M	-0.0000	4	7	Y	5	7	0	0	1	1	6	7
CNTRL1	3	M	-0.0000	4	8	Y	6	7	2	2	0	2	6	7
CNTRL1	3	M	-0.0000	5	9	N	0	0	0	0	0	0	0	0
CNTRL1	3	M	-0.0000	5	10	Y	6	5	0	0	0	0	6	6
CNTRL1	3	M	-0.0000	6	11	Y	3	10	0	1	0	0	3	10
CNTRL1	3	M	-0.0000	6	12	Y	7	9	0	0	1	1	8	9
CNTRL1	3	M	-0.0000	7	13	Y	10	3	0	0	0	0	10	3
CNTRL1	3	M	-0.0000	7	14	Y	9	5	0	0	1	0	9	5
CNTRL1	3	M	-0.0000	8	15	Y	6	7	0	0	0	0	6	7
CNTRL1	3	M	-0.0000	8	16	N	0	0	0	0	0	0	0	0
CNTRL1	3	M	-0.0000	9	17	Y	2	3	1	0	0	0	5	10
CNTRL1	3	M	-0.0000	9	18	Y	5	8	0	0	0	0	5	10
CNTRL1	3	M	-0.0000	10	19	Y	2	2	0	0	1	0	9	3
CNTRL1	3	M	-0.0000	10	20	Y	4	9	0	1	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
71-5	3	M	.0300	11	21	N	0	0	0	0	0	0	0	0
71-5	3	M	.0300	11	22	Y	7	5	1	1	0	0	7	5
71-5	3	M	.0300	12	23	Y	6	7	1	0	1	3	6	7
71-5	3	M	.0300	12	24	N	0	0	0	0	0	0	0	0
71-5	3	M	.0300	13	25	N	0	0	0	0	0	0	0	0
71-5	3	M	.0300	13	26	Y	5	10	1	0	0	0	5	10
71-5	3	M	.0300	14	27	Y	8	5	0	0	0	0	8	5
71-5	3	M	.0300	14	28	Y	4	1	2	1	0	0	11	6
71-5	3	M	.0300	15	29	Y	8	5	0	0	0	0	10	5
71-5	3	M	.0300	15	30	N	0	0	0	0	0	0	0	0
71-5	3	M	.0300	16	31	Y	4	5	0	0	0	0	6	9
71-5	3	M	.0300	16	32	N	0	0	0	0	0	0	0	0
71-5	3	M	.0300	17	33	Y	7	7	0	1	0	1	7	7
71-5	3	M	.0300	17	34	Y	4	7	2	1	0	0	5	8
71-5	3	M	.0300	18	35	Y	6	4	0	0	0	0	6	5
71-5	3	M	.0300	18	36	Y	11	5	3	0	0	0	11	6
71-5	3	M	.0300	19	37	Y	4	9	0	0	0	1	4	9
71-5	3	M	.0300	19	38	Y	3	6	1	1	0	0	7	8
71-5	3	M	.0300	20	39	Y	8	5	0	0	0	0	8	5
71-5	3	M	.0300	20	40	Y	6	4	0	0	0	0	7	4
71-5	3	M	2.5000	21	41	Y	8	5	0	0	0	0	8	5
71-5	3	M	2.5000	21	42	Y	2	7	0	0	0	0	4	7
71-5	3	M	2.5000	22	43	Y	4	8	0	1	0	0	4	9
71-5	3	M	2.5000	22	44	Y	10	4	0	0	0	0	10	4
71-5	3	M	2.5000	23	45	Y	5	10	0	0	0	0	6	11
71-5	3	M	2.5000	23	46	Y	1	10	1	0	0	0	2	10
71-5	3	M	2.5000	24	47	Y	8	1	2	0	2	0	9	3
71-5	3	M	2.5000	24	48	Y	2	1	0	0	0	0	5	6
71-5	3	M	2.5000	25	49	Y	8	5	0	0	0	1	9	5
71-5	3	M	2.5000	25	50	Y	5	4	0	0	0	0	6	4
71-5	3	M	2.5000	26	51	Y	6	5	1	0	0	0	6	5
71-5	3	M	2.5000	26	52	Y	9	4	1	0	0	0	9	5
71-5	3	M	2.5000	27	53	Y	5	9	0	0	0	0	5	9
71-5	3	M	2.5000	27	54	Y	6	7	0	0	0	0	7	8
71-5	3	M	2.5000	28	55	Y	6	6	1	0	0	0	6	6
71-5	3	M	2.5000	28	56	Y	6	7	0	1	0	0	6	7
71-5	3	M	2.5000	29	57	Y	6	7	0	0	0	0	6	7
71-5	3	M	2.5000	29	58	Y	6	4	0	0	0	0	6	7
71-5	3	M	2.5000	30	59	Y	6	7	0	1	0	2	6	7
71-5	3	M	2.5000	30	60	N	0	0	0	0	0	0	0	0

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	3	M	5.0000	31	61	Y	5	9	0	1	0	0	5	9
71-5	3	M	5.0000	31	62	Y	5	8	1	0	0	0	5	8
71-5	3	M	5.0000	32	63	Y	8	7	0	0	0	0	8	8
71-5	3	M	5.0000	32	64	Y	6	7	0	0	0	0	6	7
71-5	3	M	5.0000	33	65	Y	0	10	0	2	0	0	1	12
71-5	3	M	5.0000	33	66	Y	5	7	0	0	0	0	5	8
71-5	3	M	5.0000	34	67	Y	5	6	0	0	0	0	6	6
71-5	3	M	5.0000	34	68	Y	4	8	0	4	0	0	4	8
71-5	3	M	5.0000	35	69	N	0	0	0	0	0	0	0	0
71-5	3	M	5.0000	35	70	Y	3	2	0	1	0	0	7	6
71-5	3	M	5.0000	36	71	Y	6	6	0	0	0	0	6	6
71-5	3	M	5.0000	36	72	Y	2	0	1	0	0	0	5	4
71-5	3	M	5.0000	37	73	Y	5	7	0	0	0	0	5	7
71-5	3	M	5.0000	37	74	Y	7	9	1	7	3	0	10	16
71-5	3	M	5.0000	38	75	Y	6	5	0	0	0	0	6	6
71-5	3	M	5.0000	38	76	Y	5	4	2	0	0	0	8	4
71-5	3	M	5.0000	39	77	Y	7	6	1	0	0	0	8	8
71-5	3	M	5.0000	39	78	Y	9	6	0	0	0	0	9	6
71-5	3	M	5.0000	40	79	Y	4	8	0	0	0	0	4	8
71-5	3	M	5.0000	40	80	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
CNTRL1	4	S	-0.0000	1	1	Y	6	7	0	0	0	0	6	7
CNTRL1	4	S	-0.0000	1	2	Y	5	6	0	0	1	0	7	7
CNTRL1	4	S	-0.0000	2	3	Y	9	4	1	1	0	0	9	4
CNTRL1	4	S	-0.0000	2	4	Y	6	5	0	1	0	0	7	5
CNTRL1	4	S	-0.0000	3	5	Y	8	5	0	0	0	0	8	5
CNTRL1	4	S	-0.0000	3	6	Y	2	11	0	0	1	0	2	12
CNTRL1	4	S	-0.0000	4	7	Y	1	6	0	0	0	0	4	8
CNTRL1	4	S	-0.0000	4	8	N	0	0	0	0	0	0	0	0
CNTRL1	4	S	-0.0000	5	9	Y	7	8	0	0	0	1	7	8
CNTRL1	4	S	-0.0000	5	10	Y	6	8	1	1	0	0	6	8
CNTRL1	4	S	-0.0000	6	11	Y	7	4	2	0	0	0	7	4
CNTRL1	4	S	-0.0000	6	12	Y	11	4	0	0	0	0	12	4
CNTRL1	4	S	-0.0000	7	13	Y	4	8	1	0	0	0	4	8
CNTRL1	4	S	-0.0000	7	14	Y	6	9	0	0	1	0	6	9
CNTRL1	4	S	-0.0000	8	15	Y	6	5	0	0	0	0	7	5
CNTRL1	4	S	-0.0000	8	16	Y	7	6	1	1	0	0	9	7
CNTRL1	4	S	-0.0000	9	17	Y	7	5	0	0	0	0	7	5
CNTRL1	4	S	-0.0000	9	18	Y	7	8	0	0	0	0	8	10
CNTRL1	4	S	-0.0000	10	19	N	0	0	0	0	0	0	0	0
CNTRL1	4	S	-0.0000	10	20	Y	7	7	0	2	0	0	7	7
71-5	4	S	.0300	21	41	Y	5	8	0	1	0	0	5	8
71-5	4	S	.0300	21	42	Y	6	8	0	0	0	0	6	8
71-5	4	S	.0300	22	43	Y	4	8	0	1	0	0	4	8
71-5	4	S	.0300	22	44	Y	6	5	0	1	0	0	8	5
71-5	4	S	.0300	23	45	Y	9	6	0	0	2	1	9	6
71-5	4	S	.0300	23	46	Y	8	7	0	0	1	0	8	7
71-5	4	S	.0300	24	47	Y	5	8	0	0	3	1	5	8
71-5	4	S	.0300	24	48	Y	5	6	0	0	0	1	5	9
71-5	4	S	.0300	25	49	Y	1	1	1	0	0	0	7	7
71-5	4	S	.0300	25	50	Y	8	4	0	0	0	0	10	5
71-5	4	S	.0300	26	51	Y	5	5	0	2	0	0	8	5
71-5	4	S	.0300	26	52	Y	6	6	1	0	0	0	6	6
71-5	4	S	.0300	27	53	Y	0	2	0	0	0	2	4	8
71-5	4	S	.0300	27	54	Y	7	6	2	1	0	0	7	6
71-5	4	S	.0300	28	55	Y	7	7	0	1	0	0	7	7
71-5	4	S	.0300	28	56	Y	8	5	1	0	0	0	10	5
71-5	4	S	.0300	29	57	Y	8	8	0	0	0	0	8	8
71-5	4	S	.0300	29	58	Y	7	5	0	0	2	1	7	5
71-5	4	S	.0300	30	59	Y	9	4	0	1	0	0	9	4
71-5	4	S	.0300	30	60	Y	7	6	0	2	1	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
71-5	4	S	2.5000	31	61	Y	7	4	0	0	2	2	8	4
71-5	4	S	2.5000	31	62	Y	9	2	0	0	0	0	10	2
71-5	4	S	2.5000	32	63	Y	5	5	0	0	0	1	6	6
71-5	4	S	2.5000	32	64	Y	12	2	0	0	0	0	13	2
71-5	4	S	2.5000	33	65	Y	4	6	0	0	0	0	4	6
71-5	4	S	2.5000	33	66	Y	4	4	0	0	2	0	7	5
71-5	4	S	2.5000	34	67	Y	4	8	0	0	0	0	4	8
71-5	4	S	2.5000	34	68	Y	7	4	1	0	0	0	8	4
71-5	4	S	2.5000	35	69	Y	7	7	0	0	0	0	7	8
71-5	4	S	2.5000	35	70	Y	10	4	0	0	0	0	10	4
71-5	4	S	2.5000	36	71	Y	4	7	0	0	0	0	4	7
71-5	4	S	2.5000	36	72	Y	4	7	0	0	0	0	4	7
71-5	4	S	2.5000	37	73	Y	9	4	0	0	0	0	11	4
71-5	4	S	2.5000	37	74	Y	8	6	1	0	0	0	9	6
71-5	4	S	2.5000	38	75	Y	7	2	3	2	0	0	7	6
71-5	4	S	2.5000	38	76	Y	6	6	1	0	0	1	7	8
71-5	4	S	2.5000	39	77	Y	8	4	0	0	4	1	9	4
71-5	4	S	2.5000	39	78	N	0	0	0	0	0	0	0	0
71-5	4	S	2.5000	40	79	Y	5	4	0	0	0	0	7	4
71-5	4	S	2.5000	40	80	N	0	0	0	0	0	0	0	0
71-5	4	S	5.0000	41	81	Y	7	8	1	0	0	0	7	8
71-5	4	S	5.0000	41	82	Y	4	9	0	0	0	0	4	10
71-5	4	S	5.0000	42	83	N	0	0	0	0	0	0	0	0
71-5	4	S	5.0000	42	84	Y	4	9	1	2	0	0	5	10
71-5	4	S	5.0000	43	85	Y	8	8	0	0	0	0	8	8
71-5	4	S	5.0000	43	86	Y	9	7	0	0	0	0	10	9
71-5	4	S	5.0000	44	87	Y	3	7	0	0	0	0	3	12
71-5	4	S	5.0000	44	88	N	0	0	0	0	0	0	0	0
71-5	4	S	5.0000	45	89	Y	1	0	1	0	0	0	4	4
71-5	4	S	5.0000	45	90	Y	7	7	2	0	0	2	8	7
71-5	4	S	5.0000	46	91	Y	4	8	0	1	3	3	4	8
71-5	4	S	5.0000	46	92	N	0	0	0	0	0	0	0	0
71-5	4	S	5.0000	47	93	Y	5	6	0	0	0	0	6	6
71-5	4	S	5.0000	47	94	Y	6	3	0	0	0	0	9	3
71-5	4	S	5.0000	48	95	Y	3	10	0	0	0	0	4	11
71-5	4	S	5.0000	48	96	N	0	[illegible]	0	0	0	0	0	0
71-5	4	S	5.0000	49	97	Y	6	8	0	0	4	5	6	8
71-5	4	S	5.0000	49	98	Y	0	4	0	0	0	0	5	6
71-5	4	S	5.0000	50	99	Y	6	7	0	0	0	0	7	8
71-5	4	S	5.0000	50	100	Y	5	6	0	1	2	1	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
TEM	4	S	.2000	11	21	Y	5	5	0	0	3	5	5	9
TEM	4	S	.2000	11	22	N	0	0	0	0	0	0	0	0
TEM	4	S	.2000	12	23	Y	4	5	4	4	0	0	7	7
TEM	4	S	.2000	12	24	Y	2	3	2	2	0	0	5	6
TEM	4	S	.2000	13	25	N	0	0	0	0	0	0	0	0
TEM	4	S	.2000	13	26	Y	2	2	1	1	1	1	6	7
TEM	4	S	.2000	14	27	N	0	0	0	0	0	0	0	0
TEM	4	S	.2000	14	28	Y	2	3	2	2	0	1	5	8
TEM	4	S	.2000	15	29	Y	4	1	0	0	4	0	6	5
TEM	4	S	.2000	15	30	Y	3	2	3	2	0	0	7	7
TEM	4	S	.2000	16	31	N	0	0	0	0	0	0	0	0
TEM	4	S	.2000	16	32	Y	2	3	2	3	0	0	6	5
TEM	4	S	.2000	17	33	Y	4	5	4	5	0	0	6	9
TEM	4	S	.2000	17	34	Y	1	3	1	3	0	0	8	7
TEM	4	S	.2000	18	35	Y	3	0	3	0	0	0	5	7
TEM	4	S	.2000	18	36	Y	3	2	3	2	0	0	7	5
TEM	4	S	.2000	19	37	Y	0	1	0	1	0	0	8	3
TEM	4	S	.2000	19	38	Y	1	2	0	2	0	0	2	9
TEM	4	S	.2000	20	39	Y	0	1	0	1	0	0	9	6
TEM	4	S	.2000	20	40	N	0	0	0	0	0	0	0	0
CNTRL1	4	M	-0.0000	1	1	Y	7	6	0	1	0	0	7	6
CNTRL1	4	M	-0.0000	1	2	Y	4	7	0	0	0	0	4	9
CNTRL1	4	M	-0.0000	2	3	Y	4	8	0	0	0	0	5	8
CNTRL1	4	M	-0.0000	2	4	Y	4	10	0	0	0	0	4	10
CNTRL1	4	M	-0.0000	3	5	Y	5	9	0	0	0	1	5	10
CNTRL1	4	M	-0.0000	3	6	Y	9	8	0	0	0	0	10	8
CNTRL1	4	M	-0.0000	4	7	N	0	0	0	0	0	0	0	0
CNTRL1	4	M	-0.0000	4	8	N	0	0	0	0	0	0	0	0
CNTRL1	4	M	-0.0000	5	9	Y	8	5	1	0	0	2	8	5
CNTRL1	4	M	-0.0000	5	10	Y	7	6	0	0	0	1	7	6
CNTRL1	4	M	-0.0000	6	11	Y	5	8	0	0	0	1	6	8
CNTRL1	4	M	-0.0000	6	12	Y	4	8	0	0	0	0	4	8
CNTRL1	4	M	-0.0000	7	13	Y	8	5	0	0	1	0	8	5
CNTRL1	4	M	-0.0000	7	14	Y	8	3	0	0	0	0	8	4
CNTRL1	4	M	-0.0000	8	15	N	0	0	0	0	0	0	0	0
CNTRL1	4	M	-0.0000	8	16	Y	8	5	0	0	0	0	8	5
CNTRL1	4	M	-0.0000	9	17	Y	6	6	0	0	0	0	8	6
CNTRL1	4	M	-0.0000	9	18	Y	9	3	0	0	1	0	10	3
CNTRL1	4	M	-0.0000	10	19	Y	6	8	0	0	0	0	10	11
CNTRL1	4	M	-0.0000	10	20	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
71-5	4	M	.0300	11	21	Y	7	7	0	0	0	0	8	7
71-5	4	M	.0300	11	22	Y	4	8	0	0	0	0	4	9
71-5	4	M	.0300	12	23	Y	4	8	0	0	0	0	4	8
71-5	4	M	.0300	12	24	Y	5	7	0	0	0	0	5	7
71-5	4	M	.0300	13	25	Y	6	8	0	0	0	0	6	8
71-5	4	M	.0300	13	26	Y	10	7	2	0	0	0	10	8
71-5	4	M	.0300	14	27	N	0	0	0	0	0	0	0	0
71-5	4	M	.0300	14	28	N	0	0	0	0	0	0	0	0
71-5	4	M	.0300	15	29	Y	4	12	0	0	0	0	5	12
71-5	4	M	.0300	15	30	Y	9	4	0	1	0	0	10	5
71-5	4	M	.0300	16	31	N	0	0	0	0	0	0	0	0
71-5	4	M	.0300	16	32	Y	7	5	0	0	0	0	7	5
71-5	4	M	.0300	17	33	Y	8	6	0	0	0	0	8	6
71-5	4	M	.0300	17	34	Y	10	5	0	0	0	0	10	5
71-5	4	M	.0300	18	35	Y	5	7	0	0	0	0	5	8
71-5	4	M	.0300	18	36	Y	2	9	0	0	0	0	2	9
71-5	4	M	.0300	19	37	Y	6	8	1	0	0	1	7	8
71-5	4	M	.0300	19	38	Y	8	5	0	0	0	0	8	5
71-5	4	M	.0300	20	39	Y	6	6	0	0	0	0	8	6
71-5	4	M	.0300	20	40	N	0	0	0	0	0	0	-0	-0
71-5	4	M	2.5000	21	41	Y	6	5	0	0	0	0	6	6
71-5	4	M	2.5000	21	42	Y	5	8	0	1	0	0	8	8
71-5	4	M	2.5000	22	43	Y	7	6	1	0	0	0	7	6
71-5	4	M	2.5000	22	44	Y	5	6	0	0	0	2	5	6
71-5	4	M	2.5000	23	45	Y	9	4	0	0	0	0	9	4
71-5	4	M	2.5000	23	46	Y	5	7	0	0	0	0	6	7
71-5	4	M	2.5000	24	47	Y	7	6	0	0	2	2	7	6
71-5	4	M	2.5000	24	48	Y	5	8	0	1	0	0	5	8
71-5	4	M	2.5000	25	49	Y	4	9	0	0	0	0	4	10
71-5	4	M	2.5000	25	50	Y	6	8	0	0	0	0	8	8
71-5	4	M	2.5000	26	51	Y	5	5	0	0	0	1	6	5
71-5	4	M	2.5000	26	52	Y	6	5	0	0	0	0	6	5
71-5	4	M	2.5000	27	53	Y	4	9	1	1	0	1	5	9
71-5	4	M	2.5000	27	54	Y	6	5	0	0	0	0	6	6
71-5	4	M	2.5000	28	55	Y	4	9	0	0	0	0	4	9
71-5	4	M	2.5000	28	56	Y	7	7	0	1	0	0	7	8
71-5	4	M	2.5000	29	57	Y	8	3	0	0	0	0	8	4
71-5	4	M	2.5000	29	58	Y	6	7	0	0	0	0	8	7
71-5	4	M	2.5000	30	59	Y	5	8	0	0	2	0	7	8
71-5	4	M	2.5000	30	60	Y	7	7	0	0	0	0	7	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	4	M	5.0000	31	61	Y	5	5	0	0	0	0	5	5
71-5	4	M	5.0000	31	62	Y	4	7	1	0	0	0	6	10
71-5	4	M	5.0000	32	63	Y	10	4	0	0	0	0	10	5
71-5	4	M	5.0000	32	64	Y	6	7	1	1	0	0	6	8
71-5	4	M	5.0000	33	65	Y	8	6	0	0	0	2	8	6
71-5	4	M	5.0000	33	66	Y	4	5	0	0	0	0	5	5
71-5	4	M	5.0000	34	67	Y	5	9	2	0	0	0	5	9
71-5	4	M	5.0000	34	68	Y	2	9	0	1	0	0	2	12
71-5	4	M	5.0000	35	69	Y	6	5	0	0	2	1	6	6
71-5	4	M	5.0000	35	70	Y	6	6	0	0	0	0	8	8
71-5	4	M	5.0000	36	71	Y	3	11	0	0	0	1	7	12
71-5	4	M	5.0000	36	72	Y	9	5	0	0	0	0	13	5
71-5	4	M	5.0000	37	73	Y	7	6	0	0	0	0	7	6
71-5	4	M	5.0000	37	74	Y	5	3	0	0	0	0	8	5
71-5	4	M	5.0000	38	75	Y	4	7	0	0	0	0	4	7
71-5	4	M	5.0000	38	76	Y	8	6	0	0	1	0	8	6
71-5	4	M	5.0000	39	77	Y	8	4	0	0	0	0	8	4
71-5	4	M	5.0000	39	78	Y	5	7	0	1	0	0	6	8
71-5	4	M	5.0000	40	79	Y	5	8	0	0	2	2	5	8
71-5	4	M	5.0000	40	80	Y	6	7	0	0	0	0	6	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL1	5	S	-0.0000	1	1	Y	4	9	0	0	2	0	4	9
CNTRL1	5	S	-0.0000	1	2	Y	4	9	0	0	1	0	4	9
CNTRL1	5	S	-0.0000	2	3	Y	11	9	0	0	0	0	11	9
CNTRL1	5	S	-0.0000	2	4	Y	4	6	0	0	0	0	5	9
CNTRL1	5	S	-0.0000	3	5	Y	8	4	0	0	0	0	9	4
CNTRL1	5	S	-0.0000	3	6	Y	9	2	1	0	0	0	10	2
CNTRL1	5	S	-0.0000	4	7	Y	2	8	0	0	0	0	3	8
CNTRL1	5	S	-0.0000	4	8	Y	4	6	0	0	0	0	7	6
CNTRL1	5	S	-0.0000	5	9	Y	3	9	0	0	0	0	3	9
CNTRL1	5	S	-0.0000	5	10	Y	5	7	1	0	0	1	6	7
CNTRL1	5	S	-0.0000	6	11	Y	8	4	0	0	0	0	9	4
CNTRL1	5	S	-0.0000	6	12	Y	3	6	1	0	0	0	6	7
CNTRL1	5	S	-0.0000	7	13	Y	6	4	0	0	0	0	6	6
CNTRL1	5	S	-0.0000	7	14	Y	8	3	0	0	0	0	9	3
CNTRL1	5	S	-0.0000	8	15	Y	6	8	0	0	0	0	6	10
CNTRL1	5	S	-0.0000	8	16	Y	5	6	1	2	0	0	5	6
CNTRL1	5	S	-0.0000	9	17	Y	6	5	0	0	1	1	6	6
CNTRL1	5	S	-0.0000	9	18	Y	6	6	0	0	0	0	6	6
CNTRL1	5	S	-0.0000	10	19	Y	5	8	0	0	0	0	5	8
CNTRL1	5	S	-0.0000	10	20	Y	7	7	0	0	0	0	7	7
71-5	5	S	.0300	21	41	Y	6	8	0	0	0	0	6	8
71-5	5	S	.0300	21	42	Y	5	7	0	0	0	1	5	8
71-5	5	S	.0300	22	43	Y	7	6	0	0	0	1	7	6
71-5	5	S	.0300	22	44	Y	6	8	0	0	0	0	6	8
71-5	5	S	.0300	23	45	Y	5	8	0	0	0	1	5	9
71-5	5	S	.0300	23	46	Y	5	8	0	1	0	0	5	8
71-5	5	S	.0300	24	47	Y	4	7	0	0	0	0	4	7
71-5	5	S	.0300	24	48	Y	7	9	0	0	2	3	8	9
71-5	5	S	.0300	25	49	Y	1	1	0	0	0	0	4	6
71-5	5	S	.0300	25	50	Y	5	8	0	0	0	0	5	8
71-5	5	S	.0300	26	51	Y	5	6	0	0	0	0	5	7
71-5	5	S	.0300	26	52	Y	8	7	1	1	0	0	8	7
71-5	5	S	.0300	27	53	Y	1	2	0	0	0	0	5	10
71-5	5	S	.0300	27	54	Y	4	9	0	0	0	0	4	10
71-5	5	S	.0300	28	55	Y	5	8	0	0	0	0	5	8
71-5	5	S	.0300	28	56	Y	3	7	0	0	0	0	5	8
71-5	5	S	.0300	29	57	Y	10	4	0	0	0	1	10	4
71-5	5	S	.0300	29	58	Y	8	3	0	0	1	0	8	3
71-5	5	S	.0300	30	59	Y	7	7	0	1	3	2	7	7
71-5	5	S	.0300	30	60	Y	8	4	0	0	3	1	9	4

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	5	S	2.5000	31	61	Y	5	6	0	0	1	0	7	6
71-5	5	S	2.5000	31	62	Y	8	5	1	0	0	0	8	5
71-5	5	S	2.5000	32	63	Y	4	9	0	0	0	0	4	10
71-5	5	S	2.5000	32	64	Y	6	4	0	1	0	0	7	4
71-5	5	S	2.5000	33	65	Y	7	5	0	0	3	0	7	5
71-5	5	S	2.5000	33	66	Y	4	10	1	0	0	0	4	11
71-5	5	S	2.5000	34	67	Y	5	7	0	0	4	0	5	7
71-5	5	S	2.5000	34	68	Y	6	9	0	1	0	0	6	9
71-5	5	S	2.5000	35	69	Y	7	9	0	1	0	1	7	9
71-5	5	S	2.5000	35	70	Y	6	7	1	0	0	0	6	7
71-5	5	S	2.5000	36	71	Y	10	5	1	0	3	2	10	5
71-5	5	S	2.5000	36	72	Y	7	12	0	0	0	0	7	12
71-5	5	S	2.5000	37	73	Y	5	3	0	0	1	1	5	8
71-5	5	S	2.5000	37	74	N	0	0	0	0	0	0	0	0
71-5	5	S	2.5000	38	75	Y	7	5	0	0	0	0	7	5
71-5	5	S	2.5000	38	76	N	0	0	0	0	0	0	0	0
71-5	5	S	2.5000	39	77	Y	7	4	0	0	1	0	7	5
71-5	5	S	2.5000	39	78	N	0	0	0	0	0	0	0	0
71-5	5	S	2.5000	40	79	N	0	0	0	0	0	0	0	0
71-5	5	S	2.5000	40	80	Y	7	8	0	0	0	0	8	8
71-5	5	S	5.0000	41	81	Y	6	8	0	0	0	0	6	8
71-5	5	S	5.0000	41	82	Y	6	7	2	0	0	0	6	9
71-5	5	S	5.0000	42	83	Y	5	7	0	0	0	0	5	7
71-5	5	S	5.0000	42	84	Y	8	7	0	0	1	0	8	8
71-5	5	S	5.0000	43	85	Y	6	8	0	0	0	0	6	9
71-5	5	S	5.0000	43	86	Y	7	4	1	0	0	0	7	7
71-5	5	S	5.0000	44	87	Y	9	2	0	1	0	0	10	2
71-5	5	S	5.0000	44	88	Y	5	7	0	0	0	0	5	8
71-5	5	S	5.0000	45	89	Y	9	5	0	0	0	0	9	5
71-5	5	S	5.0000	45	90	Y	6	8	0	0	0	1	6	9
71-5	5	S	5.0000	46	91	Y	8	5	0	0	0	0	8	6
71-5	5	S	5.0000	46	92	Y	6	7	0	0	0	0	6	7
71-5	5	S	5.0000	47	93	Y	3	8	0	0	0	0	3	8
71-5	5	S	5.0000	47	94	Y	6	10	0	0	0	0	7	10
71-5	5	S	5.0000	48	95	Y	6	8	0	0	0	0	6	8
71-5	5	S	5.0000	48	96	Y	6	9	0	0	0	0	6	10
71-5	5	S	5.0000	49	97	Y	10	5	0	0	0	0	10	6
71-5	5	S	5.0000	49	98	Y	4	9	0	0	0	3	4	9
71-5	5	S	5.0000	50	99	Y	6	7	0	0	0	0	7	7
71-5	5	S	5.0000	50	100	Y	7	5	0	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
TEM	5	S	.0002	11	21	Y	11	6	1	0	7	6	11	8
TEM	5	S	.0002	11	22	Y	9	4	0	0	0	1	9	4
TEM	5	S	.0002	12	23	Y	6	4	0	0	1	1	6	6
TEM	5	S	.0002	12	24	Y	8	6	0	1	1	0	10	6
TEM	5	S	.0002	13	25	Y	1	0	0	0	1	0	5	7
TEM	5	S	.0002	13	26	Y	8	5	0	0	1	3	8	5
TEM	5	S	.0002	14	27	Y	6	6	0	6	1	0	7	6
TEM	5	S	.0002	14	28	Y	6	9	0	1	0	0	6	9
TEM	5	S	.0002	15	29	Y	5	5	3	5	0	0	6	7
TEM	5	S	.0002	15	30	Y	5	2	3	1	1	0	6	7
TEM	5	S	.0002	16	31	Y	11	4	0	0	1	0	11	5
TEM	5	S	.0002	16	32	N	0	0	0	0	0	0	0	0
TEM	5	S	.0002	17	33	Y	6	2	0	0	3	1	9	6
TEM	5	S	.0002	17	34	Y	2	1	1	0	0	0	8	6
TEM	5	S	.0002	18	35	Y	7	8	0	0	2	3	7	8
TEM	5	S	.0002	18	36	Y	4	1	1	1	0	0	4	9
TEM	5	S	.0002	19	37	Y	7	7	0	0	4	0	7	7
TEM	5	S	.0002	19	38	Y	6	8	5	3	0	0	6	9
TEM	5	S	.0002	20	39	N	0	0	0	0	0	0	0	0
TEM	5	S	.0002	20	40	N	0	0	0	0	0	0	0	0
CNTRL1	5	M	-0.0000	1	1	Y	5	8	0	0	0	1	5	8
CNTRL1	5	M	-0.0000	1	2	Y	5	8	0	0	0	0	5	9
CNTRL1	5	M	-0.0000	2	3	Y	2	9	0	0	0	0	3	9
CNTRL1	5	M	-0.0000	2	4	Y	6	3	0	0	0	0	7	3
CNTRL1	5	M	-0.0000	3	5	Y	7	4	0	0	0	1	7	5
CNTRL1	5	M	-0.0000	3	6	Y	7	4	0	0	0	2	7	5
CNTRL1	5	M	-0.0000	4	7	Y	7	4	0	0	0	0	9	4
CNTRL1	5	M	-0.0000	4	8	Y	4	8	0	1	0	0	4	10
CNTRL1	5	M	-0.0000	5	9	Y	8	7	0	0	0	0	8	7
CNTRL1	5	M	-0.0000	5	10	Y	4	7	0	0	0	1	4	7
CNTRL1	5	M	-0.0000	6	11	Y	6	6	0	0	0	0	7	6
CNTRL1	5	M	-0.0000	6	12	Y	7	7	0	0	0	0	7	7
CNTRL1	5	M	-0.0000	7	13	Y	9	7	0	1	1	0	9	7
CNTRL1	5	M	-0.0000	7	14	Y	7	5	0	0	0	0	7	5
CNTRL1	5	M	-0.0000	8	15	Y	5	7	0	0	0	0	6	7
CNTRL1	5	M	-0.0000	8	16	Y	7	5	0	0	0	1	7	6
CNTRL1	5	M	-0.0000	9	17	Y	4	6	0	0	0	2	4	6
CNTRL1	5	M	-0.0000	9	18	Y	7	8	0	0	0	0	8	10
CNTRL1	5	M	-0.0000	10	19	Y	5	9	0	0	0	0	5	9
CNTRL1	5	M	-0.0000	10	20	Y	5	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
71-5	5	M	.0300	11	21	Y	3	9	0	0	0	0	3	9
71-5	5	M	.0300	11	22	Y	4	8	0	0	0	0	5	8
71-5	5	M	.0300	12	23	Y	7	5	0	0	0	0	7	5
71-5	5	M	.0300	12	24	Y	5	6	0	0	0	0	5	6
71-5	5	M	.0300	13	25	Y	4	7	0	1	0	0	4	7
71-5	5	M	.0300	13	26	Y	8	4	0	0	0	0	9	4
71-5	5	M	.0300	14	27	Y	4	10	0	0	0	1	4	10
71-5	5	M	.0300	14	28	Y	5	9	0	0	0	0	5	9
71-5	5	M	.0300	15	29	Y	7	7	0	0	0	0	7	8
71-5	5	M	.0300	15	30	Y	6	6	0	0	0	0	6	6
71-5	5	M	.0300	16	31	Y	8	6	0	0	0	0	8	6
71-5	5	M	.0300	16	32	Y	4	8	0	2	0	0	7	12
71-5	5	M	.0300	17	33	Y	5	9	0	1	0	1	5	9
71-5	5	M	.0300	17	34	Y	7	6	0	0	0	0	8	7
71-5	5	M	.0300	18	35	Y	5	8	0	0	0	0	5	9
71-5	5	M	.0300	18	36	Y	8	3	0	0	0	0	8	5
71-5	5	M	.0300	19	37	Y	6	6	0	0	0	0	7	6
71-5	5	M	.0300	19	38	Y	6	7	0	0	1	1	6	7
71-5	5	M	.0300	20	39	Y	6	5	1	0	0	0	6	5
71-5	5	M	.0300	20	40	Y	5	8	0	0	2	0	5	8
71-5	5	M	2.5000	21	41	Y	8	4	0	0	0	0	8	4
71-5	5	M	2.5000	21	42	N	0	0	0	0	0	0	0	0
71-5	5	M	2.5000	22	43	Y	7	4	0	0	1	0	7	5
71-5	5	M	2.5000	22	44	N	0	0	0	0	0	0	0	0
71-5	5	M	2.5000	23	45	Y	7	7	0	0	0	0	7	7
71-5	5	M	2.5000	23	46	Y	4	7	0	1	0	2	4	7
71-5	5	M	2.5000	24	47	Y	7	1	1	0	0	0	8	4
71-5	5	M	2.5000	24	48	Y	7	8	0	0	0	0	7	9
71-5	5	M	2.5000	25	49	Y	5	5	0	0	0	0	5	6
71-5	5	M	2.5000	25	50	Y	6	7	0	0	0	0	6	8
71-5	5	M	2.5000	26	51	Y	4	6	0	0	0	0	5	6
71-5	5	M	2.5000	26	52	Y	5	7	0	0	1	1	5	7
71-5	5	M	2.5000	27	53	Y	6	8	0	0	0	0	7	8
71-5	5	M	2.5000	27	54	Y	9	8	0	0	0	0	9	8
71-5	5	M	2.5000	28	55	Y	5	7	0	0	0	0	5	7
71-5	5	M	2.5000	28	56	Y	4	8	0	0	0	0	4	10
71-5	5	M	2.5000	29	57	Y	6	6	0	0	0	1	7	6
71-5	5	M	2.5000	29	58	Y	4	10	0	5	0	0	4	10
71-5	5	M	2.5000	30	59	Y	6	8	0	0	0	0	6	8
71-5	5	M	2.5000	30	60	Y	3	9	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
71-5	5	M	5.0000	31	61	Y	3	8	0	1	0	0	7	9
71-5	5	M	5.0000	31	62	Y	4	9	0	0	0	1	5	9
71-5	5	M	5.0000	32	63	Y	4	8	0	0	0	1	4	8
71-5	5	M	5.0000	32	64	Y	5	7	0	0	0	0	7	7
71-5	5	M	5.0000	33	65	Y	9	2	0	1	0	0	9	2
71-5	5	M	5.0000	33	66	Y	3	9	0	0	0	0	6	12
71-5	5	M	5.0000	34	67	Y	9	4	0	0	0	0	9	5
71-5	5	M	5.0000	34	68	Y	7	6	0	0	1	0	7	6
71-5	5	M	5.0000	35	69	Y	4	6	0	0	0	3	4	6
71-5	5	M	5.0000	35	70	Y	4	7	0	0	0	1	7	7
71-5	5	M	5.0000	36	71	N	0	0	0	0	0	0	0	0
71-5	5	M	5.0000	36	72	Y	3	9	0	0	2	0	3	9
71-5	5	M	5.0000	37	73	Y	3	11	0	1	0	0	4	12
71-5	5	M	5.0000	37	74	Y	7	0	0	0	1	0	8	7
71-5	5	M	5.0000	38	75	Y	5	8	0	0	0	0	5	8
71-5	5	M	5.0000	38	76	Y	2	9	0	0	0	0	2	11
71-5	5	M	5.0000	39	77	Y	5	4	0	0	0	0	6	4
71-5	5	M	5.0000	39	78	Y	5	6	0	0	0	0	7	9
71-5	5	M	5.0000	40	79	Y	5	5	0	0	0	0	5	5
71-5	5	M	5.0000	40	80	Y	10	4	0	0	0	0	10	4

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL1	6	S	-0.0000	1	1	Y	3	6	0	0	0	0	3	6
CNTRL1	6	S	-0.0000	1	2	Y	3	8	0	0	0	0	4	8
CNTRL1	6	S	-0.0000	2	3	Y	4	7	0	0	0	0	4	7
CNTRL1	6	S	-0.0000	2	4	Y	9	4	0	0	0	0	9	4
CNTRL1	6	S	-0.0000	3	5	Y	4	11	0	0	0	0	4	11
CNTRL1	6	S	-0.0000	3	6	Y	6	6	0	0	0	0	7	6
CNTRL1	6	S	-0.0000	4	7	Y	7	5	0	0	0	0	7	5
CNTRL1	6	S	-0.0000	4	8	Y	8	7	0	0	0	1	8	7
CNTRL1	6	S	-0.0000	5	9	Y	2	6	0	0	0	0	2	8
CNTRL1	6	S	-0.0000	5	10	Y	8	5	0	0	0	0	8	5
CNTRL1	6	S	-0.0000	6	11	Y	3	8	0	0	0	0	3	8
CNTRL1	6	S	-0.0000	6	12	Y	4	9	0	0	0	0	4	9
CNTRL1	6	S	-0.0000	7	13	Y	5	5	0	1	0	0	5	6
CNTRL1	6	S	-0.0000	7	14	Y	7	5	0	0	0	0	7	7
CNTRL1	6	S	-0.0000	8	15	Y	8	3	0	0	1	0	9	3
CNTRL1	6	S	-0.0000	8	16	Y	5	7	0	0	1	0	5	7
CNTRL1	6	S	-0.0000	9	17	Y	6	5	0	0	0	0	6	5
CNTRL1	6	S	-0.0000	9	18	Y	7	7	0	0	0	0	7	7
CNTRL1	6	S	-0.0000	10	19	Y	5	3	0	0	0	1	7	4
CNTRL1	6	S	-0.0000	10	20	Y	4	9	0	1	0	0	4	9
71-5	6	S	.0300	21	41	Y	5	6	0	0	0	0	5	6
71-5	6	S	.0300	21	42	Y	7	6	0	0	0	0	7	6
71-5	6	S	.0300	22	43	Y	4	8	0	0	0	0	4	8
71-5	6	S	.0300	22	44	N	0	0	0	0	0	0	0	0
71-5	6	S	.0300	23	45	Y	6	7	0	0	0	1	6	7
71-5	6	S	.0300	23	46	Y	4	7	0	0	0	0	5	6
71-5	6	S	.0300	24	47	Y	2	9	0	0	0	0	2	9
71-5	6	S	.0300	24	48	Y	5	8	1	1	0	0	7	9
71-5	6	S	.0300	25	49	Y	8	4	0	0	0	0	8	5
71-5	6	S	.0300	25	50	N	0	0	0	0	0	0	0	0
71-5	6	S	.0300	26	51	Y	2	9	0	0	0	1	2	10
71-5	6	S	.0300	26	52	Y	6	[illegible]	0	0	1	0	6	5
71-5	6	S	.0300	27	53	Y	6	5	0	0	0	0	6	5
71-5	6	S	.0300	27	54	Y	4	9	0	0	0	0	4	9
71-5	6	S	.0300	28	55	Y	4	7	0	0	0	0	4	7
71-5	6	S	.0300	28	56	Y	4	7	0	0	0	1	6	7
71-5	6	S	.0300	29	57	Y	9	4	0	0	1	0	9	4
71-5	6	S	.0300	29	58	Y	2	12	0	0	0	0	2	12
71-5	6	S	.0300	30	59	Y	6	6	0	1	1	0	6	6
71-5	6	S	.0300	30	60	Y	6	7	0	0	0	1	6	7

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	6	S	2.5000	31	61	Y	7	9	0	0	0	0	7	9
71-5	6	S	2.5000	31	62	Y	4	0	0	0	0	0	4	7
71-5	6	S	2.5000	32	63	Y	7	6	0	0	0	0	7	6
71-5	6	S	2.5000	32	64	Y	6	7	0	0	0	0	6	7
71-5	6	S	2.5000	33	65	Y	7	5	0	0	2	0	7	5
71-5	6	S	2.5000	33	66	Y	6	6	0	0	0	0	7	7
71-5	6	S	2.5000	34	67	Y	5	9	0	1	0	0	5	9
71-5	6	S	2.5000	34	68	Y	9	2	0	0	0	0	12	2
71-5	6	S	2.5000	35	69	Y	6	7	0	0	2	1	7	7
71-5	6	S	2.5000	35	70	Y	6	7	0	0	0	0	7	7
71-5	6	S	2.5000	36	71	Y	1	8	0	0	0	0	1	9
71-5	6	S	2.5000	36	72	N	0	0	0	0	0	0	0	0
71-5	6	S	2.5000	37	73	Y	6	7	1	0	0	0	6	7
71-5	6	S	2.5000	37	74	Y	5	6	0	0	0	0	5	7
71-5	6	S	2.5000	38	75	Y	4	0	1	0	0	0	4	6
71-5	6	S	2.5000	38	76	Y	5	7	0	0	1	0	5	7
71-5	6	S	2.5000	39	77	Y	7	5	0	0	0	0	7	5
71-5	6	S	2.5000	39	78	Y	7	6	0	0	0	0	7	6
71-5	6	S	2.5000	40	79	Y	6	7	0	0	0	1	6	7
71-5	6	S	2.5000	40	80	Y	4	8	0	0	0	3	4	8
71-5	6	S	5.0000	41	81	Y	8	5	1	0	1	0	8	5
71-5	6	S	5.0000	41	82	Y	7	4	0	1	0	0	7	4
71-5	6	S	5.0000	42	83	Y	5	7	0	0	0	1	5	7
71-5	6	S	5.0000	42	84	Y	7	7	0	0	2	3	7	8
71-5	6	S	5.0000	43	85	Y	5	7	0	0	0	0	5	7
71-5	6	S	5.0000	43	86	Y	6	5	0	0	1	2	6	6
71-5	6	S	5.0000	44	87	Y	6	4	0	0	1	1	6	5
71-5	6	S	5.0000	44	88	N	0	0	0	0	0	0	0	0
71-5	6	S	5.0000	45	89	Y	6	6	0	0	0	0	6	6
71-5	6	S	5.0000	45	90	Y	6	6	0	0	0	0	7	6
71-5	6	S	5.0000	46	91	Y	6	5	0	0	0	0	6	7
71-5	6	S	5.0000	46	92	Y	6	6	0	0	0	0	6	6
71-5	6	S	5.0000	47	93	Y	6	8	0	0	0	0	6	8
71-5	6	S	5.0000	47	94		4	9	0	0	0	0	4	9
71-5	6	S	5.0000	48	95		7	5	0	0	0	1	7	5
71-5	6	S	5.0000	48	96	Y	6	7	0	0	0	0	6	7
71-5	6	S	5.0000	49	97	Y	6	8	1	0	0	0	6	9
71-5	6	S	5.0000	49	98	Y	8	5	0	0	0	0	8	5
71-5	6	S	5.0000	50	99	Y	6	2	0	0	0	0	6	5
71-5	6	S	5.0000	50	100	Y	7	6	0	0	0	0	11	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
TEM	6	S	.0002	11	21	Y	6	6	2	0	1	1	6	6
TEM	6	S	.0002	11	22	Y	4	8	0	2	0	0	5	8
TEM	6	S	.0002	12	23	Y	0	8	0	0	0	2	4	8
TEM	6	S	.0002	12	24	Y	5	7	0	0	0	0	5	7
TEM	6	S	.0002	13	25	N	0	0	0	0	0	0	0	0
TEM	6	S	.0002	13	26	N	0	0	0	0	0	0	0	0
TEM	6	S	.0002	14	27	N	0	0	0	0	0	0	0	0
TEM	6	S	.0002	14	28	Y	5	8	0	0	0	0	5	8
TEM	6	S	.0002	15	29	Y	8	3	1	1	1	1	8	3
TEM	6	S	.0002	15	30	Y	4	7	0	0	1	0	4	7
TEM	6	S	.0002	16	31	Y	5	6	0	0	3	0	5	6
TEM	6	S	.0002	16	32	Y	6	7	0	0	0	1	7	8
TEM	6	S	.0002	17	33	Y	5	8	0	0	0	0	5	8
TEM	6	S	.0002	17	34	Y	2	0	0	0	0	0	6	8
TEM	6	S	.0002	18	35	Y	7	4	0	0	1	0	7	6
TEM	6	S	.0002	18	36	Y	10	0	2	0	0	0	11	2
TEM	6	S	.0002	19	37	Y	5	8	1	0	0	0	5	8
TEM	6	S	.0002	19	38	N	0	0	0	0	0	0	0	0
TEM	6	S	.0002	20	39	Y	7	5	0	0	1	3	7	6
TEM	6	S	.0002	20	40	N	0	0	0	0	0	0	0	0
CNTRL1	6	M	-0.0000	1	1	Y	0	2	0	0	0	0	5	6
CNTRL1	6	M	-0.0000	1	2	Y	8	5	0	1	0	0	8	5
CNTRL1	6	M	-0.0000	2	3	Y	6	6	0	0	0	0	7	6
CNTRL1	6	M	-0.0000	2	4	Y	6	5	0	0	0	0	6	7
CNTRL1	6	M	-0.0000	3	5	Y	8	6	0	0	0	0	8	6
CNTRL1	6	M	-0.0000	3	6	Y	7	5	0	0	2	1	8	5
CNTRL1	6	M	-0.0000	4	7	Y	8	4	0	0	0	0	11	4
CNTRL1	6	M	-0.0000	4	8	Y	6	6	0	0	0	0	6	7
CNTRL1	6	M	-0.0000	5	9	Y	5	7	0	0	2	1	5	7
CNTRL1	6	M	-0.0000	5	10	Y	6	5	0	0	0	0	6	5
CNTRL1	6	M	-0.0000	6	11	Y	3	9	0	0	0	0	3	10
CNTRL1	6	M	-0.0000	6	12	Y	1	10	0	0	0	0	1	10
CNTRL1	6	M	-0.0000	7	13	Y	7	6	1	0	0	0	7	8
CNTRL1	6	M	-0.0000	7	14	Y	2	9	0	0	0	0	3	10
CNTRL1	6	M	-0.0000	8	15	Y	5	9	0	1	0	1	5	9
CNTRL1	6	M	-0.0000	8	16	Y	9	4	0	0	0	0	9	4
CNTRL1	6	M	-0.0000	9	17	Y	6	7	0	0	2	0	6	7
CNTRL1	6	M	-0.0000	9	18	Y	6	4	0	0	0	0	7	5
CNTRL1	6	M	-0.0000	10	19	Y	5	4	1	0	0	0	8	8
CNTRL1	6	M	-0.0000	10	20	Y	3	10	0	0	0	1	9	11

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

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	6	M	5.0000	31	61	Y	4	9	0	0	0	0	4	9
71-5	6	M	5.0000	31	62	Y	5	8	0	0	0	0	5	9
71-5	6	M	5.0000	32	63	Y	6	7	0	0	0	0	6	8
71-5	6	M	5.0000	32	64	Y	8	7	0	0	1	0	8	8
71-5	6	M	5.0000	33	65	Y	7	4	1	0	0	0	10	4
71-5	6	M	5.0000	33	66	Y	5	4	0	0	0	0	5	5
71-5	6	M	5.0000	34	67	Y	4	7	0	0	0	0	4	7
71-5	6	M	5.0000	34	68	Y	8	7	0	0	0	0	8	7
71-5	6	M	5.0000	35	69	Y	3	9	0	0	0	0	3	9
71-5	6	M	5.0000	35	70	Y	7	5	0	0	0	1	7	5
71-5	6	M	5.0000	36	71	Y	6	6	0	0	0	1	7	6
71-5	6	M	5.0000	36	72	Y	6	6	0	0	0	0	6	7
71-5	6	M	5.0000	37	73	Y	3	6	0	0	0	0	5	6
71-5	6	M	5.0000	37	74	Y	8	4	0	0	0	0	8	5
71-5	6	M	5.0000	38	75	Y	8	4	0	0	0	0	9	5
71-5	6	M	5.0000	38	76	Y	6	7	0	0	0	0	6	7
71-5	6	M	5.0000	39	77	Y	6	7	0	0	0	0	6	7
71-5	6	M	5.0000	39	78	Y	0	4	0	0	0	0	8	4
71-5	6	M	5.0000	40	79	Y	7	7	0	0	0	0	7	7
71-5	6	M	5.0000	40	80	Y	8	4	0	0	0	0	8	5

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
CNTRL1	7	S	-0.0000	1	1	Y	7	7	0	0	0	0	7	7
CNTRL1	7	S	-0.0000	1	2	Y	6	4	0	0	1	0	8	4
CNTRL1	7	S	-0.0000	2	3	Y	9	3	0	0	0	0	11	4
CNTRL1	7	S	-0.0000	2	4	Y	5	6	0	0	0	0	5	7
CNTRL1	7	S	-0.0000	3	5	Y	6	5	0	0	0	0	6	5
CNTRL1	7	S	-0.0000	3	6	Y	8	5	0	0	0	2	8	5
CNTRL1	7	S	-0.0000	4	7	Y	7	4	0	0	0	0	8	4
CNTRL1	7	S	-0.0000	4	8	Y	8	0	0	0	0	1	8	6
CNTRL1	7	S	-0.0000	5	9	Y	2	2	0	0	0	0	3	6
CNTRL1	7	S	-0.0000	5	10	Y	7	4	0	0	0	0	7	4
CNTRL1	7	S	-0.0000	6	11	Y	5	8	2	0	0	0	5	8
CNTRL1	7	S	-0.0000	6	12	Y	6	5	0	0	0	0	8	6
CNTRL1	7	S	-0.0000	7	13	Y	6	6	0	0	0	1	6	6
CNTRL1	7	S	-0.0000	7	14	Y	9	4	0	0	0	0	9	4
CNTRL1	7	S	-0.0000	8	15	Y	8	4	0	1	0	0	9	4
CNTRL1	7	S	-0.0000	8	16	Y	0	7	0	0	0	0	5	7
CNTRL1	7	S	-0.0000	9	17	Y	6	6	0	0	0	0	8	7
CNTRL1	7	S	-0.0000	9	18	Y	5	4	0	0	0	0	7	4
CNTRL1	7	S	-0.0000	10	19	Y	6	5	0	1	0	0	6	5
CNTRL1	7	S	-0.0000	10	20	Y	6	6	0	0	0	1	6	6
71-5	7	S	.0300	21	41	Y	6	6	0	0	0	0	7	6
71-5	7	S	.0300	21	42	Y	11	2	0	0	0	1	11	3
71-5	7	S	.0300	22	43	Y	3	5	0	0	1	0	6	7
71-5	7	S	.0300	22	44	N	0	0	0	0	0	0	0	0
71-5	7	S	.0300	23	45	Y	5	5	0	0	0	0	5	5
71-5	7	S	.0300	23	46	Y	3	9	0	0	1	5	3	9
71-5	7	S	.0300	24	47	Y	7	6	1	0	0	1	7	6
71-5	7	S	.0300	24	48	Y	7	6	0	0	3	1	8	6
71-5	7	S	.0300	25	49	Y	8	6	0	0	1	0	8	6
71-5	7	S	.0300	25	50	Y	6	6	0	0	1	1	6	6
71-5	7	S	.0300	26	51	Y	8	5	0	0	0	0	10	5
71-5	7	S	.0300	26	52	Y	3	7	0	2	1	2	6	12
71-5	7	S	.0300	27	53	Y	2	8	0	0	0	3	4	8
71-5	7	S	.0300	27	54	Y	4	7	0	0	0	0	5	9
71-5	7	S	.0300	28	55	N	0	0	0	0	0	0	0	0
71-5	7	S	.0300	28	56	Y	7	7	0	0	0	1	7	7
71-5	7	S	.0300	29	57	Y	6	8	0	0	1	0	6	9
71-5	7	S	.0300	29	58	Y	5	7	0	0	1	0	6	6
71-5	7	S	.0300	30	59	N	0	0	0	0	0	0	0	0
71-5	7	S	.0300	30	60	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
71-5	7	S	2.5000	31	61	Y	6	6	0	0	0	0	6	6
71-5	7	S	2.5000	31	62	Y	7	3	0	0	0	0	7	3
71-5	7	S	2.5000	32	63	Y	6	6	0	0	0	0	7	6
71-5	7	S	2.5000	32	64	Y	5	6	0	0	0	0	6	6
71-5	7	S	2.5000	33	65	Y	4	9	0	0	0	0	5	9
71-5	7	S	2.5000	33	66	Y	9	3	0	0	0	0	9	3
71-5	7	S	2.5000	34	67	Y	7	6	0	0	0	0	7	6
71-5	7	S	2.5000	34	68	Y	6	5	0	0	0	0	9	7
71-5	7	S	2.5000	35	69	Y	5	6	0	0	0	0	5	7
71-5	7	S	2.5000	35	70	Y	4	9	0	0	0	0	4	9
71-5	7	S	2.5000	36	71	Y	6	5	0	0	1	0	6	5
71-5	7	S	2.5000	36	72	Y	5	5	0	0	0	0	6	6
71-5	7	S	2.5000	37	73	Y	7	6	0	0	0	0	12	9
71-5	7	S	2.5000	37	74	Y	4	8	0	0	0	0	4	8
71-5	7	S	2.5000	38	75	Y	7	7	0	0	0	0	7	7
71-5	7	S	2.5000	38	76	N	0	0	0	0	0	0	0	0
71-5	7	S	2.5000	39	77	Y	5	6	1	2	0	0	6	6
71-5	7	S	2.5000	39	78	Y	5	8	0	0	0	0	5	8
71-5	7	S	2.5000	40	79	Y	9	5	0	0	2	2	9	6
71-5	7	S	2.5000	40	80	N	0	0	0	0	0	0	0	0
71-5	7	S	5.0000	41	81	Y	6	6	0	0	0	0	6	6
71-5	7	S	5.0000	41	82	Y	4	7	0	0	0	0	5	8
71-5	7	S	5.0000	42	83	Y	7	5	0	0	0	0	7	5
71-5	7	S	5.0000	42	84	Y	5	7	0	0	0	0	5	9
71-5	7	S	5.0000	43	85	Y	4	8	0	0	0	0	4	8
71-5	7	S	5.0000	43	86	Y	7	7	0	0	0	0	7	7
71-5	7	S	5.0000	44	87	Y	3	9	0	1	0	0	7	9
71-5	7	S	5.0000	44	88	Y	7	5	0	0	1	0	8	6
71-5	7	S	5.0000	45	89	Y	10	6	0	0	0	0	15	7
71-5	7	S	5.0000	45	90	Y	2	10	0	0	0	0	2	10
71-5	7	S	5.0000	46	91	Y	5	7	0	1	0	0	5	7
71-5	7	S	5.0000	46	92	Y	6	5	0	0	0	0	7	6
71-5	7	S	5.0000	47	93	Y	5	9	0	0	2	2	5	9
71-5	7	S	5.0000	47	94	Y	4	6	0	0	1	0	4	6
71-5	7	S	5.0000	48	95	Y	5	6	0	0	0	0	5	6
71-5	7	S	5.0000	48	96	Y	9	2	0	0	0	0	10	2
71-5	7	S	5.0000	49	97	Y	1	2	0	0	0	0	7	3
71-5	7	S	5.0000	49	98	Y	6	4	0	0	0	0	6	5
71-5	7	S	5.0000	50	99	Y	7	4	0	0	0	0	7	4
71-5	7	S	5.0000	50	100	Y	3	8	0	0	0	0	3	8

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
TEM	7	S	.0002	11	21	Y	9	3	0	0	0	0	9	3
TEM	7	S	.0002	11	22	Y	4	10	0	2	0	0	5	10
TEM	7	S	.0002	12	23	Y	7	6	0	0	0	0	7	6
TEM	7	S	.0002	12	24	N	0	0	0	0	0	0	0	0
TEM	7	S	.0002	13	25	Y	9	4	0	0	0	0	9	4
TEM	7	S	.0002	13	26	Y	5	5	0	0	0	0	5	5
TEM	7	S	.0002	14	27	N	0	0	0	0	0	0	0	0
TEM	7	S	.0002	14	28	N	0	0	0	0	0	0	0	0
TEM	7	S	.0002	15	29	Y	9	3	1	0	0	0	9	3
TEM	7	S	.0002	15	30	Y	8	4	0	0	4	0	9	4
TEM	7	S	.0002	16	31	Y	6	0	0	0	0	0	6	8
TEM	7	S	.0002	16	32	Y	2	10	0	0	0	0	6	18
TEM	7	S	.0002	17	33	Y	10	4	0	0	0	1	10	4
TEM	7	S	.0002	17	34	Y	6	6	0	0	0	0	6	6
TEM	7	S	.0002	18	35	Y	7	5	0	0	1	0	7	5
TEM	7	S	.0002	18	36	N	0	0	0	0	0	0	0	0
TEM	7	S	.0002	19	37	Y	3	10	0	0	0	1	4	10
TEM	7	S	.0002	19	38	Y	5	5	0	0	0	0	5	5
TEM	7	S	.0002	20	39	Y	6	3	0	0	0	1	6	3
TEM	7	S	.0002	20	40	Y	0	1	0	0	0	1	2	5
CNTRL1	7	M	-0.0000	1	1	Y	8	7	1	0	0	0	9	7
CNTRL1	7	M	-0.0000	1	2	Y	6	7	1	0	0	0	6	7
CNTRL1	7	M	-0.0000	2	3	Y	4	10	0	0	1	0	4	10
CNTRL1	7	M	-0.0000	2	4	Y	7	5	4	0	0	0	7	5
CNTRL1	7	M	-0.0000	3	5	Y	7	6	0	0	3	1	7	6
CNTRL1	7	M	-0.0000	3	6	Y	5	6	0	0	0	0	6	7
CNTRL1	7	M	-0.0000	4	7	Y	7	4	1	0	2	2	8	4
CNTRL1	7	M	-0.0000	4	8	Y	3	10	0	0	0	2	3	10
CNTRL1	7	M	-0.0000	5	9	Y	8	4	0	0	1	1	8	4
CNTRL1	7	M	-0.0000	5	10	N	0	0	0	0	0	0	0	0
CNTRL1	7	M	-0.0000	6	11	Y	4	9	0	0	0	0	4	9
CNTRL1	7	M	-0.0000	6	12	Y	5	4	0	0	0	0	5	4
CNTRL1	7	M	-0.0000	7	13	N	0	0	0	0	0	0	0	0
CNTRL1	7	M	-0.0000	7	14	Y	5	7	0	0	0	0	5	7
CNTRL1	7	M	-0.0000	8	15	Y	9	7	0	0	0	0	9	7
CNTRL1	7	M	-0.0000	8	16	Y	3	9	0	2	0	0	3	9
CNTRL1	7	M	-0.0000	9	17	Y	3	8	0	0	0	0	3	8
CNTRL1	7	M	-0.0000	9	18	Y	5	7	1	0	0	0	5	7
CNTRL1	7	M	-0.0000	10	19	Y	4	2	0	0	0	0	4	3
CNTRL1	7	M	-0.0000	10	20	Y	6	4	1	0	1	0	6	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
71-5	7	M	.0300	11	21	Y	3	9	0	0	0	0	3	10
71-5	7	M	.0300	11	22	Y	6	4	0	0	0	0	7	5
71-5	7	M	.0300	12	23	Y	7	7	0	0	2	3	7	7
71-5	7	M	.0300	12	24	Y	5	7	0	2	1	0	5	7
71-5	7	M	.0300	13	25	Y	4	8	0	0	0	0	4	8
71-5	7	M	.0300	13	26	Y	5	5	0	0	0	0	5	5
71-5	7	M	.0300	14	27	Y	6	7	0	0	0	0	8	9
71-5	7	M	.0300	14	28	Y	7	5	0	1	0	0	7	5
71-5	7	M	.0300	15	29	[illegible]	4	7	0	0	0	0	4	7
71-5	7	M	.0300	15	30	Y	4	8	0	0	0	0	4	8
71-5	7	M	.0300	16	31	Y	8	7	1	0	0	0	9	7
71-5	7	M	.0300	16	32	Y	7	3	0	0	0	0	8	3
71-5	7	M	.0300	17	33	Y	5	6	0	0	0	0	5	6
71-5	7	M	.0300	17	34	Y	7	7	0	0	0	0	7	7
71-5	7	M	.0300	18	35	Y	4	8	0	0	0	0	4	8
71-5	7	M	.0300	18	36	Y	4	0	0	0	0	0	4	7
71-5	7	M	.0300	19	37	Y	7	5	1	0	0	0	7	5
71-5	7	M	.0300	19	38	Y	7	6	0	1	0	0	7	6
71-5	7	M	.0300	20	39	Y	0	2	0	2	0	0	3	6
71-5	7	M	.0300	20	40	Y	7	6	0	0	0	0	8	6
71-5	7	M	2.5000	21	41	Y	6	4	0	0	0	0	6	4
71-5	7	M	2.5000	21	42	Y	1	0	1	0	0	0	7	6
71-5	7	M	2.5000	22	43	Y	8	4	2	0	0	0	8	4
71-5	7	M	2.5000	22	44	Y	3	8	0	0	0	0	3	8
71-5	7	M	2.5000	23	45	Y	6	7	0	0	0	1	6	7
71-5	7	M	2.5000	23	46	Y	8	3	0	0	0	0	8	4
71-5	7	M	2.5000	24	47	Y	3	9	0	0	0	0	3	9
71-5	7	M	2.5000	24	48	Y	7	5	0	0	1	0	7	5
71-5	7	M	2.5000	25	49	Y	4	6	0	0	0	0	4	6
71-5	7	M	2.5000	25	50	Y	8	4	0	1	0	0	9	6
71-5	7	M	2.5000	26	51	Y	5	2	0	0	0	0	6	6
71-5	7	M	2.5000	26	52	Y	6	5	0	0	0	0	6	5
71-5	7	M	2.5000	27	53	Y	6	7	0	0	0	0	6	7
71-5	7	M	2.5000	27	54	Y	6	6	0	0	0	0	6	6
71-5	7	M	2.5000	28	55	Y	7	5	0	0	0	0	7	5
71-5	7	M	2.5000	28	56	N	0	0	0	0	0	0	0	0
71-5	7	M	2.5000	29	57	Y	9	3	1	0	0	0	9	4
71-5	7	M	2.5000	29	58	Y	6	6	0	0	0	0	6	6
71-5	7	M	2.5000	30	59	Y	8	4	0	0	0	0	9	4
71-5	7	M	2.5000	30	60	Y	9	4	0	1	0	0	9	4

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	7	M	5.0000	31	61	Y	7	8	0	0	0	0	7	8
71-5	7	M	5.0000	31	62	Y	5	7	0	1	0	1	5	7
71-5	7	M	5.0000	32	63	Y	6	5	0	0	0	0	8	5
71-5	7	M	5.0000	32	64		0	2	0	1	0	0	5	4
71-5	7	M	5.0000	33	65	Y	12	4	2	0	0	0	12	5
71-5	7	M	5.0000	33	66	Y	2	5	0	0	0	0	8	5
71-5	7	M	5.0000	34	67	Y	5	8	0	0	0	0	5	8
71-5	7	M	5.0000	34	68	Y	6	5	1	0	0	0	6	8
71-5	7	M	5.0000	35	69	Y	7	0	0	0	0	0	7	4
71-5	7	M	5.0000	35	70	Y	8	3	0	0	1	0	8	3
71-5	7	M	5.0000	36	71	Y	8	7	0	0	0	0	10	7
71-5	7	M	5.0000	36	72	Y	5	7	0	0	0	0	5	7
71-5	7	M	5.0000	37	73	Y	4	0	0	0	0	0	6	5
71-5	7	M	5.0000	37	74	Y	6	6	0	0	0	1	6	8
71-5	7	M	5.0000	38	75	Y	5	7	1	0	0	0	5	7
71-5	7	M	5.0000	38	76	Y	7	7	0	0	1	0	7	7
71-5	7	M	5.0000	39	77	Y	6	6	0	0	0	1	6	6
71-5	7	M	5.0000	39	78	Y	5	5	0	0	0	0	6	5
71-5	7	M	5.0000	40	79	Y	6	7	0	0	1	2	6	7
71-5	7	M	5.0000	40	80	Y	0	1	0	0	0	0	6	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
CNTRL1	8	S	-0.0000	1	1	Y	8	3	0	0	1	0	9	3
CNTRL1	8	S	-0.0000	1	2	Y	9	3	0	0	3	0	9	3
CNTRL1	8	S	-0.0000	2	3	Y	6	5	0	0	0	0	6	5
CNTRL1	8	S	-0.0000	2	4	Y	3	9	0	0	0	0	3	9
CNTRL1	8	S	-0.0000	3	5	Y	7	7	0	0	0	0	7	7
CNTRL1	8	S	-0.0000	3	6	Y	2	10	0	0	0	0	3	10
CNTRL1	8	S	-0.0000	4	7	Y	3	3	0	0	0	0	7	3
CNTRL1	8	S	-0.0000	4	8	Y	3	8	0	0	0	0	5	8
CNTRL1	8	S	-0.0000	5	9	Y	5	7	0	0	0	0	5	7
CNTRL1	8	S	-0.0000	5	10	Y	6	6	0	0	1	0	6	6
CNTRL1	8	S	-0.0000	6	11	Y	6	6	0	0	0	0	6	7
CNTRL1	8	S	-0.0000	6	12	Y	5	6	1	0	0	0	6	6
CNTRL1	8	S	-0.0000	7	13	Y	9	1	0	0	0	0	9	1
CNTRL1	8	S	-0.0000	7	14	Y	3	10	0	0	0	0	3	10
CNTRL1	8	S	-0.0000	8	15	Y	8	5	0	0	0	1	8	5
CNTRL1	8	S	-0.0000	8	16	Y	6	6	1	0	0	0	6	7
CNTRL1	8	S	-0.0000	9	17	Y	6	7	0	1	0	0	6	7
CNTRL1	8	S	-0.0000	9	18	Y	7	3	1	0	0	0	7	3
CNTRL1	8	S	-0.0000	10	19	Y	6	3	0	0	0	0	6	3
CNTRL1	8	S	-0.0000	10	20	Y	8	4	0	0	0	0	8	4
71-5	8	S	.0300	21	41	Y	7	4	0	0	1	0	7	4
71-5	8	S	.0300	21	42	Y	5	6	0	0	0	0	8	6
71-5	8	S	.0300	22	43	Y	7	6	0	0	0	0	7	6
71-5	8	S	.0300	22	44	N	0	0	0	0	0	0	0	0
71-5	8	S	.0300	23	45	Y	5	6	0	0	0	0	5	6
71-5	8	S	.0300	23	46	Y	5	5	0	0	1	0	5	5
71-5	8	S	.0300	24	47	Y	4	12	0	1	0	0	4	12
71-5	8	S	.0300	24	48	Y	8	6	0	0	1	2	8	6
71-5	8	S	.0300	25	49	Y	7	5	0	0	0	0	7	5
71-5	8	S	.0300	25	50	Y	4	8	0	0	1	1	4	8
71-5	8	S	.0300	26	51	Y	9	4	1	0	1	0	9	4
71-5	8	S	.0300	26	52	Y	6	5	0	0	3	1	6	5
71-5	8	S	.0300	27	53	Y	3	7	0	0	0	0	3	8
71-5	8	S	.0300	27	54	Y	6	6	0	0	1	1	6	6
71-5	8	S	.0300	28	55	Y	7	6	0	0	0	0	7	6
71-5	8	S	.0300	28	56	Y	8	4	0	0	0	0	8	4
71-5	8	S	.0300	29	57	Y	5	5	0	0	0	1	5	5
71-5	8	S	.0300	29	58	Y	3	8	0	0	0	0	4	8
71-5	8	S	.0300	30	59	Y	10	5	0	0	3	1	10	6
71-5	8	S	.0300	30	60	Y	4	6	0	0	1	1	5	6

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L	IMPLANTS R	EARLY DEATHS L	EARLY DEATHS R	LATE DEATHS L	LATE DEATHS R	CORPORA LUTEA L	CORPORA LUTEA R
71-5	8	S	2.5000	31	61	Y	7	4	0	0	3	2	7	4
71-5	8	S	2.5000	31	62	Y	5	7	0	0	0	0	5	7
71-5	8	S	2.5000	32	63	Y	5	9	0	0	1	5	6	9
71-5	8	S	2.5000	32	64	Y	6	7	1	1	0	0	6	7
71-5	8	S	2.5000	33	65	Y	5	8	0	1	0	0	6	8
71-5	8	S	2.5000	33	66	Y	6	4	0	0	0	0	6	4
71-5	8	S	2.5000	34	67	Y	6	7	0	0	0	0	6	7
71-5	8	S	2.5000	34	68	Y	5	5	0	0	0	0	5	5
71-5	8	S	2.5000	35	69	Y	8	5	0	1	0	0	8	5
71-5	8	S	2.5000	35	70	Y	7	4	0	0	0	0	7	4
71-5	8	S	2.5000	36	71	Y	5	7	0	1	0	0	5	7
71-5	8	S	2.5000	36	72	Y	6	6	0	0	2	2	7	8
71-5	8	S	2.5000	37	73	Y	8	6	0	0	1	0	8	6
71-5	8	S	2.5000	37	74	Y	6	6	0	0	1	0	6	6
71-5	8	S	2.5000	38	75	Y	6	6	0	0	0	0	6	6
71-5	8	S	2.5000	38	76	Y	6	5	0	2	0	0	6	6
71-5	8	S	2.5000	39	77	Y	4	8	0	0	0	2	4	8
71-5	8	S	2.5000	39	78	Y	0	1	0	0	0	1	4	5
71-5	8	S	2.5000	40	79	Y	6	6	0	0	0	0	7	8
71-5	8	S	2.5000	40	80	Y	6	6	1	0	2	2	6	6
71-5	8	S	5.0000	41	81	Y	5	5	0	0	0	0	6	5
71-5	8	S	5.0000	41	82	Y	8	2	0	0	0	0	11	2
71-5	8	S	5.0000	42	83	Y	3	8	0	0	0	0	4	10
71-5	8	S	5.0000	42	84	Y	5	2	0	0	0	0	6	6
71-5	8	S	5.0000	43	85	Y	4	8	1	0	0	0	4	9
71-5	8	S	5.0000	43	86	Y	2	8	0	0	0	1	2	9
71-5	8	S	5.0000	44	87	Y	7	5	0	1	1	0	7	6
71-5	8	S	5.0000	44	88	Y	6	8	1	0	0	0	6	8
71-5	8	S	5.0000	45	89	Y	7	6	0	0	1	0	7	6
71-5	8	S	5.0000	45	90	Y	8	5	0	0	0	0	8	5
71-5	8	S	5.0000	46	91	Y	9	7	0	0	0	0	9	7
71-5	8	S	5.0000	46	92	Y	10	4	0	0	0	0	10	5
71-5	8	S	5.0000	47	93	Y	6	6	0	0	0	1	6	7
71-5	8	S	5.0000	47	94	Y	1	10	0	0	0	0	3	10
71-5	8	S	5.0000	48	95	Y	8	3	0	0	1	0	9	3
71-5	8	S	5.0000	48	96	Y	5	6	0	0	0	0	5	6
71-5	8	S	5.0000	49	97	Y	8	6	1	0	2	0	8	6
71-5	8	S	5.0000	49	98	Y	8	6	0	0	2	0	8	6
71-5	8	S	5.0000	50	99	Y	4	7	1	1	0	0	4	7
71-5	8	S	5.0000	50	100	Y	2	10	0	1	0	0	2	11

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-5 CALCIUM CARRAGEENAN

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

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

WEEK	VEHICLE CONTROL				71-5 30 MG/KG				71-5 2.5 G/KG				71-5 5.0 G/KG				TEM .2 MG/KG			
	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ	N PRG	N MTD	FERT. INDEX	CHISQ
SINGLE TREATMENT																				
1	16	20	.80	0.00	17	20	.85	0.00	15	20	.75	0.00	16	20	.80	.16	15	20	.75	0.00
2	16	20	.80	0.00	18	20	.90	.20	15	20	.75	0.00	17	20	.85	0.00	15	20	.75	0.00
3	17	20	.85	0.00	13	20	.65	1.20	17	20	.85	.20	18	20	.90	0.00	18	20	.90	0.00
4	18	20	.90	0.00	20	20	1.00	.53	18	20	.90	.28	16	20	.80	.20	15	20	.75	.69
5	20	20	1.00	0.00	20	20	1.00	0.00	16	20	.80	2.50	20	20	1.00	0.00	17	20	.85	1.44
6	20	20	1.00	0.00	18	20	.90	.53	19	20	.95	0.00	19	20	.95	0.00	15	20	.75	3.66
7	20	20	1.00	0.00	17	20	.85	1.44	18	20	.90	.53	20	20	1.00	0.00	16	20	.80	2.50
8	20	20	1.00	0.00	19	20	.95	0.00	20	20	1.00	0.00	20	20	1.00	0.00	17	20	.85	1.44
MULTIPLE TREATMENT																				
1	16	20	.80	0.00	15	20	.75	0.00	16	20	.80	.16	15	20	.75	0.00				
2	17	20	.85	0.00	16	20	.80	0.00	15	20	.75	.16	19	20	.95	.28				
3	17	20	.85	0.00	15	20	.75	.16	19	20	.95	.28	19	20	.95	.28				
4	17	20	.85	0.00	16	20	.80	0.00	20	20	1.00	1.44	20	20	1.00	1.44				
5	20	20	1.00	0.00	20	20	1.00	0.00	18	20	.90	.53	19	20	.95	0.00				
6	20	20	1.00	0.00	16	20	.80	2.50	16	20	.80	2.50	20	20	1.00	0.00				
7	18	20	.90	0.00	20	20	1.00	.53	19	20	.95	0.00	20	20	1.00	.53				

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

WEEK	30 MG/KG N PRG	30 MG/KG N MTD	2.5 G/KG N PRG	2.5 G/KG N MTD	5.0 G/KG N PRG	5.0 G/KG N MTD	CHISQ (C=1)	CHISQ (1)	ARMTG CHISQ
								SINGLE TREATMENT	
1	17	20	15	20	16	20	.62	.15	.47
2	18	20	15	20	17	20	1.68	.18	1.50
3	13	20	17	20	18	20	4.37	3.90	.48
4	20	20	18	20	16	20	4.44	4.44	.00
5	20	20	16	20	20	20	8.57	.00	8.57
6	18	20	19	20	19	20	.54	.40	.14
7	17	20	18	20	20	20	3.05	2.95	.11
8	19	20	20	20	20	20	2.03	1.52	.51
								MULTIPLE TREATMENT	
1	15	20	16	20	15	20	.19	.00	.19
2	16	20	15	20	19	20	3.12	1.63	1.49
3	15	20	19	20	19	20	5.18	3.87	1.31
4	16	20	20	20	20	20	8.57	6 40	2.17
5	20	20	18	20	19	20	2.11	.52	1.59
6	15	20	16	20	20	20	4.62	3.48	1.14
7	20	20	19	20	20	20	2.03	.00	2.03

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

WEEK	30 MG/KG N PRG	30 MG/KG N MTD	2.5 G/KG N PRG	2.5 G/KG N MTD	5.0 G/KG N PRG	5.0 G/KG N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
								SINGLE TREATMENT	
1	17	20	15	20	16	20	.62	.40	.23
2	18	20	15	20	17	20	1.68	.75	.93
3	13	20	17	20	18	20	4.37	4.36	.02
4	20	20	18	20	16	20	4.44	3.78	.67
5	20	20	16	20	20	20	8.57	1.29	7.28
6	18	20	19	20	19	20	.54	.53	.01
7	17	20	18	20	20	20	3.05	2.11	.94
8	19	20	20	20	20	20	2.03	2.00	.03
								MULTIPLE TREATMENT	
1	15	20	16	20	15	20	.19	.03	.16
2	16	20	15	20	19	20	3.12	.49	2.63
3	15	20	19	20	19	20	5.18	5.09	.08
4	16	20	20	20	20	20	8.57	8.44	.13
5	20	20	18	20	19	20	2.11	1.34	.77
6	16	20	16	20	20	20	4.62	1.69	2.93
7	20	20	19	20	20	20	2.03	.31	1.73

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

	CONTROL		30 MG/KG		2.5 G/KG		5.0 G/KG				
WEEK	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
							SINGLE TREATMENT				
1	16	20	17	20	15	20	16	20	.62	.11	.51
2	16	20	18	20	15	20	17	20	1.73	.03	1.70
3	17	20	13	20	17	20	18	20	4.84	2.13	2.71
4	18	20	20	20	18	20	16	20	4.44	3.21	1.23
5	20	20	20	20	16	20	20	20	12.63	.38	12.26
6	20	20	18	20	19	20	19	20	2.11	.00	2.11
7	20	20	17	20	18	20	20	20	5.76	.93	4.83
8	20	20	19	20	20	20	20	20	3.04	.81	2.22
							MULTIPLE TREATMENT				
1	16	20	15	20	16	20	15	20	.29	.03	.26
2	17	20	16	20	15	20	19	20	3.21	1.01	2.20
3	17	20	15	20	19	20	19	20	5.03	3.34	1.69
4	17	20	16	20	20	20	20	20	7.98	6.25	1.73
5	20	20	20	20	18	20	19	20	3.81	1.54	2.27
6	20	20	16	20	16	20	20	20	8.89	.79	8.09
7	18	20	20	20	19	20	20	20	3.81	.80	3.01

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

WEEK	CONTROL			71-5 30 MG/KG					71-5 2.5 G/KG					71-5 5.0 G/KG					TEM .2 MG/KG				
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
											SINGLE TREATMENT												
1	16	12.62	1.89	17	13.29	2.20	31	.933	15	12.20	2.96	29	.480	16	12.69	3.22	30	.667	15	12.20	3.61	29	.414
2	16	12.44	1.55	18	11.78	1.73	32	1.164	15	12.00	1.46	29	.807	17	11.06	2.99	31	1.648	15	8.27	3.13	29	4.753
3	17	13.18	2.01	13	12.46	2.15	28	.938	17	12.65	3.53	32	.537	18	12.83	1.38	33	.592	18	9.94	4.52	33	2.707
4	18	12.67	2.03	20	11.80	3.65	36	.890	18	11.44	1.85	34	1.886	16	11.56	4.08	32	1.016	15	4.93	2.66	31	9.476
5	20	12.00	2.34	20	11.85	3.51	38	.159	16	13.37	2.25	34	1.783	20	13.25	1.45	38	2.032	17	10.94	4.66	35	.894
6	20	11.70	1.98	18	11.78	1.56	36	.134	19	11.58	3.01	37	.149	19	12.11	1.49	37	.721	15	10.93	2.81	33	.948
7	20	10.85	2.35	17	11.94	1.68	35	1.601	18	12.00	1.24	36	1.859	20	11.45	2.44	38	.793	16	10.94	3.34	34	.092
8	20	11.40	1.73	19	11.95	1.72	37	.992	20	11.50	2.70	38	.139	20	11.90	2.00	38	.846	17	10.88	3.31	35	.609
											MULTIPLE TREATMENT												
1	16	13.13	1.31	15	12.67	3.56	29	.482	16	10.63	3.63	30	2.591	15	10.93	3.59	29	2.284					
2	17	13.00	1.46	16	13.94	1.84	31	1.626	15	13.07	1.79	30	.116	19	11.79	2.07	34	2.005					
3	17	12.76	2.70	15	11.73	2.79	30	1.061	19	11.58	2.73	34	1.305	19	11.58	3.36	34	1.158					
4	17	13.06	1.39	16	13.31	1.66	31	.477	20	12.45	1.19	35	1.435	20	12.15	1.79	35	1.704					
5	20	12.30	1.78	20	12.50	1.10	38	.427	18	12.39	2.09	36	.142	19	11.53	1.74	37	1.370					
6	20	11.50	2.56	16	10.56	2.80	34	1.046	16	12.75	1.48	34	1.729	20	11.85	2.41	38	.445					
7	18	11.94	2.24	20	11.20	3.12	36	.836	19	10.95	2.78	35	1.199	20	10.50	4.21	36	1.299					

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	48	2.46	2.08	12.75	2.79	-.124	13.056	-.633	46	7.8662	.2200	.0386	.3974	.1639
	LOG DOSE	48	-.42	2.33	12.75	2.79	-.163	12.682	-.934	46	7.7870	.2189	.0306	.1676	.1622
2	DOSE	50	2.46	2.10	11.60	2.18	-.143	11.952	-.966	48	4.7412	.1877	.0220	.2278	.0948
	LOG DOSE	50	-.44	2.34	11.60	2.18	-.077	11.566	-.572	48	4.8006	.1889	.0179	.0995	.0960
3	DOSE	48	2.77	2.00	12.67	2.48	.075	12.430	.410	46	6.2525	.1974	.0332	.3847	.1303
	LOG DOSE	48	-.02	2.17	12.67	2.48	.063	12.668	.373	46	6.2564	.1975	.0283	.1304	.1303
4	DOSE	54	2.33	2.04	11.61	3.26	-.051	11.730	-.231	52	10.8126	.2832	.0491	.4657	.2002
	LOG DOSE	54	-.52	2.33	11.61	3.26	-.060	11.580	-.309	52	10.8039	.2831	.0375	.2101	.2001
5	DOSE	56	2.51	2.12	12.79	2.62	.281	12.080	1.716	54	6.6279	.2614	.0268	.2875	.1184
	LOG DOSE	56	-.42	2.34	12.79	2.62	.296	12.969	2.015	54	6.5005	.1994	.0216	.1198	.1161
6	DOSE	56	2.55	2.04	11.82	2.12	.068	11.649	.479	54	4.5402	.1902	.0199	.2108	.0811
	LOG DOSE	56	-.27	2.27	11.82	2.12	.026	11.828	.201	54	4.5561	.1906	.0161	.0825	.0814
7	DOSE	55	2.65	2.05	11.78	1.86	-.102	12.053	-.826	53	3.4906	.1586	.0153	.1708	.0635
	LOG DOSE	55	-.20	2.25	11.78	1.86	-.061	11.770	-.534	53	3.5166	.1592	.0128	.0644	.0639
8	DOSE	59	2.55	2.04	11.79	2.16	-.008	11.799	-.055	57	4.7390	.1848	.0197	.2085	.0803
	LOG DOSE	59	-.27	2.27	11.79	2.16	-.042	11.768	-.331	57	4.7301	.1846	.0159	.0814	.0802
							MULTIPLE TREATMENTS								
1	DOSE	46	2.51	2.03	11.39	3.63	-.348	12.264	-1.314	44	12.9671	.3161	.0700	.7228	.2819
	LOG DOSE	46	-.30	2.27	11.39	3.63	-.384	11.276	-1.645	44	12.6958	.3128	.0546	.2809	.2760
2	DOSE	50	2.66	2.10	12.86	2.09	-.434	14.015	-3.352	48	3.6132	.1478	.0168	.1911	.0723
	LOG DOSE	50	-.24	2.28	12.86	2.09	-.353	12.777	-2.900	48	3.7939	.1515	.0148	.0767	.0759
3	DOSE	53	2.70	2.00	11.62	2.93	-.030	11.703	-.145	51	8.7504	.2545	.0420	.4708	.1651
	LOG DOSE	53	-.09	2.19	11.62	2.93	-.032	11.620	-.170	51	8.7490	.2545	.0351	.1653	.1651
4	DOSE	56	2.69	2.00	12.59	1.60	-.229	13.205	-2.193	54	2.4069	.1232	.0109	.1217	.0430
	LOG DOSE	56	-.10	2.19	12.59	1.60	-.216	12.568	-2.276	54	2.3920	.1229	.0090	.0428	.0427
5	DOSE	57	2.47	2.07	12.14	1.71	-.195	12.621	-1.809	55	2.7950	.1377	.0116	.1197	.0490
	LOG DOSE	57	-.40	2.32	12.14	1.71	-.133	12.087	-1.359	55	2.3652	.1394	.0095	.0518	.0503
6	DOSE	52	2.70	2.08	11.73	2.43	.236	11.092	1.463	50	5.7581	.2046	.0261	.3013	.1107
	LOG DOSE	52	-.18	2.26	11.73	2.43	.324	11.788	2.237	50	5.4583	.1992	.0210	.1056	.1050
7	DOSE	59	2.51	2.06	10.88	3.39	-.141	11.235	-.650	57	11.6011	.3130	.0470	.4926	.1966
	LOG DOSE	59	-.35	2.30	10.88	3.39	-.109	10.843	-.561	57	11.6231	.3133	.0379	.2016	.1970

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	64	1.84	2.09	12.72	2.58	-.078	12.863	-.502	62	4.7297	.2040	.0244	.1880	.1052
2	DOSE	66	1.86	2.11	11.80	2.06	-.193	12.163	-1.612	64	4.1507	.1726	.0143	.1127	.0629
3	DOSE	65	2.04	2.11	12.80	2.36	-.013	12.826	-.091	63	5.6564	.1858	.0199	.1701	.0870
4	DOSE	72	1.74	2.03	11.88	3.02	-.151	12.139	-.857	70	9.1593	.2549	.0312	.2222	.1272
5	DOSE	76	1.85	2.13	12.58	2.56	.290	12.043	2.138	74	6.2429	.1986	.0184	.1450	.0821
6	DOSE	76	1.88	2.08	11.79	2.07	.062	11.674	.534	74	4.3162	.1762	.0133	.1039	.0568
7	DOSE	75	1.94	2.11	11.53	2.03	.039	11.458	.347	73	4.1666	.1770	.0126	.1031	.0556
8	DOSE	79	1.91	2.08	11.68	2.05	.037	11.612	.332	77	4.2678	.1768	.0126	.0999	.0540
							MULTIPLE TREATMENTS								
1	DOSE	62	1.86	2.06	11.84	3.28	-.446	12.670	-2.271	60	10.0428	.2477	.0386	.2959	.1620
2	DOSE	67	1.98	2.15	12.90	1.94	-.322	13.535	-3.079	65	3.3333	.1416	.0109	.0928	.0498
3	DOSE	70	2.04	2.09	11.90	2.90	-.152	12.210	-.908	68	8.4315	.2440	.0279	.2369	.1205
4	DOSE	73	2.06	2.09	12.70	1.56	-.213	13.137	-2.507	71	2.2692	.1186	.0072	.0617	.0311
5	DOSE	77	1.83	2.09	12.18	1.71	-.160	12.473	-1.713	75	2.8672	.1390	.0087	.0661	.0372
6	DOSE	72	1.95	2.14	11.67	2.45	.188	11.301	1.392	70	5.9219	.2086	.0182	.1514	.0822
7	DOSE	77	1.92	2.10	11.13	3.18	-.214	11.542	-1.238	75	10.0179	.2844	.0300	.2411	.1301

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

WEEK	CONTROL			71-5 30 MG/KG					71-5 2.5 G/KG					71-5 5.0 G/KG					TEM .2 MG/KG				
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	16	.58	.29	17	.54	.32	31	.395	15	.69	.48	29	.760	16	.56	.51	30	.114	15	.85	.55	29	1.742
2	16	.56	.25	18	.68	.30	32	1.243	15	.42	.27	29	1.451	17	.60	.55	31	.308	15	1.21	.51	29	4.542
3	17	.45	.33	13	.54	.38	28	.739	17	.72	.57	32	1.721	18	.55	.34	33	.955	18	1.05	.77	33	2.956
4	18	.53	.35	20	.64	.63	36	.627	18	.67	.31	34	1.288	16	.84	.57	32	1.935	15	1.81	.38	31	10.115
5	20	.60	.32	20	.61	.58	38	.067	16	.42	.22	34	1.900	20	.53	.22	38	.919	17	.94	.70	35	1.974
6	20	.47	.28	18	.45	.31	36	.160	19	.58	.49	37	.936	19	.50	.30	37	.347	15	.66	.56	33	1.318
7	20	.69	.46	17	.64	.39	35	.387	18	.55	.34	36	1.079	20	.60	.44	38	.633	16	.64	.63	34	.274
8	20	.47	.29	19	.40	.22	37	.750	20	.51	.49	38	.345	20	.59	.33	38	1.295	17	.54	.61	35	.509
MULTIPLE TREATMENT																							
1	16	.52	.23	15	.61	.56	29	.615	16	.91	.52	30	2.735	15	.77	.65	29	1.422					
2	17	.46	.22	16	.43	.24	31	.337	15	.50	.33	30	.449	19	.58	.34	34	1.247					
3	17	.63	.42	15	.69	.53	30	.335	19	.64	.44	34	.080	19	.72	.55	34	.569					
4	17	.49	.28	16	.47	.22	31	.248	20	.54	.24	35	.598	20	.66	.37	35	1.494					
5	20	.54	.24	20	.48	.29	38	.777	18	.54	.29	36	.029	19	.69	.42	37	1.347					
6	20	.71	.50	16	.76	.55	34	.287	16	.48	.25	34	1.689	20	.60	.39	38	.735					
7	18	.39	.21	20	.59	.53	36	1.549	19	.56	.56	35	1.210	20	.82	.67	36	2.611					

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

WEEK	CONTROL			71-5 30 MG/KG					71-5 2.5 G/KG					71-5 5.0 G/KG					TEM .2 MG/KG				
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	16	.56	.31	17	.60	.36	31	.372	15	.54	.29	29	.166	16	.58	.27	30	.176	15	1.16	.45	29	4.382
2	16	.46	.23	18	.53	.26	32	.819	15	.53	.35	29	.687	17	.65	.37	31	1.755	15	1.70	.49	29	9.091
3	17	.47	.24	13	.50	.29	28	.272	17	.51	.28	32	.414	18	.54	.33	33	.676	19	1.70	.61	33	7.740
4	18	.56	.25	20	.72	.27	36	1.894	18	.58	.40	34	.212	16	.67	.56	32	.777	15	1.27	.34	31	6.910
5	20	.46	.29	20	.57	.36	38	.980	16	.69	.34	34	2.114	20	.40	.24	38	.723	17	1.11	.45	35	5.266
6	20	.40	.19	18	.47	.23	36	1.101	19	.49	.29	37	1.213	19	.52	.33	37	1.391	15	.75	.37	33	3.666
7	20	.46	.23	17	.70	.38	35	2.406	18	.39	.28	36	.834	20	.40	.24	38	.778	16	.53	.30	34	.843
8	20	.46	.24	19	.63	.35	37	1.795	20	.71	.40	38	2.310	20	.54	.27	38	.920	17	.54	.37	35	.764
MULTIPLE TREATMENT																							
1	16	.56	.35	15	.47	.28	29	.826	16	.50	.32	30	.570	15	.46	.27	29	.891					
2	17	.53	.32	16	.53	.27	31	.038	15	.47	.34	30	.539	19	.41	.31	34	1.120					
3	17	.62	.37	15	.65	.36	30	.205	19	.51	.30	34	.975	19	.57	.36	34	.988					
4	17	.44	.24	16	.35	.19	31	1.202	20	.51	.30	35	.710	20	.53	.30	35	.926					
5	20	.46	.26	20	.44	.25	38	.239	18	.48	.34	36	.137	19	.51	.27	37	.538					
6	20	.48	.28	16	.40	.23	34	.911	16	.40	.25	34	.885	20	.35	.15	38	1.792					
7	18	.68	.38	20	.48	.33	36	1.670	19	.43	.21	35	2.407	20	.51	.26	36	1.553					

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

WEEK	VEHICLE CONTROL				71-5 30 MG/KG				71-5 2.5 G/KG				71-5 5.0 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
SINGLE TREATMENT																				
1	9	16	.56	0.00	10	17	.59	.04	9	15	.60	.02	10	16	.63	0.00	14	15	.93	3.79
2	7	16	.44	0.00	10	18	.56	.12	6	15	.40	.02	10	17	.59	.27	15	15	1.00	9.32
3	8	17	.47	0.00	6	13	.46	.10	9	17	.53	0.00	9	18	.50	.03	18	18	1.00	10.21
4	11	18	.61	0.00	17	20	.85	1.69	8	18	.44	.45	7	16	.44	.45	15	15	1.00	5.26
5	7	20	.35	0.00	10	20	.50	.41	12	16	.75	4.21	6	20	.30	0.00	17	17	1.00	14.30
6	6	20	.30	0.00	8	18	.44	.34	8	19	.42	.21	8	19	.42	.21	11	15	.73	4.83
7	8	20	.40	0.00	12	17	.71	2.34	3	18	.17	1.50	5	20	.25	.46	8	16	.50	.07
8	8	20	.40	0.00	11	19	.58	.64	13	20	.65	1.60	11	20	.55	.40	8	17	.47	.01
MULTIPLE TREATMENT																				
1	9	16	.56	0.00	6	15	.40	.30	7	16	.44	.13	6	15	.40	.30				
2	9	17	.53	0.00	9	16	.56	.03	5	15	.33	.58	4	19	.21	2.69				
3	11	17	.65	0.00	9	15	.60	.01	9	19	.47	.50	10	19	.53	.16				
4	7	17	.41	0.00	3	16	.19	1.04	9	20	.45	.01	10	20	.50	.04				
5	8	20	.40	0.00	7	20	.35	0.00	6	18	.33	.01	10	19	.53	.22				
6	8	20	.40	0.00	4	16	.25	.35	4	16	.25	.35	4	20	.20	1.07				
7	11	18	.61	0.00	7	20	.35	1.65	7	19	.37	1.32	10	20	.50	.13				

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

	30 MG/KG		2.5 G/KG		5.0 G/KG				
WEEK	N WDI	N PRG	N WDI	N PRG	N WDI	N PRG	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
							SINGLE TREATMENT		
1	10	17	9	15	10	16	.05	.05	.00
2	10	18	6	15	10	17	1.27	.03	1.24
3	6	13	9	17	9	18	.14	.03	.10
4	17	20	8	18	7	16	8.72	6.73	1.99
5	10	20	12	16	6	20	7.20	1.62	5.58
6	8	18	8	19	8	19	.03	.02	.01
7	12	17	3	18	5	20	12.74	7.64	5.10
8	11	19	13	20	11	20	.44	.04	.40
							MULTIPLE TREATMENT		
1	6	15	7	16	6	15	.06	.00	.06
2	9	16	5	15	4	19	4.74	4.60	.13
3	9	15	9	19	10	19	.54	.15	.39
4	3	16	9	20	10	20	4.07	3.45	.62
5	7	20	6	18	10	19	1.80	1.24	.56
6	4	16	4	16	4	20	.17	.13	.04
7	7	20	7	19	10	20	1.10	.94	.17

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

	30 MG/KG		2.5 G/KG		5.0 G/KG				
WEEK	N WDI	N PRG	N WDI	N PRG	N WDI	N PRG	CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
							SINGLE TREATMENT		
1	10	17	9	15	10	16	.05	.03	.01
2	10	18	6	15	10	17	1.27	.06	1.21
3	6	13	9	17	9	18	.14	.09	.05
4	17	20	8	18	7	16	8.72	8.62	.10
5	10	20	12	16	6	20	7.20	.10	7.10
6	8	18	8	19	8	19	.03	.03	.00
7	12	17	3	18	5	20	12.74	11.77	.97
8	11	19	13	20	11	20	.44	.01	.43
							MULTIPLE TREATMENT		
1	6	15	7	16	6	15	.06	.01	.05
2	9	16	5	15	4	19	4.74	4.51	.23
3	9	15	9	19	10	19	.54	.37	.17
4	3	16	9	20	10	20	4.07	4.06	.00
5	7	20	6	18	10	19	1.80	.56	1.24
6	4	16	4	16	4	20	.17	.07	.10
7	7	20	7	19	10	20	1.10	.54	.56

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		30 MG/KG		2.5 G/KG		5.0 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	9	16	10	17	9	15	10	16	.13	.11	.02
2	7	16	10	18	6	15	10	17	1.60	.20	1.40
3	8	17	6	13	9	17	9	18	.18	.07	.11
4	11	18	17	20	8	18	7	16	8.77	5.39	3.38
5	7	20	10	20	12	16	6	20	8.58	.23	8.35
6	6	20	8	18	8	19	8	19	1.05	.18	.86
7	8	20	12	17	3	18	5	20	12.68	5.96	6.72
8	8	20	11	19	13	20	11	20	2.67	.41	2.26
							MULTIPLE TREATMENT				
1	9	16	6	15	7	16	6	15	1.13	.31	.82
2	9	17	9	16	5	15	4	19	6.05	5.91	.14
3	11	17	9	15	9	19	10	19	1.28	.63	.64
4	7	17	3	16	9	20	10	20	4.07	2.18	1.89
5	8	20	7	20	6	18	10	19	1.80	.93	.87
6	8	20	4	16	4	16	4	20	2.22	1.21	1.00
7	11	18	7	20	7	19	10	20	3.40	.00	3.39

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	.033	5.270	.01	1
2	-.044	5.042	1.21	1
3	.058	5.001	.05	1
4	-.565	5.162	.13	1
5	-.053	4.990	7.10	1
6	-.028	4.817	.00	1
7	-.623	4.560	1.07	1
8	.012	5.237	.43	1
	MULTIPLE TREATMENT			
1	.019	4.783	.05	1
2	-.390	4.580	.31	1
3	-.112	5.067	.17	1
4	.398	4.719	.00	1
5	.127	4.776	1.21	1
6	-.051	4.259	.11	1
7	.124	4.781	.55	1

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

WEEK	CONTROL			71-5 30 MG/KG					71-5 2.5 G/KG					71-5 5.0 G/KG					TEM .2 MG/KG				
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	16	.58	.33	17	.62	.37	31	.346	15	.58	.28	29	.026	16	.64	.37	30	.473	15	1.36	.51	29	5.149
2	16	.48	.24	18	.56	.27	32	.909	15	.54	.35	29	.577	17	.77	.59	31	1.826	15	2.38	.52	29	13.163
3	17	.49	.27	13	.52	.28	28	.209	17	.64	.54	32	1.003	18	.56	.33	33	.634	18	2.23	.41	33	14.657
4	18	.57	.26	20	.86	.51	36	2.160	18	.63	.47	34	.450	16	.80	.69	32	1.273	15	2.46	.30	31	19.391
5	20	.48	.30	20	.60	.36	38	1.164	16	.70	.34	34	1.998	20	.42	.25	38	.770	17	1.40	.56	35	6.284
6	20	.41	.20	18	.49	.25	36	1.099	19	.53	.32	37	1.396	19	.53	.34	37	1.349	15	.81	.36	33	4.115
7	20	.49	.24	17	.75	.43	35	2.382	18	.40	.29	36	1.019	20	.42	.24	38	.875	16	.64	.54	34	1.147
8	20	.47	.24	19	.64	.35	37	1.756	20	.80	.55	38	2.408	20	.56	.26	38	1.025	17	.66	.59	35	1.327
MULTIPLE TREATMENT																							
1	16	.58	.35	15	.52	.30	29	.540	16	.64	.57	30	.378	15	.53	.29	29	.407					
2	17	.54	.33	16	.55	.27	31	.031	15	.48	.33	30	.559	19	.43	.31	34	1.075					
3	17	.67	.40	15	.73	.46	30	.433	19	.54	.32	34	1.013	19	.68	.50	34	.092					
4	17	.45	.24	16	.36	.20	31	1.189	20	.52	.31	35	.761	20	.56	.31	35	1.127					
5	20	.48	.26	20	.46	.26	38	.221	18	.49	.34	36	.071	19	.54	.28	37	.799					
6	20	.52	.29	16	.44	.23	34	.929	16	.41	.25	34	1.231	20	.37	.16	38	2.023					
7	18	.68	.39	20	.57	.55	36	.715	19	.53	.49	35	1.027	20	.60	.33	36	.694					

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	1.200	9	.133	2.000	10	.200	3.200	19	.667
2	1.200	9	.133	2.000	10	.200	3.200	19	.667
3	1.050	9	.117	1.500	10	.150	2.550	19	.778
4	.800	9	.089	1.000	10	.100	1.800	19	.889
5	0.000	9	0.000	0.000	10	0.000	0.000	19	I
6	0.000	9	0.000	0.000	10	0.000	0.000	19	I
7	0.000	9	0.000	0.000	10	0.000	0.000	19	I
8	0.000	9	0.000	0.000	10	0.000	0.000	19	I
				MULTIPLE TREATMENT					
1	2.200	9	.244	1.000	10	.100	3.200	19	2.444
2	1.050	9	.117	1.500	10	.150	2.550	19	.778
3	1.050	9	.117	1.500	10	.150	2.550	19	.778
4	2.050	9	.228	.500	10	.050	2.550	19	4.556
5	0.000	9	0.000	0.000	10	0.000	0.000	19	I
6	0.000	9	0.000	0.000	10	0.000	0.000	19	I
7	.800	9	.089	1.000	10	.100	1.800	19	.889

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	17.260	9	1.918	36.500	6	6.083	53.760	15	.315
2	32.160	9	3.573	4.500	6	.750	36.660	15	4.764
3	42.062	9	4.674	22.500	7	3.214	64.562	16	1.454
4	47.345	9	5.261	23.500	8	2.938	70.845	17	1.791
5	43.000	9	4.778	61.000	10	6.100	104.000	19	.783
6	27.200	9	3.022	47.000	10	4.700	74.200	19	.643
7	45.050	9	5.006	59.500	10	5.950	104.550	19	.841
8	26.800	9	2.978	30.000	10	3.000	56.800	19	.993
				MULTIPLE TREATMENT					
1	9.278	8	1.160	16.500	7	2.357	25.778	15	.492
2	20.542	9	2.282	13.500	7	1.929	34.042	16	1.184
3	64.080	9	7.120	53.000	7	7.571	117.080	16	.940
4	17.441	8	2.180	13.500	8	1.688	30.941	16	1.292
5	25.200	9	2.800	35.000	10	3.500	60.200	19	.800
6	46.000	9	5.111	79.000	10	7.900	125.000	19	.647
7	52.445	9	5.827	32.500	8	4.063	84.945	17	1.434

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	43.360	9	4.818	28.000	6	4.667	71.360	15	1.032
2	2.840	9	.316	9.000	6	1.500	11.840	15	.210
3	17.082	9	1.898	20.500	7	2.929	37.582	16	.648
4	25.905	9	2.878	12.500	8	1.563	38.405	17	1.842
5	13.800	9	1.533	18.000	10	1.800	31.800	19	.852
6	6.450	9	.717	8.500	10	.850	14.950	19	.843
7	30.800	9	3.422	42.000	10	4.200	72.800	19	.815
8	15.450	9	1.717	3.500	10	.350	18.950	19	4.905
				MULTIPLE TREATMENT					
1	2.512	8	.314	6.500	7	.929	9.012	15	.338
2	1.743	9	.194	4.500	7	.643	6.243	16	.301
3	39.330	9	4.370	31.000	7	4.429	70.330	16	.987
4	17.306	8	2.163	28.500	8	3.563	45.806	16	.607
5	7.200	9	.800	6.000	10	.600	13.200	19	1.333
6	89.800	9	9.978	46.000	10	4.600	135.800	19	2.169
7	2.125	9	.236	3.500	8	.438	5.625	17	.540

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	15.000	9	1.667	4.000	6	.667	19.000	15	2.500
2	4.560	9	.507	3.500	6	.583	8.060	15	.869
3	5.930	9	.659	4.000	7	.571	9.930	16	1.153
4	5.780	9	.642	6.000	8	.750	11.780	17	.856
5	6.800	9	.756	10.000	10	1.000	16.800	19	.756
6	3.200	9	.356	1.000	10	.100	4.200	19	3.556
7	3.000	9	.333	6.000	10	.600	9.000	19	.556
8	8.000	9	.889	3.000	10	.300	11.000	19	2.963
				MULTIPLE TREATMENT					
1	19.327	8	2.416	28.500	7	4.071	47.827	15	.593
2	10.282	9	1.142	17.500	7	2.500	27.782	16	.457
3	34.082	9	3.787	22.500	7	3.214	56.582	16	1.178
4	5.750	8	.719	4.500	8	.563	10.250	16	1.278
5	4.450	9	.494	6.500	10	.650	10.950	19	.761
6	6.200	9	.689	14.000	10	1.400	20.200	19	.492
7	20.805	9	2.312	21.500	8	2.688	42.305	17	.860

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	.119	9	.013	.040	6	.007	.159	15	2.014
2	.019	9	.002	.024	6	.004	.042	15	.519
3	.033	9	.004	.043	7	.006	.076	16	.598
4	.031	9	.003	.040	8	.005	.072	17	.683
5	.049	9	.005	.081	10	.008	.130	19	.673
6	.028	9	.003	.008	10	.001	.036	19	3.708
7	.020	9	.002	.043	10	.004	.064	19	.523
8	.058	9	.006	.021	10	.002	.078	19	3.130
				MULTIPLE TREATMENT					
1	.088	8	.011	.130	7	.019	.218	15	.592
2	.072	9	.008	.120	7	.017	.192	16	.465
3	.186	9	.021	.135	7	.019	.321	16	1.073
4	.034	8	.004	.027	8	.003	.061	16	1.274
5	.036	9	.004	.046	10	.005	.082	19	.860
6	.043	9	.005	.091	10	.009	.134	19	.529
7	.137	9	.015	.164	8	.021	.301	17	.741

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

WEEK	CONTROL			71-5 30 MG/KG				71-5 2.5 G/KG				71-5 5.0 G/KG				TEM .2 MG/KG			
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	16	13.87	3.46	17	14.29	1.86	31	.437	15	13.93	1.44	29	.061	16	13.87	1.78	30	0.000	15	15.27	3.39	29	1.130
2	16	13.31	1.40	18	13.22	2.05	32	.148	15	12.47	1.06	29	1.886	17	12.47	1.74	31	1.527	15	12.53	2.07	29	1.236
3	17	13.88	1.27	13	13.46	1.05	28	.968	17	14.82	1.74	32	1.802	18	14.00	1.53	33	.246	19	15.50	6.30	33	1.038
4	18	13.67	1.81	20	13.55	1.19	36	.237	18	12.78	1.66	34	1.531	16	13.75	2.52	32	.112	15	12.80	1.61	31	1.436
5	20	13.10	1.97	20	13.30	1.56	38	.356	16	13.81	2.07	34	1.054	20	14.05	1.54	38	1.699	17	14.18	1.78	35	1.732
6	20	12.25	1.59	18	12.39	1.33	36	.290	19	12.74	1.48	37	.989	19	12.89	1.70	37	1.227	15	12.60	1.12	33	.728
7	20	12.45	1.50	17	13.47	1.74	35	1.917	18	13.17	2.41	36	1.113	20	12.80	2.65	38	.514	16	12.75	3.66	34	.334
8	20	11.95	1.32	19	12.32	1.73	37	.744	20	12.35	1.69	38	.834	20	12.95	1.36	38	2.366	17	12.06	1.30	35	.252
MULTIPLE TREATMENT																							
1	16	13.87	1.02	15	14.00	1.69	29	.251	16	13.25	3.53	30	.680	15	13.27	2.22	29	.991					
2	17	13.53	1.33	16	14.50	1.83	31	1.754	15	14.20	3.10	30	.813	19	12.84	1.77	34	1.304					
3	17	14.18	1.47	15	13.80	1.86	30	.639	19	12.89	1.63	34	2.468	19	13.63	3.40	34	.611					
4	17	13.94	2.28	16	13.94	1.88	31	.005	20	13.30	1.56	35	1.012	20	13.80	2.31	35	.187					
5	20	13.10	1.89	20	13.30	1.81	38	.342	18	13.22	1.73	36	.207	19	13.42	2.24	37	.484					
6	20	13.40	2.04	16	12.69	1.66	34	1.130	16	13.44	1.75	34	.058	20	13.00	1.41	38	.721					
7	18	12.22	2.16	20	12.40	1.90	36	.270	19	12.16	1.17	35	.114	20	12.65	2.16	36	.610					